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Logistics

Department of Defense
Supply Management Reference Book

Headquarters
Departments of the Army, the Navy,
the Air Force, and the Defense
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FOREWORD

During the past 40 years technological advances have influenced all logistics systems development significantly. Along with these developments, important policy and procedural changes have occurred in management of the Defense effort of the United States.

Military logistics has been in an evolutionary process since World War *II.* The development of new management strategies has resulted in standardized supply procedures and practices. Standardization and automation have resulted in a better capacity for a joint response in military operations and an improved overall state of combat readiness.

The trend in supply management has been directed toward integration of operations. First, there was coordinated procurement and inter-service supply support; next, there was the single manager concept and then the establishment of a unified supply and services activity--the Defense Logistics Agency (DLA). These incremental improvements in the defense supply system have evolved into the concept of integrated materiel management.

These developments are making possible more efficient use of limited resources, consolidation of inventory management functions with assigned single managers, and implementation of more effective stockage policies and distribution concepts. The use of scientific management techniques applied to procurement, inventory management, maintenance and other related functions is enabling the Department of Defense (DoD) to procure better equipment, and to distribute and maintain it with a higher degree of proficiency and at comparatively lower costs. Continual management attention is being directed toward increasing the effectiveness and responsiveness of the DoD supply system to meet the materiel readiness objectives of the military services. This sixth edition of the Supply Management Reference Book was assembled by the United States Army Logistics Management Center with assistance from representatives of the Departments of the Army, Navy, and the Air Force, and the DLA, as well as the Marine Corps and the General Services Administration. It describes significant management improvements undertaken by the DoD and elements of the logistics system. Users of this reference book are requested to submit suggested changes or recommendations for improvement to the Commandant, U.S. Army Logistics Management Center, ATTN: DRXMC-MR-MM, Fort Lee, Virginia 23801.

This reference book is intended as a guide to the changing supply management picture, for use by all levels of management. It is not to be interpreted as a directive to activities on the distribution list. The contents are for informational purposes only and, even as such, should be verified by all users where the accuracy of the information is crucial. It is hoped that the book will serve as a useful basis for discussion of supply related problems among professionals in the DoD and outside groups and encourage thinking on how our dynamic logistics establishment may better satisfy the needs of the Defense mission.

William H. Taft, IV
Deputy Secretary of Defense

Headquarters
Departments of the Army,
the Navy, the Marine Corps,
the Air Force, and the
Defense Logistics Agency
Washington, DC
1 January 1985

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Logistics

Supply Management Reference Book

Applicability. This publication applies to the Active Army, the US Army Reserve, and the Army National Guard. Specifically, this publication applies to management systems used in military supply management for the Departments of the Army, the Navy, the Marine Corps, the Air Force, and the Defense Logistics Agency.

Impact on New Manning System. This publication does not contain information that affects the New Manning System.

Interim Changes. Interim changes to this publication are not official unless they are authenticated by The Adjutant General. Users will destroy interim changes on their expiration dates unless sooner superseded or rescinded.

Suspected Improvements. The Army proponent agency of this publication is the US Army Logistics Management Center. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commandant. US Army Logistics Management Center, ATTN: DRXMC-MRMM, Fort Lee, VA 23801.

Contents

Page

Chapter 1. Introduction to Supply Management 1-1

Chapter 2. The Role of National Agencies In Supply Management

Section I. National Policy and Its Effect on Supply Management 2-1

II. Department of Defense 2-3

III. The Joint Chiefs of Staff .. 2-8

Chapter 3. The Army Supply System .. 3-1

Chapter 4. The Navy Supply System

Section I. Introduction 4-1

II. The Naval Material Command 4-2

III. Bureau of Medicine and Surgery .. 4-4

IV. The Fleet Supply System Base Supply Support 4-5

V. Retail-Level Supply 4-6

Chapter 5. The Air Force Supply System

Section I. Introduction 5-1

II. Department of the Air Force 5-1

III. The Air Staff 5-3

IV. Field Organization of the Air Force 5-5

V. Retail-Level Supply... 5-8

Chapter 6. The Marine Corps Supply System 6-1

Chapter 7. Defense Logistics Agency

Section I. Introduction 7-1

II. Federal Catalog System 7-5

III. Contract Administration Services 7-8

Chapter 8. General Services Administration

Section I. Supply Support to the Department of Defense 8-1

II. The Federal Supply and Services Supply Operations 8-3

III. The Federal Supply and Services . 8-10

IV. Basic Federal Supply and Services Support to the Department of Defense..... 8-10

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Page

V. The National Supply System 8-11

Chapter 9. Department of Transportation

Section I. Introduction 9-1

II. United States Coast Guard Supply System 9-1

III. The Federal Aviation Administration Supply System 9-3

Chapter 10. Integrated Materiel Management

Section I. General 10-1

II. Defense Integrated Materiel Management of Weapon System Oriented Consumable Items 10-3

Chapter 11. Military Standard Logistics Systems/ Programs Management

Section I. The Military Standard Requisitioning and Issue Procedures 11-1

II. The Uniform Materiel Movement and Issue Priority System 11-3

III. The Military Standard Transaction Reporting and Accounting Procedures 11-5

IV. The Military Standard Transportation and Movement Procedures 11-6

V. The Military Supply and Transportation Evaluation Procedures 11-8

VI. Military Standard Contract Administration Procedures 11-10

VII. Standard Cataloging Programs 11-11

V*III.* Defense Automatic Addressing System 11-16

IX. The Defense Retail Interservice Support Program 11-18

X. Military Standard Billing System 11-18

Chapter 12. Assignment of Supply Responsibilities 12-1

Chapter 13. Equipment Authorization and Control Systems

Section I. Equipment Authorization and Control Systems, US Army 13-1

II. Equipment Authorization and Control Systems, US Navy 13-6

III. Equipment Authorization and Control Systems, US Air Force .. 13-11

IV. Equipment Authorization and Control Systems, US Marine Corps..... 13-14

Chapter 14. Provisioning in the Department of Defense

Section I. The Provisioning Process 14-1

II. Provisioning in the Army 14-1

III. Provisioning in the Navy ... 14-5

IV. Provisioning in the Air Force 14-5

V. Provisioning in the Marine Corps 14-8

VI. Provisioning in the Defense Logistics Agency 14-10

V*II.* Provisioning in the General Services Administration 14-11

Chapter 15. Major Item Management

Section I. Major Item Management in the Army 15-1

II. Major Item Management in the Navy 15-9

III. Managing Weapon Systems and Major Items in the Air Force 15-12

IV. Major Item Management in the Marine Corps 15-18

Chapter 16. Secondary Items and Repair Parts Management

Section I. Secondary Items and Repair Parts Management in the Department of Defense 16-1

II. Secondary Items and Repair Parts Management in the Army 16-3

III. Secondary Items and Repair Parts Management in the Navy 16-5

IV. Secondary Items and Repair Parts Management in the Air Force 16-7

V. Secondary Items and Repair Parts Management in the Marine Corps 16-10

VI. Secondary Items and Repair Parts Management in the Defense Logistics Agency 16-10

V*II.* Secondary Items Management in the General Services Administration 16-12

Page

Chapter 17. Asset Control and Reporting

Section I. Asset Control and Reporting in the Army 17-1

II. Asset Control and Reporting in the Navy 17-3

III. Asset Control and Reporting in the Air Force 17-4

IV. Asset Control and Reporting in the Marine Corps 17-5

V. Asset Control and Reporting in the Defense Logistics Agency 17-6

VI. Asset Control and Reporting in the General Services Administration 17-7

Chapter 18. Retail-Level Supply Management

Section I. Retail-Level Supply Management in the Army 18-1

II. Retail-Level Supply Management in the Navy 18-6

III. Retail-Level Supply Management in the Air Force 18-8

IV. Retail-Level Supply Management in the Marine Corps 18-12

Chapter 19. Acquisition and Supply Management

Section I. Acquisition and Supply Management in the Department of Defense ... 19-1

II. Contracting and Supply Management in the Army 19-6

III. Contracting and Supply Management in the Navy 19-7

IV. Contracting and Supply Management in the Air Force 19-7

V. Procurement and Supply Management in the Marine Corps 19-8

VI. General Accounting Office 19-9

V*II.* National Priorities, the Defense Materials System, the Defense Priorities System, and Their Relationship with the Department of Commerce 19-9

Chapter 20. Distribution and Movement of Material

Section I. Defense Transportation 20-1

II. Joint Chiefs of Staff 20-6

III. Distribution and Movement of Materiel in the Army 20-7

IV. Distribution and Movement of Materiel in the Navy 20-10

V. Distribution and Movement of Materiel in the Air Force 20-21

VI. Distribution and Movement of Materiel in the Marine Corps ... 20-21

V*II.* Distribution and Movement of Materiel in the Defense Logistics Agency ... 20-22

Chapter 21. Maintenance and Supply Management

Section I. Department of Defense Maintenance Management System 21-1

II. Maintenance and Supply Management in the Army 21-2

III. Maintenance and Supply Management in the Navy 21-7

IV. Maintenance and Supply Management in the Air Force 21-10

V. Maintenance Management in the Marine Corps 21-13

VI. Maintenance and Supply Management in the Defense Logistics Agency 21-15

Chapter 22. Property Disposal and the Handling of Excess and Surplus Material (Except Automatic Data Processing Equipment) 22-1

Chapter 23. Resources Management Program

Section I. Department of Defense Automation 23-1

II. Army Automation Material Management Systems 23-4

III. Navy Automated Material Management Systems 23-6

IV. Air Force Automated Logistics Systems 23-11

V. Automatic Data Processing Systems in the Marine Corps 23-14

VI. Automated Logistics Systems in the Defense Logistics Agency 23-17

Chapter 24. Financial Inventory Accounting and Funding In Supply Management **Page**

Section I. Financial Inventory Accounting 24-1

II. Financial Inventory Accounting in the Army 24-6

III. Financial Inventory Accounting in the Navy 24-13

IV. Financial Inventory Accounting in the Air Force 24-15

V. Financial Inventory Accounting in the Marine Corps..... 24-15

VI. Financial Inventory Accounting in the Defense Logistics Agency 24-17

V*II.* Financial Inventory Accounting in GSA 24-19

V*III.* Communication Services Industrial Fund..... 24-19

Chapter 25. Resources Management Systems 25-1

Chapter 26. Planning, Programming, and Building

Section I. Department of Defense 26-1

II. Joint Chiefs of Staff Plans and Documents 26-1

III. The Planning, Programing, and Budgeting System 26-7

IV. Planning, Programing, Budgeting, and Execution System (PPBES) in the Army 26-17

V. Planning and Programming in the Navy 26-20

VI. Planning and Programming in the Air Force 26-23

V*II.* Planning and Programing in the Marine Corps 26-29

V*III.* Planning, Programming, and Budgeting in the Defense Logistics Agency 26-30

Chapter 27. Principles of Review and Analysis 27-1

Chapter 28. Supply-Related Educational Program

Section I. General Information 28-1

II. Supply-Related Educational Programs in the Army 28-2

III. Supply-Related Educational Programs in the Navy 28-4

IV. Supply-Related Educational Programs in the Air Force 28-6

V. Supply-Related Educational Programs in the Marine Corps ... 28-10

VI. Supply-Related Educational Programs in the Defense Logistics Agency 28-11

V*II.* Joint Service Schools ... 28-11

V*III.* Interagency Training Programs 28-12

Chapter 29. Summary 29-1

Illustrations

Figure No.	Title	Page
2-1	Department of Defense Organization	2-4
2-2	Office of the Secretary of Defense	2-6
2-3	Organization of the Joint Chiefs of Staff	2-10
2-4	Logistics Directorate (J4)	2-11
4-1	Naval Material Command Organization	4-3
5-1	Air Force Logistics Command Organizational Directory	5-7
6-1	Organizational Structure of the Installations and Logistics Department of the Marine Corps	6-3
7-1	Defense Logistics Agency	7-3
7-2	Defense Contract Administration Services Regions ...	7-10
8-1	General Services Administration/Organizational Chart	8-2
8-2	General Services Administration Regional Offices Organization	8-4
8-3	General Services Administration Regional Offices Map	8-5
8-4	Office of Federal Supply and Services Organization ..	8-9
9-1	Organizational Chart, Department of Transportation .	9-2
25-1	Categories of Resource Management Systems	25-1
25-2	Five-Year Defense Program and Congressional Defense Budget Relationship	25-3

Tables

Table No.	Subject	Page
1-1	Assets on Hand in September 1982	1-1
1-2	United States Arms Deliveries and Training (in thousands of dollars)	1-2
1-3	Investment in Major Weapons and Secondary Items	1-4
7-1	Magnitude and Scope of Defense Supply Operations	7-4
7-2	Some Defense Logistics Agency-Managed Commodities	7-6
11-2	Decision Logic Table for MILSTRIP	11-4
15-1	Participation in the NATO Codification System	11-16
15-2	Example of Information for Requirements Studies (Navy)	15-11
15-3	Major Item Management Summary (Air Force)	15-18
17-1	Marine Corps Systems/Equipment Support Management Roles	15-20
20-1	Reportable Item Control Codes	17-1
21-1	Stock Positioning of DLA Materiel-Principal Distribution Depots and Specialized Support Points	20-23
21-1	Key Installations Responsible for Maintenance of Various Types of Navy Equipment Ad Weapons	21-9
24-1	Materiel Categories Description	24-7
24-2	Marine Corps Instore Materiel Assets	24-16
24-3	Marine Corps Stock Fund Materiel Categories	24-16
24-4	Defense Logistics Agency Stratification of Inventories	24-17

Chapter 1
Introduction to Supply Management

1-1. Introduction

This is a reference book about supply management in the Department of Defense (DOD). It is printed in reference book style to facilitate its use. It describes the supply management systems and supply supporting systems of the military services and Defense Logistics Agency (DLA). The role of the General Services Administration (GSA) is portrayed where support of defense activities is involved. The Supply Management Reference Book is intended to serve as a vehicle for information and discussion by professionals within DOD, other Government agencies, Congress, and outside groups such as universities, industrial activities, and research organizations. The scope of the sixth edition has been expanded to include new organizational structures and concepts, and new subject areas that directly or indirectly affect supply operations.

1-2. Significance of supply management

The basic mission of the military services is to prevent wars from starting and to win them if they start. To perform this mission the military services do not depend on bulk manpower. Massive manpower is not the prime asset of the United States; this Nation's prime asset is skilled manpower equipped with the proper tools. It is the mission of the supply systems of the military services and DLA to buy these tools, supply them to US and allied forces worldwide, and maintain them in working order wherever they are located. The supply system must not only support combat readiness for the US forces now in being, but must plan for the support of the US military forces of the future, and all foreign military sales (FMS) and assistance to allied forces under the international logistics programs.

1-3. The magnitude of supply management

a. Military supply management involves the largest inventories and the greatest diversity of items to be found in any organization in the world. As of September 1983, over 4 million different items were classified, identified, and cataloged under the Federal Catalog System within DOD. Assets on hand were valued at $336.1 trillion as of September 1982, and consisted of the basic types as shown in table 1-1.

b. The segment of DOD property holdings that interests us most in this text is the so-called "supply system inventory;" that is, the inventory of equipment and supplies being held in DOD storage and warehousing facilities for issue to the operating forces.

c. This property, currently valued at $102.4 billion, consists of 4 million items of weapons, equipment, repair parts, ammunition, vehicles, consumables, clothing, subsistence items, fuel, and medical supplies. It is held for various purposes by depots, posts, camps, bases, supply ships, or stations. Supply inventories are held as follows: Army $32.6 billion; Navy and Marine Corps $28.0 billion; Air Force $31.8 billion; and DLA $10.0 billion. In composition, these inventories consist of major items such as vehicles, ammunition, weapons, communications equipment, aircraft, and similar equipment and secondary items such as components and repair parts, fuel, clothing, subsistence, medical, and general supplies. The largest category is aircraft components and parts valued at $13.455 billion.

Table 1-1. Assets on Hand in September 1982

	Acquisition cost as of September 1982 (billions)
Supply System Inventory:	
Stock Funded	28.7
Procurement Appropriated	73.3
Subtotal	102.4
In Use and Excess:	
Army	43.4
Navy and Marine Corps	118.5
Air Force	65.9
Held in Industrial Fund Accounts	1.0
Excess and Surplus and Foreign Excess	4.9
Subtotal	233.7
Overall Total	336.1

1-4. Security Assistance Program costs

During the period 1950-63, approximately $27.7 billion of US military exports were programed as grant aid and $2.9 billion were ordered on a reimbursable basis to meet the needs of foreign customers. Although a similar amount was programed during the 1960s, the major recipients for grants of military equipment shifted from Europe to Asia. As many European countries became sufficient and were able to obtain more of their own arms, the necessity for US financing for those countries was obviated. In both the 1950s and the 1960s, the annual appropriations necessary for foreign military assistance ballooned because of limited wars in Asia. During the 1970s, emphasis centered on Southeast Asia and the Middle East. The Security Assistance Program which was largely grant aid (MAP) in the early 1970s is now almost exclusively FINIS today. In recent years, the United States has accounted for somewhat less than half of the total worldwide arms deliveries. Table 1-2 shows arms deliveries and training during fiscal years 1978-82.

Table 1-2. United States Arms Deliveries and Training (in thousands of dollars)[1]

	Foreign Military Sales (FMS)	Military Assistance Program (MAP)	International Military Education and Training (IMET)
1978	$6,415,002	$220,403	$29,164
1979	6,873,921	157,872	26,640
1980	5,876,086	317,661	24,785
1981	7,718,530	240,256	28,701
1982	8,948,143	310,085	46,699

[1]Data taken from the Foreign Military Sales, Construction, and Military Assistance Facts Book as of September 1982.

1-5. The meaning of supply management

a. It is the task of supply management to provide the material support required by the military services and foreign customers without failure under all conditions of peace or war. This support must be provided at a minimum cost for the material itself and for the effort involved in supplying it. These facts about supply management stand out:

(1) *Supply must be effective*-national survival may depend on it.

(2) *Supply must be economical*-the money and resources available to the supply manager are limited.

(3) *Supply management is complex*-customer needs are extremely diversified and subject to constant change.

b. During World War II, supply effectiveness was obtained through massive support operations. No matter where battles were fought, or what the fortunes of war, the supply system was designed to have convenient storage points that could take care of every conceivable need. This system did not result in economical supply. At that time, the United States was engaged in a life-or-death struggle; all resources were mobilized. Round-the-clock; production strained the economy but it helped to end the war before the strain became too great.

c. The Korean War brought new supply problems. The sudden onset of hostilities in Korea found the United States unprepared for that limited type of war. Our World War II production base had been largely dissolved and little had been accomplished in the development of new weapons or supply systems.

d. In Vietnam, the situation was again different. The geographical limitations of the war caused the United States to supply the troops on a scale never before realized in modern warfare. Improved communications, automatic data processing equipment (ADPE), and increased use of aircraft for resupply made the difference. Supply shortages occurred but they were the result of production stoppages, lack of centralized control of assets, lack of supply discipline in the field, lack of trained supply personnel at organizational and field level, and poor logistics planning and programing.

e. In regard to any war, the United States must be ready for rapid response. The war our military services must be ready to fight may not materialize for years, or may occur today. Therefore, the United States must be ready to fight it today. The logistics system must provide effective supply, and be prepared to provide it for an indefinite period. The strength of the national economy is maintained by means of having what is needed but not more than is needed. It means getting supplies into the system, storing them, and getting them into the hands of the user at a minimum cost.

f. An ability to provide prompt and efficient response to allied customer requirements must also be maintained. This is essential where US commitments are involved.

g. The job of supplying just what is needed and no more is a demanding one. It means surveillance of an enormous quantity of items that change almost from day to day and supplying these items to a changing number of customers at changing locations around the world. Managing an economical supply system that provides for the customer's needs is a formidable task demanding the best executive talent.

h. It is common to talk of supply effectiveness and supply economy as two different concepts and two different goals; however, they are interdependent. If effectiveness is achieved without consideration for economy, vital resources may not be available to reequip the Armed Forces with improved weapons. The future is what supply managers must consider and plan for. The basic fact that resources are limited is all-controlling. Consequently, supply economy means an opportunity for greater supply effectiveness. Supply costs have an important effect on the degree of combat readiness that we can achieve. Because of limited resources, decisions on the number and types of weapons that the military services will employ depend in large measure on the costs involved. Supply and maintenance support loom large in those costs. In the final analysis, supply management must be judged on effectiveness and economy together, in determining the quality and quantity of the weapons that it can effectively furnish with the supply dollar.

i. The job of the supply manager is to appraise and control the cost of supply. To achieve supply economy, inventories must be centrally controlled so that no more money is in-

vested in them than is necessary for effective support, and operating costs must be controlled so that the costs of performing the supply function are kept at a minimum. Because of the magnitude of the supply system, slight improvements can result in tremendous savings. The control of inventory levels and control of operating costs are closely related. In some instances, it is necessary to increase certain operating costs in order to reduce inventory levels; for example, inventory levels can be cut by using a faster but more expensive method of distribution, such as airlift. On the other hand, a reduction in inventory levels reduces certain other operating costs, fewer personnel are required to store and inventory, and less warehouse space is required. Similarly, the speed and economy with which the maintenance facilities can effect repairs are important factors in establishing inventory levels for many items, as is the speed with which procurement can bring materiel into the system. Consequently, the supply system should be looked upon as a series of individual segments which are an interrelated chain of activities. The goal is overall effectiveness and economy.

1-6. Problems of supply management

a. The problems of supply management stem from three factors that have already been mentioned:

(1) *The magnitude of the supply system*-any operation of this tremendous size is extremely difficult to manage.

(2) *The complexity of the supply mission*-the system must satisfy the needs of a wide range of exacting customers for highly technical weapons and other necessities.

(3) *Factors of change*-new weapons and systems are constantly being developed and the tactical and strategic concepts which dictate the manner in which supply will be accomplished are subject to constant revision.

b. Within this framework, military supply management, like any other management task, consists of breaking the job down into manageable segments, planning for successful performance, and measuring that performance. In breaking the vast DOD supply system into manageable segments, three characteristics of the system assume paramount importance. First, the supply system is worldwide; this suggests that manageable segments should be established on a geographical basis. Second, the successful operation of the system depends on the performance of a number of specialized functions, such as storage, distribution, procurement, maintenance, communications, transportation, and data processing. Third, the system contains 4 million items that vary greatly in their use, size, complexity, value, and volume of issues. This suggests that manageable segments should be established by grouping items together according to some classification system. Actually, all three of these characteristics must be considered in breaking the supply system down into segments. The problem arises in choosing the characteristic which is of overriding importance in establishing manageable segments. For example, due to criticality of the commodity, the Department of the Army (DA) manages medical materiel as a segment or subsystem of the Army Medical Department.

c. In addition, five basic individual item characteristics are considered when determining the overall management method for items in the supply systems of the military services and DLA. These are: criticality, dollar value, procurement leadtime or difficulty to procure or manufacture, demand or usage rate, and degree of difficulty to transport. Criticality and dollar value will he discussed in detail in chapters 15, 16 and 23.

d. Reliable communications, high-speed transportation, criticality, and dollar considerations have eliminated the need for management by geographical area with the exception of certain commercial items which are procured locally, and some seasonal items.

e. Emphasis is now on assigning worldwide materiel responsibility by item groupings. Under this concept, a manager is put in charge of a system or group of items and has full responsibility for all materiel functions which must be performed in connection with meeting the demands of customers for those items. There is practically no limit to the number of item groupings that can be made. There is no best way to group items for all purposes. The military services and DLA may be expected to change their methods of grouping items from time to time in order to achieve the management objectives that are most important at the time.

f. In the ideal situation, the manager of a group of items would manage all the materiel functions necessary to compute requirements, procure, store, distribute, maintain, and ultimately dispose of the items. But, in most cases, this ideal situation is difficult to achieve. For example, an item grouping which creates a manageable segment for the purposes of requirements computation or procurement might not provide sufficient volume to operate a maintenance activity economically. To operate efficiently, the maintenance activity may have to repair the items from two or more groups or managers. Hence, the maintenance function in its entirety could not be placed under the manager of any one group of items. Control of maintenance and procurement schedules by supply managers is and can be practicable.

g. Another obstacle to giving the supply manager of a group of items complete control of the maintenance function is that strategic or economic considerations may dictate that the items be repaired in many locations throughout the world. In this situation, the problem of providing an economical production volume to a main

tenance shop would be magnified as would be the problems of exercising direct management control over this widespread cooperation. In spite of the obstacles, the objective remains clear; that is, to break up the supply system into manageable segments based on appropriate item groupings. The objective also is to provide the manager of each group of items or system with authority over every materiel function which must be performed in getting those items to the customers in the field world-wide.

1-7. Major developments in supply management

a. Since 1961, efforts have been geared to improving logistics readiness while minimizing the number and dollar value of supply system stocks. The military services have made exceptional progress in meeting these objectives, as shown by the relatively small secondary item inventory when compared to the value of weapons in use. The investment in major items and secondary items is shown in table 1-3.

Table 1-3. Investment in Major Items and Secondary Items (Billions at dollars)

	9/30/83
Major items (weapons and equipment in use)	227.9
Secondary items	54.8

b. Listed here are seven principal events which have had a noteworthy influence on supply management.

(1) *The advent of the Federal Catalog System.* The starting point for major change in supply management was the conversion from numerous diverse systems for cataloging items of supply to the single Federal Catalog System, initiated under DOD in July 1950 and completed by the end of 1958. The catalog system, for the first time established a common supply language by assigning a discrete number and description to each separate item in the supply system. One of the most important objectives of the system is to prevent the addition of unnecessary items to supply system inventories as new weapons-together with thousands of repair parts-are developed. Since July 1968 through the central catalog file established at the Defense Logistics Services Center (DLSC) in Battle Creek, Michigan, DOD has had the capability of comparing new items proposed for stockage against all items in the system, in order to determine if the same or a substitute item is available. Through this medium, it has been determined that approximately 40 percent of the parts in newly developed weapons are already in the system. In addition the centrally managed catalog system has opened a new era in DOD standardization and item identification programs by making it possible to rapidly classify and compare items, eliminate duplicates, and continuously purify the catalog data. Without this common language and the new disciplines it has brought to bear, it is estimated that there might well have been a growth of 50 percent, and that DOD would be spending at least $180 million each year in clerical and warehousing costs to manage those duplicate items, to say nothing of the investment in unneeded stocks.

(2) *NATO Codification System.*

(a) The advent of the NATO Codification (Cataloging) System in December 1958 provided a uniform and common system for identification, classification, and stock numbering items of supply of the NATO countries. It achieves a maximum effectiveness in logistics support and facilities data management in the area of materiel. The system has been agreed to by all signatories of the alliance for use in identifying equipment and supplies (in particular, common or NATO projects and equipment used by two or more countries procured from another).

(b) International use of the system is based on the principle that the manufacturer’s country is responsible for the codification of the item, even if this item is not used in its own services. That means, the buyer’s country has to request codification actions from the producer’s country.

(c) The system, which is based upon the US Federal Catalog System, is also used by the Civil Departments of some NATO countries. It is governed by the NATO Group of National Directors on Codification of Equipment (AC/135). The implementation is a national concern and is performed by the National Codification Bureau. There are 5 million items in the Federal Catalog System of which 1.2 million are DOD/NATO items and 600,000 are NATO items only.

(d) Some of the significant benefits of the NATO Codification System are: more effective coordinated procurement of supplies; more effective cross-utilization of assets between member countries; reduction of recordkeeping, personnel, storage, space, etc., increased standardization of materiel; improved relations between Government and industry; and more effective requirements determination.

(3) *Integrated item management.* The creation of the Defense Supply Agency in 1962 (now DLA) has brought under single management over 2.3 million common items. Other single-manager assignments to Army, Navy, Marine Corps, and Air Force have added another 1.7 million items. Thus, over 4 million items in the Federal Catalog System have been assigned to one military manager who buys, stores and issues on behalf of all the military services. Most of the items which remain under military service management are peculiar to the individual military service, or directly related to the operation of its weapon systems. DOD is continuing

to purify these item assignments, but the major job has been done. Integrated item management almost immediately led to simplification in the organizational and physical structure for supply management. The number of inventory control points (ICP) was reduced from 44 to 22, and numerous storage points were closed-releasing altogether about 96 million square feet of covered storage space.

(4) *Standardization of procedures.* Beginning in 1962, it became apparent that to obtain maximum benefits from integrated management and to facilitate interchange of stocks among the military services, DOD needed one set of forms, records, and codes for use in requisitioning, shipping, and accounting for supplies within and among the military departments. These are the wellknown DOD Military Standard Logistics System Procedures (Military Standard Requisitioning and Issue Procedures (MILSTRIP), Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP), Military Standard Contract Administration Procedures (MILSCAP), etc.). They were accompanied by a procedure approved by the Joint Chiefs of Staff (JCS), of uniform priority designators which established the sequence and timing of issues from depots. The introduction of the Military Standard Logistics Systems Procedures was probably the most massive paperwork standardization program ever undertaken in the Federal Government. Immediately following the implementation of the MILSTRIP on 1 July 1962, the Federal Supply Service of the GSA began developing a compatible civilian counterpart, the Federal Standard Requisitioning and Issue Procedure. It was promulgated by GSA Circular 312, 16 July 1963. Personal Property Management Regulation No. 35, 13 April 1964, made its use by all civilian agencies mandatory by 1 January 1965. The compatibility of the Federal procedure and military procedures makes it feasible for GSA and DLA to serve both civilian and military activities from their respective depot systems. This has been a major factor in furtherance of the national supply system concept. (See chapter 8.)

(5) *Improved communications.* A major breakthrough has been the development of high-speed techniques of communicating logistics data over the defense long-lines network, known as the Defense Communications System Automatic Digital Network. Under this system, it is possible for depots to report transactions to inventory managers at a rate of 600,000 messages per day compared to only 35,000 possible under previous procedures.

(6) *Automation of records.* Since 1961, the number of computers applied to supply management applications has grown tremendously. The benefits of the computers are, of course, not simply in their ability to rapidly store and process information on receipts, issues, and stock balances, but in their capability to prepare reorders as soon as minimum stock balances are reached, and to compute reorder quantities accurately related to usage experience. Thus, computers are permitting attainment of the long-sought objective of freeing the supply manager from the drudgery of detail so that he can concentrate on special problems requiring analysis and judgment. Each of the military services and DLA now have comprehensive programs of automated inventory management; and each has established a full-time, top-level planning and control staff which is devoted to harnessing the great power of the computer to logistics and other management tasks. The current trend is to miniaturize the computer hardware used in supply management.

(7) *Defense Integrated Data System.* The installation and activation of the Defense Integrated Data System in March 1975, in addition to simplifying and unifying the central item data bank at the DLSC has furthered the integration thrust of many aspects of all the military supply systems. The institution of a standard data set and standardized configurations or punched cards and magnetic computer tape, along with the new compatibility between Federal catalog records, catalog management data records, item status records, and standardization records will all combine to clarify and simplify logistics data processing.

Chapter 2
The Role of National Agencies in Supply Management

Section I
National Policy and Its Effect on Supply Management

2-1. Introduction

a. This chapter covers, in general terms, the individuals and organizations responsible for supply management in the Department of Defense (DOD). In discussing supply management, however, it is necessary to go beyond the organizational structure of DOD to even higher Government levels. As part of the Federal Government, DOD and its supply activities are influenced by directives promulgated by the President and his advisers. The President and his executive agencies, Congress, and the public share in formulating the objectives of national security, in defining the role of the Military Establishment, and in determining the share of the Nation's resources which will be made available to DOD for the support of its operations.

b. The President, as chief of the executive branch of Government, is responsible for carrying out the laws enacted by Congress. In terms of national security, the President assigns responsibilities among his executive departments and agencies, directing and coordinating their execution of the foreign, domestic, and military aspects of the national security.

c. The President is specifically authorized by the Constitution to make treaties with foreign nations; he also directs the Department of State in the conduct of foreign affairs. While this is a civil responsibility, it is closely allied to security problems. The network of treaties which link the United States to other nations of the free world is a powerful deterrent to aggression. At the same time, it imposes on the United States a responsibility to aid in the defense of other nations. Supply managers must be prepared to support peacetime as well as limited and general combat operations in any part of the world, including the provision of repair parts for equipment which the United States has furnished to other nations under various programs.

d. Each year the executive departments, including Defense, submit their budgets to the President through the Office of Management and Budget (OMB). After making any changes deemed appropriate, the President forwards the budget to Congress. After review, Congress authorizes and appropriates funds to the executive departments for the conduct of Government programs. Appropriations to DOD include funds for the various aspects of the military supply system, including personnel procurement, operations and maintenance, and research, development, test, and evaluation.

e. Because many changes may occur in military demands during the period required for budget preparation and submission, the President maintains control of the expenditure of military funds even after the money has been appropriated by Congress.

2-2. The National Security Council

a. The National Security Act of 1947 created the National Security Council (NSC) to advise the President with respect to the integration of domestic, foreign, and military policies relating to the national security.

b. The NSC is made up of three groups:

(1) *Statutory members.*

(2) *Statutory advisers.*

(3) *Attendees.*

c. The statutory members are the President, who is chairman of the council; the Vice President; the Secretary of State; and the Secretary of Defense. These are the persons who are charged with the responsibility for giving guidance to the President in the formulation of national security policies. The ultimate authority for deciding such policies and selecting national objectives relative to security is vested in the President who decides based on the advice of the statutory members of the NSC. The statutory advisers are the Chairman, Joint Chiefs of Staff (JCS), and the Director, Central Intelligence Agency (CIA). These members are required to advise the statutory members in matters related to their fields of specialized interest which, of course, are often of considerable concern to security policy and objectives.

d. The attendees include the Secretary of the Treasury and the Director, United States Information Agency. The Secretary of the Treasury is a major policy adviser to the President on domestic and international financial and tax policy, while the international communication agency as well as being the principal vehicle through which the rest of the world learns about the United States, is also an important source of information regarding the views of the nationals of foreign countries, on the impact of United States security policies and objectives abroad. It is also the prerogative of the President to request the presence of any other individual as an attendee whom he deems advisable.

e. All security policies and objectives have an effect on the needs of the military services and, thus, the supply systems of the services and the General Services Administration (GSA). The NSC, as the principal agency influencing the President's selection of national security policies and objectives, exerts a major influence over the activities of the service supply systems, and the management thereof.

2-3. The Congress

a. Article I, section 8, of the Constitution defines the powers of Congress. Included are the powers to assess and collect taxes; to regulate commerce, both interstate and foreign; to declare war; to raise and maintain an army and navy; etc. Together with the Senate, these are the lawmakers of the United States, and it is within the statutory limitations imposed by the laws that supply operations in the services must be conducted. Congress not only sets the limits on the amount of money which may be spent, but also determines how the funds are to be expended through the constitutional provision that, unless otherwise specified, funds may be used only for prescribed purposes. In practice, Congress allows a fair degree of latitude; providing funds in a comparatively small number of appropriation titles. In view of the flexibility inherent in military service needs, and the difficulty of accurately predicting materiel requirements, this latitude is essential to supply operations. Any tightening or loosening of this congressional control may have far-reaching effects on materiel management.

b. On 19 December 1950, a bill was introduced in the Senate to amend title II of the First War Powers Act, 1941, as requested by the President. On 20 December 1950, the House of Representatives started action on a similar bill. The legislation was passed by Congress, signed by the President, and became Public Law (PL) 921, 81st Congress. The law itself was largely procedural; its principal effect was to amend and extend title II of the First War Powers Act of 1941. Title II of PL 921 gave the President the power to authorize any department or agency of the Government, exercising functions in connection with the national defense, to amend or modify contracts.

c. PL 921 expired 30 June 1952, and at the request of DOD it was superseded on a permanent basis by PL 85-804, enacted by Congress on 28 August 1958. This law, as implemented by Executive Order (EO) 10789 and section 17 of the Armed Services Procurement Regulation (now the Federal Acquisition Regulation (FAR)), established the authority and provided uniform regulations for entering into and amending or modifying contracts to facilitate the national defense. These contractual actions are extraordinary in nature and may be exercised by the Defense Department only in certain unusual circumstances. These circumstances are of three general types. The first provides for authorizing contractual adjustments of specific types including:

(1) Amendments without consideration to provide a certain amount of relief where a financial loss is causing impairment of the productive ability of a contractor to perform on essential defense contracts, or where direct Government action taken against a contractor results in a contract loss.

(2) Correction of a mutual mistake discovered after award of a contract.

(3) Formalization of an informal procurement commitment made to an individual or individuals without a formal contract. The second general type of action includes the making of advance payments to contractors, and the third general type includes the exercise of "Residual Powers" by formal Contract Adjustment Boards at secretarial level. This is a broad general authority to provide for extraordinary contractual actions which facilitate national security and which are not otherwise provided for under the act.

d. The Foreign Assistance Act of 1967, the amended version of the basic Foreign Assistance Act of 1961, which provided the authority for the United States to implement its foreign economic, military assistance, and military sales programs for fiscal year 1968, was signed into law by the President on 14 November 1967, as PL 90-137. The funds authorized under this act were considerably less than those the executive branch had requested and the amount that was later appropriated was still lower. In addition to the severe fund reductions, the act placed new major restrictions upon the use of both economic and military funds.

e. Another law which had major impact on foreign aid was the International Security Assistance and Arms Export Control Act of 1976 (PL 94-329) which placed many new controls and restraints on US transfers of arms and services through amendment of the Foreign Assistance Act of 1961 and restructuring the Foreign Military Sales Act of 1968 (retitled as the Arms Export Control Act).

f. Other statutory limitations on the supply system include:

(1) PL 82-436 (chapter 145, title 10, USC and section 487, title 40, USC) Defense Cataloging and Standardization Act, establishing the scope and purpose of the single catalog and standardization systems.

(2) PL 80-413 (62 Stat. 21; 41 USC 151), the Armed Forces Procurement Act, establishing strict limitations upon the procurement function.

(3) PL 81-216, as amended (63 Stat. 578; 5 USC 171), an amendment to the National Security Act requiring DOD to establish a unified system of financial accounting. This resulted in the present financial inventory accounting systems.

(4) PL 81-152 establishing the Federal Property and Administrative Services Act, as amended (63 Stat. 377; USC 124-132). The GSA (Federal Supply and Services) buys and stores common-use commercially available items for Federal Government agencies. GSA also has responsibility for disposal of surplus personal property for civil government agencies.

2-4. Congressional Liaison with Military Establishment

a. In order to guide Congress in formulating legislation affecting the Military Establishment, various committees of the Senate and House of Representatives maintain close liaison with the military services and conduct both routine and special investigations. Even when they do not lead to new legislation, these investigations, by highlighting certain problems, may lead to changes in supply policy and practices. Often congressional investigations are informal, involving questions or suggestions from individual congressmen to responsible authorities in the supply system. These questions and suggestions are often helpful in improving supply practices.

b. Standing congressional committees which customarily request detailed logistical information are:

(1) Standing committees of the Senate:

(a) Appropriations Committee.

(b) Armed Services Committee.

(c) Finance Committee.

(d) Government Operations Committee.

(e) Aeronautical and Space Sciences Committee.

(f) Small Business Committee.

(g) Foreign Relations Committee.

(2) Standing committees of the House:

(a) Appropriations Committee.

(b) Armed Services Committee.

(c) Government Operations Committee.

(d) Science and Astronautics Committee.

(e) Small Business Committee.

(f) International Relations Committee.

(3) Congressional joint committees, commissions, and boards:

(a) Joint Committee on Defense Production.

(b) Joint Committee on Reduction of Nonessential Federal Expenditures.

(c) Joint Economic Committee.

Section II
Department of Defense

2-5. History

a. DOD, originally called the "National Military Establishment," was formed in 1947 under the National Security Act. In 1949, it became an executive department of the Government. Reorganized in 1953 and again in 1958 under the Department of Defense Reorganization Act, it assumed much the same form that it has today.

b. Within DOD, there are three separate military departments: the Army, the Navy (including the Marine Corps), and the Air Force, each maintaining a considerable degree of autonomy and having its own combat and service organizations. Thus, each service has its own supply organization and is responsible for computing and budgeting for its own materiel needs within guidance provided by the Secretary of Defense. The Secretary of Defense exercises ultimate authority over the military departments and has the responsibility of integrating their policies and procedures.

c. DOD includes the Secretary and the Deputy Secretary of Defense; the Office of the Secretary of Defense; the JCS and the Joint Staff; the Inspector General of DOD; the three military departments and the four military services within those departments (Army, Navy, Air Force, and Marine Corps); the unified and specified commands; and such other DOD agencies as the Secretary of Defense establishes to meet specific requirements. Figure 2-1 shows the current DOD organization.

d. In providing immediate staff assistance and advice to the Secretary of Defense, the Office of the Secretary of Defense, and the JCS, although separately organized, function in full coordination and cooperation. The Secretary’s Staff includes the offices of the Deputy Secretary of Defense, the Under Secretary of Defense for Policy, the Under Secretary of Defense for Research and Engineering, 11 Assistant Secretaries of Defense, the General Counsel, and such other staff offices as the Secretary of Defense establishes to assist him in carrying out his duties and responsibilities. The heads of these offices perform such functions as are assigned by the Secretary of Defense in accordance with existing laws. The Joint Chiefs, as a group, are directly responsible to the Secretary of Defense of the functions assigned to them. Each member of the JCS, other than the chairman, is the head of his service and is also responsible for keeping the Secretary of his military department fully informed on matters considered or acted upon by the JCS.

e. Each military department is separately organized under its own Secretary and functions under the direction, authority, and control of the Secretary of Defense. The Secretary of each military department is responsible to the Secretary of Defense for the operation of his department as well as its efficiency. Orders to the military departments are issued through the Secretaries of these departments, or their designees, by the Secretary of Defense or under authority specifically delegated in writing by the Secretary of Defense as provided by law.

f. Commanders of unified and specified commands are responsible to the President and the Secretary of Defense for the accomplishment of the military missions assigned to them. The chain of command runs from the President to the Secretary of Defense and through JCS to the commanders of unified and specified commands.

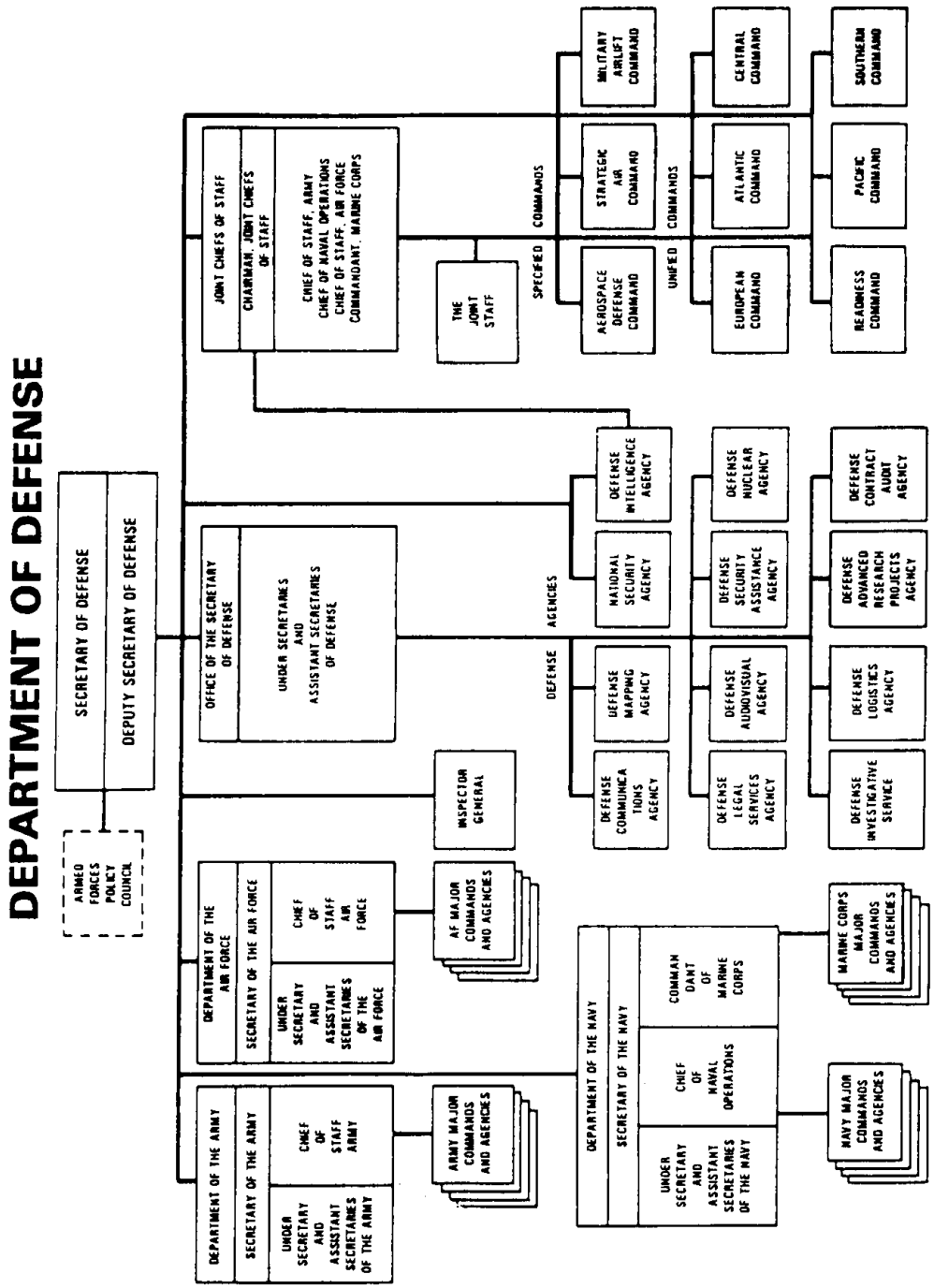

Figure 2-1. DOD organization.

Orders to such commands are issued by the President or the Secretary of Defense, or by JCS by authority and direction of the Secretary of Defense. These commanders have full operational control over the forces assigned to them and perform such missions as are as signed by the Secretary of Defense, with the approval of the President.

2-6. Office of the Secretary of Defense

The Office of the Secretary of Defense is organized along functional lines, with key staff offices as indicated in figure 2-2.

2-7. Secretary of Defense

The Secretary of Defense is the principal assistant to the President in all matters relating to DOD. Under the direction of the President, and subject to the provisions of the National Security Act of 1947, as amended, the Secretary of Defense exercises direction, authority, and control over DOD. He is appointed from the civil life by the President with the advice and consent of the Senate. He serves as a member of the NSC and the North Atlantic Council.

2-8. Deputy Secretary of Defense

The Deputy Secretary of Defense is responsible for the supervision and coordination of the activities of DOD as directed by the Secretary of Defense. He act for, and exercises the powers of, the Secretary of Defense during his absence or disability. He is appointed from civil life by the President with the advice and consent of the Senate. He represents the Secretary of Defense with such governmental and international groups as are determined by the Secretary.

2-9. Under Secretary of Defense for Policy

The Under Secretary of Defense for Policy is the principal staff assistant to the Secretary of Defense for planning and policy matters concerned with politico-military and international affairs such as arms limitation negotiations, intelligence analysis and collection requirements, communications, command and control requirements, the use of outer space and the integration of departmental plans and policies with overall national security objectives. These functions are carried out through the following key personnel: Deputy Under Secretary of Defense for Policy, Assistant Secretary of Defense (International Security Affairs). Assistant Secretary of Defense (International Security Policy), and the Director of Net Assessment. In addition, the Under Secretary of Defense supervises the Defense Investigative Service and the Defense Security Assistance Agency.

2-10. Under Secretary of Defense for Research and Engineering

The Under Secretary of Defense for Research and Engineering is responsible for the research, development, test, and acquisition of all DOD weapons systems. He also provides for the coordinated resource management, research, development, test, and acquisition of the telecommunications, command and control systems, and intelligence systems. These functions are carried out through the following key personnel: Assistant Secretary of Defense (Development and Support), Assistant Secretary of Defense (Research and Technology), Assistant Secretary of Defense (Command, Control, Communication, and Intelligence), Deputy Under Secretary (Acquisition Management), Deputy Under Secretary (international Programs and Technology), Deputy Under Secretary (Research and Advanced Technology), Deputy Under Secretary (Strategic and Theater Nuclear Forces). Deputy Under Secretary (Tactical Warfare Programs), and Assistant to the Secretary of Defense (Atomic Energy). In addition, the Under Secretary of Defense for Research and Engineering supervises the Defense Advanced Research Projects Agency, the Defense Communications Agency, the Defense Nuclear Agency, and the Defense Mapping Agency.

2-11. Assistant Secretary of Defense (Comptroller)

The Assistant Secretary of Defense (Comptroller) advises and assists the Secretary of Defense in the performance of the department’s programing, budgetary, and fiscal functions and DOD-wide organizational and management matters; provides for the design and installation of resource management systems throughout DOD; collects, analyzes, and reports resource management information for OMB, Congress, the General Accounting Office (GAO), and other agencies outside DOD; supervises, directs, and reviews the preparation and execution of the defense budget; and oversees services pertaining to automatic data processing (ADP). In addition, the Assistant Secretary of Defense (Comptroller) supervises the Defense Contract Audit Agency.

2-12. Assistant Secretary of Defense (Health Affairs)

The Assistant Secretary of Defense (Health Affairs) is responsible for DOD health and sanitation matters which include the care and treatment of patients, preventive medicine, clinical investigations, hospitals and related health facilities, medical materiel, nutrition, drug and alcohol abuse control, and health personnel and the procurement, education and training, and retention of such personnel.

OFFICE OF THE SECRETARY OF DEFENSE

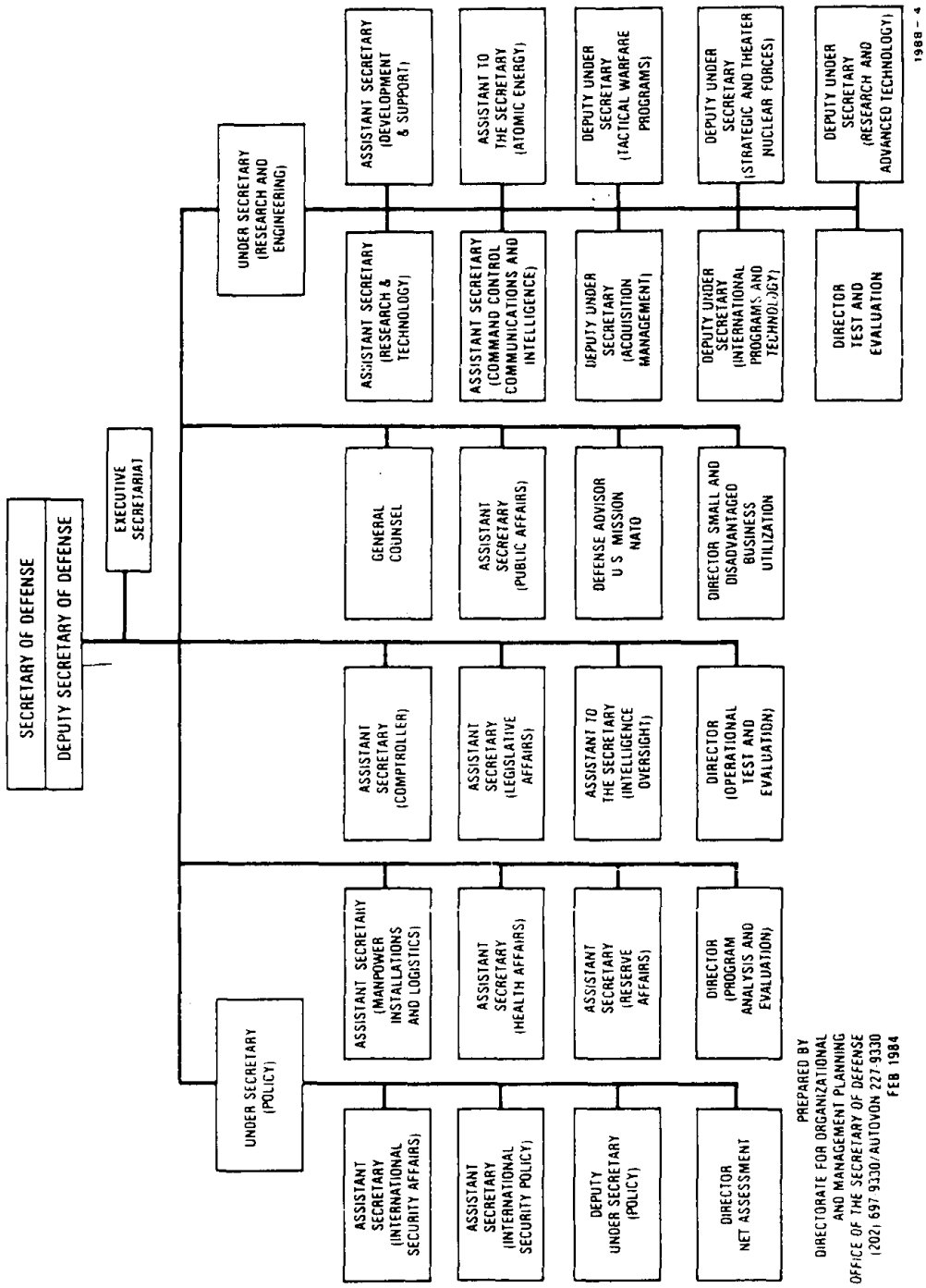

Figure 2-2.

2-13. Assistant Secretary of Defense (Manpower, Installations, and Logistics)

The Assistant Secretary of Defense (Manpower, Installations, and Logistics) is the principal staff assistant to the Secretary of Defense in the functional fields of manpower, personnel, and material requirements; production planning and scheduling; acquisition; quality assurance; inventory management; storage, maintenance, distribution, movement, and disposal of materiel, supplies, tools, and equipment; quality control; transportation, petroleum, and other logistics services; supply cataloging, standardization, commercial and industrial activities and facilities, including fixed industrial equipment; military construction; family housing; and real estate and real property, including general-purpose space. He also serves as the principal staff assistant to the Secretary of Defense in the functional fields of manpower and personnel and exercises staff supervision over the Defense Logistics Agency (DLA). The Assistant Secretary of Defense (Manpower, Installations, and Logistics) is appointed by the President with the advice and consent of the Senate.

2-14. Assistant Secretary of Defense (Legislative Affairs)

The Assistant Secretary of Defense (Legislative Affairs) maintains direct liaison with Congress, the Executive Office of the President, and other Government agencies with regard to legislative investigations and other pertinent matters affecting the relations of DOD with Congress; provides advice and assistance to the Secretary of Defense and other officials of DOD on congressional aspects of departmental policies, plans, and programs; coordinates departmental actions relating to congressional consideration of the legislative program of the department; coordinates the development, clearance, and furnishing of information in response to requests received in the Office of the Secretary of Defense from Members of Congress and the committees of Congress and their staffs; and arranges for witnesses from the Office of the Secretary of Defense, defense agencies, and the military departments at congressional hearings on defense matters.

2-15. Assistant Secretary of Defense (Reserve Affairs)

The Assistant Secretary of Defense (Reserve Affairs) is the principal staff assistant to the Secretary of Defense for all matters concerning the National Guard and Reserve components. This includes, but is not limited to, manpower, logistics, budget programs, force structure, procurement, personnel, administration, facilities, training, mobilization, readiness, liaison, and other related aspects of Reserve matters.

2-16. Assistant Secretary of Defense (Public Affairs)

a. The Assistant Secretary of Defense (Public Affairs) manages the defense public and internal information activities, community relations, and programs of DOD and OSD in compliance with the Freedom of Information Act (5 USC 552). Liaison is maintained with and assistance is provided to information media and national and civic organizations with respect to matters relating to activities of DOD. In addition, the Assistant Secretary of Defense (Public Affairs) supervises the Defense Audiovisual Agency.

b. Each Under Secretary and Assistant Secretary also performs functions in his assigned fields of responsibility such as:

(1) Recommending policies and guidance governing DOD planning and program development.

(2) Developing systems and standards for the administration and management of approved plans and programs.

(3) Reviewing programs of the military departments for carrying out approved policies.

(4) Evaluating the administration and management of approved policies and programs.

(5) Recommending appropriate steps including the transfer, reassignment, abolition, and consolidation of functions which will provide for more effective, efficient, or economical administration and operation, and will eliminate unnecessary duplication, or will contribute to improved military preparedness. In the performance of his functions, he coordinates, as appropriate, with the military departments and other DOD agencies having collateral or related functions. In the course of existing full-staff functions, he is authorized to issue instructions appropriate to carrying out policies approved by the Secretary of Defense for his assigned fields of responsibility.

2-17. General Counsel of the Department of Defense

The General Counsel is the chief legal officer of DOD with responsibility for all legal services performed within or involving DOD. In addition, the General Counsel is responsible for the preparation and processing of legislation, orders, proclamations, reports, and comments thereon. In addition the General Counsel serves as Director, Defense Legal Services Agency.

2-18. Director, Program Analysis and Evaluation

The Director, Program Analysis and Evaluation, analyzes and reviews DOD quantitative requirements including forces, weapons systems, equipment, personnel, and nuclear weapons; initiates, monitors,

guides, and reviews requirements studies and cost effectiveness studies; encourages the use of the best analytical methods in DOD; and contributes or participates in special studies as directed by the Secretary of Defense.

2-19. Director of Operational Test and Evaluation

The Director of Operational Test and Evaluation is the principal adviser to the Secretary of Defense for the operational testing and evaluation of major weapons systems in their field environment. Functions include approval of operational tests for major programs, enhancement of operational test realism, oversight of independent operational test facilities and organizations, and analysis of operational test reports.

2-20. Other Activities

Activities which are also the responsibility of the Office of the Secretary include: overseeing the propriety of DOD intelligence activities promoting the use of small and disadvantaged businesses as a source of DOD supplies and services, and providing DOD representation on the US mission to NATO.

Section *III*
The Joint Chiefs of Staff

2-21. Organization

a. The JCS consist of the Chairman of the JCS; the Chief of Staff, US Army; the Chief of Naval Operations; Chief of Staff, US Air Force; and the Commandant of the Marine Corps.

b. The JCS:

(1) Are the principal military advisers to the President, the NSC, and the Secretary of Defense.

(2) Constitute the immediate military staff of military participation in public exhibitions, demonstrations, and ceremonies of national or international significance. Security review, under the provisions of EO 11652 of March 1972, is accomplished for all material for public release and publication originated by DOD, including testimonies before congressional committees, or by its contractors, departmental personnel as individuals, and material submitted by sources outside the department for such review. Also, reviews are made of official speeches, press releases, and other information originating within DOD for public release, or similar material submitted for review by other executive agencies of the Government, for conflict with established policies or programs of DOD or of the Federal Government.

c. Subject to the authority and direction of the President and the Secretary of Defense, the JCS-in addition to such other duties as the President and the Secretary of Defense may direct:

(1) Prepare strategic plans and provide for the strategic direction of the Armed Forces, including the direction of operations conducted by commanders of unified and specified commands.

(2) Prepare integrated plans for military mobilization and integrated logistics plans.

(3) Recommend to the Secretary of Defense the establishment and force structure of unified and specified commands and the assignment to the military departments of responsibility for providing support for such commands.

(4) Review the plans and programs of commanders of unified and specified commands.

(5) Review major personnel, materiel, and logistics requirements of the Armed Forces in relation to strategic and logistics plans.

(6) Establish doctrines for unified operations and training and for coordination of the military education of members of the Armed Forces.

(7) Provide the Secretary of Defense with statements of military requirements and strategic guidance for use in the development of budgets, foreign military aid programs, industrial mobilization plans, and programs of scientific research and development.

(8) Recommend to the Secretary of Defense the assignment of primary responsibility for any function of the Armed Forces requiring such determination, and the transfer, reassignment, abolition, or consolidation of such functions.

(9) Provide the United States representation on the Military Staff Committee of the United Nations and, when authorized, on other military staffs, boards, councils, and missions.

d. The JCS came into existence early in World War II following a decision by President Franklin Roosevelt and Prime Minister Winston Churchill to establish a supreme Anglo-American military hardy for the strategic direction of the war.

e. After the war in 1947, the National Security Act of that year formally established the JCS as a permanent agency and designated the JCS as the principal military advisers to the President, the NSC, and the Secretary of Defense.

f. Since 1947, the JCS organization has undergone several major changes, the latest being the Defense Reorganization Act of 1958 which, among other things, separated operational forces organized into unified and specified commands from the military departments, which had been executive agents and made them responsible to the Secretary of Defense through the JCS, increased the size of the joint staff, and gave operational command of all combat-ready forces to the unified and specified commanders.

g. Individual military departments are charged with the responsibility of organizing, equipping, training, administering, and supporting the forces for national defense. The JCS make recommendations to the Secretary of Defense regarding the assignment of combat forces to unified and specified commands. Forces so assigned are under the operational command of the unified or specified commands, but continue to be administered and supported by the military departments concerned.

h. Any combat forces not assigned to unified or specified commands remain under the control of the military departments, but these forces are few in number and are confined to training, development, or other specialized commands.

i. Since the service chiefs, in their roles as members of the JCS, obtain considerable military information which is not available through service channels, each is required to keep their service Secretary informed.

j. As the head of the JCS, the chairman outranks all other officers of the Armed Forces. The Chief of Staff of the Army, the Chief of Naval Operations, and the Chief of Staff of the Air Force rank among themselves according to dates of appointment to those offices and rank above all other officers on the active list of the Army, Navy, Air Force, and Marine Corps, except the Chairman of the JCS.

k. The chairman is appointed by the President from the officers of the regular components of the Armed Forces and serves at the discretion of the President for a term of 2 years. He may be reappointed for one additional term.

l. While the chairman outranks all other officers of the Armed Forces, he may not exercise military command over the JCS or any of the Armed Forces. He participates as a member of the JCS, serves as presiding officer of the JCS, provides agenda for their meetings, and assists them in carrying out their business. He informs the Secretary of Defense of those issues upon which agreement among the JCS has not been reached.

m. The chairman manages the Joint Staff and its director.

n. The Joint Staff headed by the director is composed of not more than 400 officers selected in approximately equal numbers from the Army, the Navy (including the Marine Corps), and the Air Force. The Joint Staff's primary mission is to prepare plans and reports which serve as the basis for decisions made by the JCS.

o. Except for certain special advisory functions and activities, the Joint Staff is organized along military staff lines with joint directors as shown in figure 2-3.

p. There are a number of other JCS activities which are not part of the Joint Staff, namely:

(1) JCS Representative, Strategic Arms Limitation Talks.

(2) JCS Representative, Mutual and Balanced Forced Reductions.

(3) JCS Representative, Law of the Sea.

(4) Assistant for Automation (Data Processing).

(5) Director of Administrative Services.

q. Additionally, the facilities of the National Military Command System are operationally and administratively responsible to the Operations Directorate of the Joint Staff.

r. Other organizations which report to or through the JCS include the:

(1) US Delegation, United Nations Military Staff Committee.

(2) US Representative to the Military Committee, North Atlantic Treaty Organization (NATO).

2-22. Logistics Directorate (J4)

a. The Logistics Directorate (J4), which is the activity of the JCS of prime interest to logisticians, is shown in figure 2-4. This directorate headed by a Director of Logistics who is responsible for providing assistance to the JCS in carrying out their logistics responsibilities as the military staff in the chain of operational command with respect to unified and specified commands.

b. The directorate consists of the Director for Logistics, two deputy directors, an executive officer, and appropriate subordinate divisions and branches. Each military department has approximately equal representation by rank, number, and importance of billet throughout the directorate. The director and the two deputies are general or flag officers from different military departments.

c. Under the authority and direction of the Chairman, JCS, and subject to the supervision and guidance of the Director, Joint Staff, the Director for Logistics shall exercise staff supervision and cognizance over joint logistics and strategic mobility matters. None of the assigned functions shall infringe on the prerogatives of the military departments/ services or on their assigned responsibilities to provide logistics support to their forces. Specifically, the Director of Logistics shall:

(1) Serve as the principal advisor to the JCS on joint and combined logistics matters.

(2) Prepare for the JCS joint logistics studies, estimates, and plans. Recommend to the JCS assignment of logistics responsibilities to the military services and DLA in accordance with these plans.

(3) Prepare for JCS the logistics objectives and the strategic mobility resource requirements necessary to support the strategy and force structure recommended by the JCS in the Joint Strategic Planning System.

(4) Prepare for the JCS recommendations for appropriate logistics guidance in the military services which, if implemented, will result in logistics readiness consistant with the approved strategic plans.

(5) Review and analyze guidance and decisions by the Secretary of Defense to assess their impact on the

ORGANIZATION OF THE JOINT CHIEFS OF STAFF

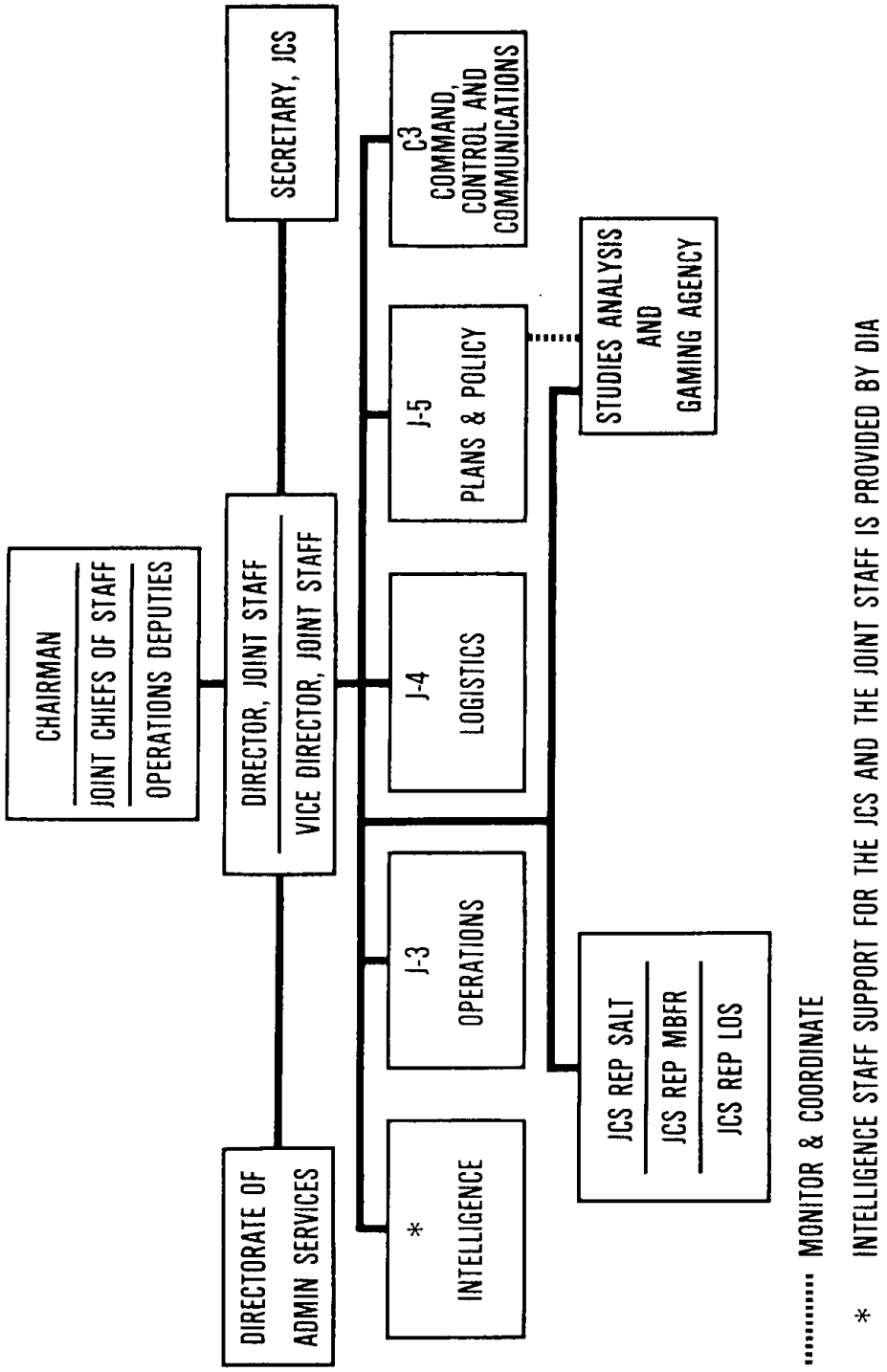

Figure 2–3.

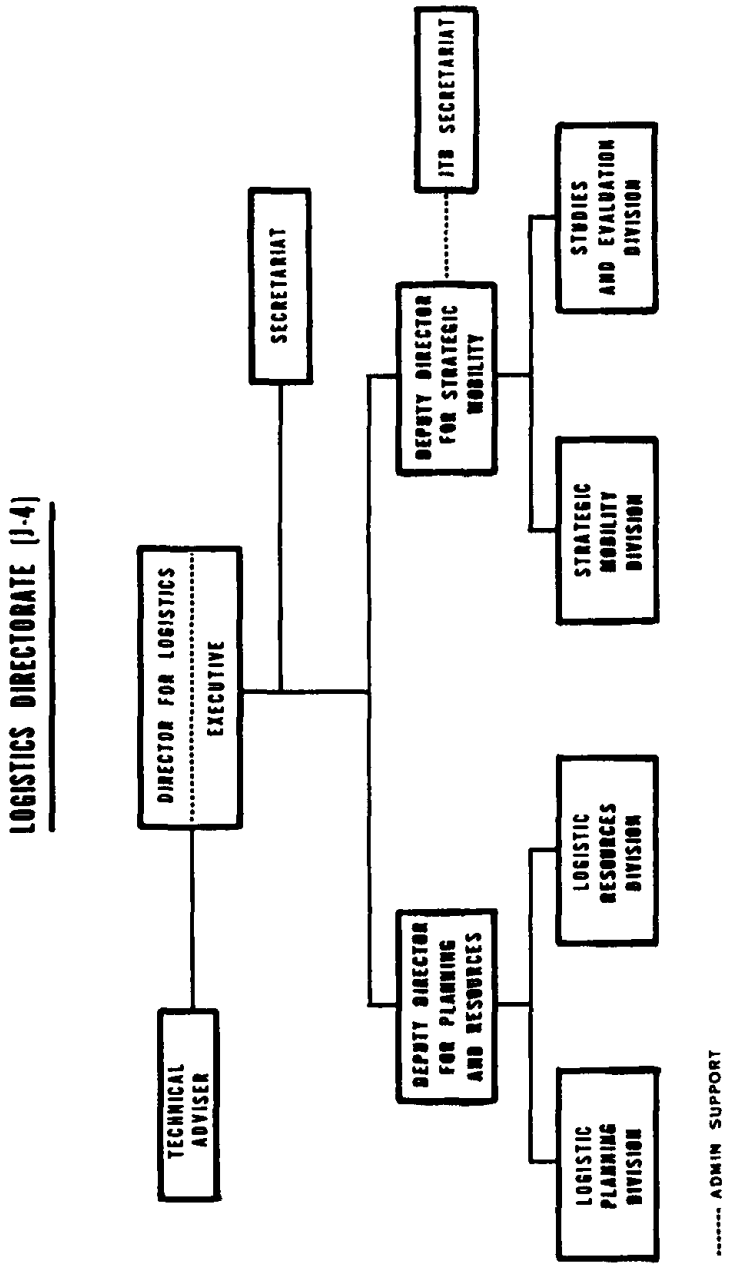
LOGISTICS DIRECTORATE (J-4)
DIRECTOR FOR LOGISTICS
EXECUTIVE
TECHNICAL ADVISER
SECRETARIAT
DEPUTY DIRECTOR FOR PLANNING AND RESOURCES
DEPUTY DIRECTOR FOR STRATEGIC MOBILITY
JTB SECRETARIAT
LOGISTIC PLANNING DIVISION
LOGISTIC RESOURCES DIVISION
STRATEGIC MOBILITY DIVISION
STUDIES AND EVALUATION DIVISION
ADMIN SUPPORT

Figure 2-4.

I-A

logistics support available to the unified and specified commands.

(6) In collaboration with the Director for Plans and Policy (J5), prepare recommendations on logistics and strategic mobility matters for consideration by the JCS for submission to the Secretary of Defense in connection with the DOD Planning, Programing, Budgeting, and Execution System (PPBES).

(7) Prepare for the JCS joint logistics planning guidance for use by commanders of unified and specified commands, the military service, and DLA, as needed, in preparing their respective detailed plans.

(8) Review the major materiel and other logistics requirements of the Armed Forces in relation to joint strategic and logistics plans.

(9) Ascertain the adequacy of the logistics support available to the unified and specified commands to execute the general war and contingency plans, including the assets available through industrial mobilization.

(10) Report to the JCS significant logistics deficiencies affecting the capability of military forces involved in current operational activities of the commanders of the unified and specified commands.

(11) Prepare for the JCS, when required, a statement of the worldwide logistics posture in relation to the tasks assigned to the unified and specified commands.

(12) In collaboration with the Director for Plans and Policy (JS), support the preparation of joint plans, policies, studies, and reports on cognizant matters pertaining to military assistance programs.

(13) Serve as the office of primary responsibility within the Office of the JCS for strategic mobility, including strategic movement planning and operations.

(14) Prepare for the JCS strategic mobility policy and guidance for use by the commanders of unified and specified commands, the military services, and the transportation operating agencies in preparing their detailed plans. Review and assess for the JCS the strategic movement aspects of unified command operation plans.

d. The Deputy Directors assist the Director for Logistics in carrying out his functions. One is designated Deputy Director for Strategic Mobility, and one is designated Deputy Director for Planning and Resources. The senior deputy present acts as the Director for Logistics in his absence.

e. The Deputy Director for Strategic Mobility serves as the point of contact within the Office of the JCS for strategic mobility matters, is responsible for the promulgation of annexes B and J of the Joint Strategic Capabilities Plan and the review of joint operation plans of the unified and specified commands and, in collaboration with the Director for Operations (J3) and the Director for Plans and Policy (J5), makes recommendations regarding their adequacy, feasibility, and suitability for the performance of assigned missions. Specific functions include:

(1) Analyze, evaluate, and monitor for the JCS all aspects of strategic movement planning and operations, with the objectives of identifying and solving strategic movement problems and achieving an optimum strategic mobility posture.

(2) Provide joint transportation planning, policy and guidance, including matters pertaining to joint and international transportation planning, operations, systems.

(3) Serve as Chairman, Joint Transportation Board and provide administration and support of the Joint Transportation Board and its elements.

f. The Deputy Director for Planning and Resources serves as the point of contact within the Joint Staff for matters of international logistics, including rationalization and standardization and logistics support requirements and capabilities to support unified commands, and facilities planning. Specific functions include:

(1) Direct the review and assessment of logistics activities relating to policy guidance, force posture security assistance, joint contingency construction, and industrial preparedness.

(2) Direct and monitor the development and coordination of the logistics aspects of the Joint Strategic capabilities plan, and the review and assessment of joint logistics aspects of the DOD Planning, Programming, and Budgeting System (PPBS).

(3) Serve as the logistics representative to the DOD Logistics Rationalization Steering Group, the Joint Medical Steering Group, and the Defense Energy Policy Council, and the ad hoc group/studies as assigned.

g. The Office of the Technical Adviser serves as adviser to the Director for Logistics on all aspects of systems analysis, operations research, and data processing matters as they relate to joint logistics and strategic mobility planning and operations. The Technical Adviser provides technical advice and assistance on the joint logistics and strategic mobility aspects command, control, and telecommunications.

h. The Joint Materiel Priorities and Allocations Board is the agency of the JCS charged with performing duties in matters referred to the JCS relating to the establishment of materiel priorities and the allocation of resources. The functions of the board are to:

(1) Establish, modify, and/or recommend priorities or allocation of materiel assets for the fulfillment of logistics requirements of US and allied forces.

(2) Review and act upon requests for modifications in Force Activity Designators.

(3) Review and act on requests recommenda-

tions to establish or change the priorities in the Master Urgency List.

(4) Prepare recommendations for approval of the JCS on priorities and allocation matters which must be referred to the Secretary of Defense for resolution.

i. The membership consists of: The Director of Logistics, Joint Staff as Chairman; the Director for Operations, Joint Staff; the Director for Plans and Policy, Joint Staff; and a flag or general officer from each military service.

j. There are many other agencies within the Organization of the JCS (Reference JCS Publication No. 4). Only those having the most influence on supply management have been discussed in this chapter.

Chapter 3
The Army Supply System

3-1. Background

a. The Army supply system is governed by broad policies established by the Secretary of Defense. The Secretary of the Army is responsible for implementing all Department of Defense (DOD) directives and instructions which deal with the supply system, including procurement, production, cataloging, standardization, storage, distribution, maintenance, disposal, transportation of supplies, and related matters. The scope of the Secretary's responsibility within the Department of the Army (DA) is comparable to that of the Secretary of Defense for the Military Establishment as a whole. The Secretary of the Army is aided in supply and logistics matters by the Assistant Secretary of the Army for Installations, Logistics, and Financial Management (ASA (IL&FM)). Within the Army Staff, the Deputy Chief of Staff for Logistics (DCSLOG) is the principal adviser to the Chief of Staff on logistics matters.

b. Historically, the burden of operating the Army supply system has been borne by the technical services organized around commodity groupings: the Ordinance Corps, the Quartermaster Corps, the Corps of Engineers, the Signal Corps, the Transportation Corps, the Army Medical Service, and the Chemical Corps. These technical services accomplished their supply missions through operating organizations which determined item requirements, then procured, received, stored, issued, maintained, and ordered disposal action with respect to those items for which they were individually responsible. In 1954, the position of DCSLOG was established, with responsibility and authority for logistics planning and for direction of supply operations. In 1962, the Army underwent a major reorganization which completely realined its supply system. The technical services were reduced or eliminated and their former materiel functions were centralized in the Army Materiel Command (AMC) (in May 1962 AMC was designated as the US Army Materiel Development and Readiness Command (DARCOM); GO 26, 25 Jul 84 redesignated DARCOM as AMC effective 15 May 1984), with the exception of medical supply and medical maintenance support which was retained by The Surgeon General (TSG), communication systems which were retained by the US Army Communications Command (USACC) (designated as the US Army Information Systems Command (USAISC) by GO 26, 25 Jul 84, effective 15 May 1984), and installation facilities which were retained by the Chief of Engineers.

c. DCSLOG way relieved of command-like responsibilities for the technical services and planning and policy responsibilities were reemphasized. Currently, DCSLOG has Army General Staff responsibility for:

(1) Development and supervision of the Army logistics organization and systems worldwide, including plans, policies, programs, doctrine, and standards.

(2) DOD interservice, interdepartmental, and interagency support programs within the Army, and proponency for joint service policy for implementing the DOD program.

(3) Joint logistics coordination and support.

(4) Commercial and industrial activities programs.

(5) Logistics information systems which pertain to assigned functional areas of responsibility.

(6) Logistics planning and logistics operations for US and other national forces.

(7) Logistics readiness of US Army forces.

(8) Approval of the equipment portions of authorization documents.

(9) Logistics aspects of simulation and gaming techniques, studies, tests, and evaluations.

(10) Formulation, management, and program guidance for maintenancerelated logistics policy including field service, integrated logistics support (ILS), maintenance engineering, and logistics systems supportability, as it pertains to retail (Army in the field) and wholesale (depot and contractual) activities world-wide; insuring that maintenance is adequately considered in allocation and use of all resources; developing uniform overhaul, issue, and shipping standards for Army equipment; establishing environmental preservation and pollution controls applicable to all Army mobile equipment.

(11) Insuring that equipment is logistically reliable, supportable, and maintainable and developed with full consideration for environmental factors and human factors; insuring that logistics support aspects are planned, programed, tested, acquired, and deployed in phase with the equipment it is designed to support; providing membership in the Army Materiel Acquisition Board and the Army Systems Acquisition Review Council (ASARC).

(12) Development of guidance for: distribution of materiel including ammunition: wholesale and retail supply; secondary item peacetime and war reserve requirements; storage; asset reporting; cataloging; materiel utilization; DOD military standard system; vertical supply management; major item distribution plans; demilitarization of surplus equipment; direct support system; care and preservation of materiel in storage; ammunition surveillance and maintenance; explosive ordnance disposal; selected item management system; the command supply discipline program; acid redistribution or disposal of surplus and foreign excess personal property.

(13) Development of concepts and guidance for evolution of automated management systems applicable

to supply, international logistics, to supply, international logistics, maintenance, troop support, and transportation.

(14) Development and coordination of policy for logistics interrelationships, mutual servicing, and ILS.

(15) Directorship of the Army Stock Fund (ASF) and those secondary items obtained with the procurement appropriations (aircraft, missiles, weapons, tracked combat vehicles, ammunition, and other).

(16) Coordinating, development, and issuance of Army-wide security assistance (SA) policy and Army input to US SA Programs. SA responsibilities are primarily performed through an Assistant DCSLOG who interacts with DOD and other military departments and services as the principal Army Staff spokesman and staff focal point on SA matters.

(17) Those financial inventory accounting systems which are used for logistics management purposes.

(18) Coordination of the Army Energy Program.

(19) Petroleum, oils, and lubricants (POL) management.

(20) Army-wide logistics support services; e.g., commissary operations, food service, and clothing.

(21) Transportation and related services required for the movement of persons and things; transportation engineering and standardization; strategic movement matters; strategic mobility planning including force structure development and development of preferred force levels of airlift and sealift forces and contingency plans; intermodal distribution systems including surface container-support distribution systems development.

d. DCSLOG serves as the program director for airlift and sealift and forces for central supply and maintenance logistics, which are 2 of the 10 major programs of the Five Year Defense Program (FYDP). In addition, he is program element director for base operations in certain logistics areas. He integrates the depot maintenance requirements of the National Guard and Reserve forces into the total depot maintenance program. He further acts as the budget program director for specific categories in the Military Assistance Program (MAP) budget structure. To aid in performance of his myriad duties and responsibilities, he exercises supervision and control over the US Army Troop Support Agency (TSA) and the US Army Logistics Evaluation Agency (LEA).

e. Other DA Staff agencies which have major responsibilities in the Army supply system are the Chief of Engineers, who is responsible for facilities and structures management; the Deputy Chief of Staff for Research, Development, and Acquisition (DUSRDA), responsible for materiel acquisition and industrial preparedness planning; the Deputy Chief of Staff for Operations and Plans (DCSOPS) manages a structure and composition system which provides a summation of manpower and equipment required and authorized for a selected Army force structure over a prescribed planning period. DCSOPS also manages the Army Priority System for major item distribution to include the DA Master Priority List (MPL) and DA Program Priority List; TSG, for medical materiel; the USACC for communication systems materiel; and the US Army Intelligence and Security Command (INSCOM) for materiel peculiar to its needs.

3-2. US Army Materiel Command

a. The US Army Materiel Command (AMC), consists of a nationwide network of 65 installations and 101 subinstallations and separate units.

b. It is responsible for the life-cycle materiel functions formerly performed by six of the Army’s seven technical services (Ordnance, Signal, Quartermaster, Engineers, Transportation, and Chemical), including research and development; test and evaluation; procurement and production; storage and distribution; inventory management; maintenance; and disposal.

c. AMC has inventory management responsibility for approximately $21.7 billion in wholesale stocks on hand in Continental United States (CONUS) depots, of which $7.1 billion is ammunition. AMC directly employs approximately 10,700 military personnel and 111,200 civilian personnel.

d. With headquarters in Alexandria, VA, it operates through major subcommands and directs the activities of depots, laboratories, arsenals, maintenance shops, proving grounds, test ranges, and procurement offices throughout the United States.

e. AMC headquarters furnishes overall policy guidance for its far-flung operations. The major subordinate commands (MSC) serve as the "midmanagement level." Individual installations and activities accomplish the actual execution of the Army’s materiel program.

f. AMC also makes maximum use of "vertical management" techniques, employing program, project, and product managers to expedite the development, production, and delivery of critical weapon (equipment) systems. To achieve this objective, HQ, AMC weapon system staff management employs the matrix management concept operations; i.e., every item, system, or equipment managed by DARCOM shall be assigned for staff management to either the Director of Development, Engineering and Acquisition, or the Director of Supply, Maintenance, and Transportation. These two directors are designated weapon system directors and all other directors and office chiefs are designated functional directors.

g. At AMC headquarters, there are three deputy commanding generals: The Deputy Commanding General for Research, Development, and Acquisition; the Deputy Commanding General for Materiel Readiness; and the Deputy Commanding General for Resources

and Management. Each is responsible for directing all subordinate echelons within respective mission areas.

h. Deputy Commanding General for Research, Development, and Acquisition assists the Commanding General by exercising direction of AMC research and development elements with their assigned program/project/product management offices; the research laboratories; US Army Test and Evaluation Command (TECOM); all research and standardization of fires; and the Foreign Science and Technology Center (FSTC). He also serves as Executive Director for Chemical and Nuclear Matters (EDCNM).

i. Deputy Commanding General for Materiel Readiness assists the Commanding General by exercising direction of AMC materiel readiness elements and their assigned program/project/ product managers; the US Army Depot System Command (DESCOM); the Security Assistance Center; arsenals; and logistics assistance offices. He also serves as Executive Director for Conventional Ammunition under the Secretary of the Army's mission as DOD single manager for conventional ammunition; and as Executive Director for Test, Measurement, and Diagnostic Equipment (TMDE) under the AMC Commanding General's mission as DA Executive Agent for TMDE.

j. Deputy Commanding General for Resources and Management oversees management and control of total command resources. He has responsibility for formulating and maintaining systems and procedures for which the development and execution of each appropriation budget is fully balanced and integrated-to include providing a consistent resources management framework for development testing, procurement, production, and ILS planning.

3-3. AMC major subordinate commands

a. The present AMC organization includes Army Armament, Munitions, and Chemical Command (AMCCOM); the Army Aviation Systems Command (AVSCOM); the Army Communications-Electronics Command (CECOM); DESCOM; the Army Missile Command (MICOM); US Army Materiel Development and Readiness Command. Europe (DARCOM-EUR); US Army Security Assistance Center (USA-SAC); the Army Tank-Automotive Command (TA-COM); the Army Test and Evaluation Command (TECOM); the Army Troop Support Command (TROSCOM); and the Electronics Research and Development Command (ERADCOM).

b. In addition to the above commands, AMC encompasses a number of program/ project/ product managers, various laboratories, schools, and centers.

c. AMCCOM, headquartered at Rock Island, IL, is the armament development and provisioning element of AMC, responsible for the development, production, and readiness of armament systems and ammunition-the "guns and bullets" of the combat soldier. It provides unified life-cycle management of weapons, ammunition, and chemical materiel.

(1) AMCCOM's management responsibility extends to a wide variety of items, including towed and self propelled artillery, mortars, recoilless rifles, rocket launchers, and individual and crew-served weapons. As the "Crossroads of the Armament Community," AMCCOM provides systems and components to support the tanks, aircraft, and missiles managed by other DARCOM commands.

(2) Since 1977, AMCCOM has also been the single manager for the procurement, production, supply, maintenance, and transportation of conventional ammunition for DOD.

(3) The AMCCOM complex includes the headquarters, four arsenals, 30 ammunition plants and activities, two research and development centers, the Defense Ammunition Center and School, and various other field and support activities. Rock Island Arsenal in Illinois is best known for the production and assembly of gun mounts, receivers, and recoil mechanisms, and for its tool set assembly mission. Watervoliet Arsenal has the unique mission of producing gun and cannon tubes for the Army, Navy, and Marines.

(4) Pine Bluff Arsenal is responsible for defensive chemical munitions and equipment and is the only current site at which white phosphorus-filled items are loaded. Rocky Mountain Arsenal performs demilitarization of obsolete chemical agent identification sets.

(5) Most of AMCCOM's ammunition plants and activities are operated by private contractors, although they are Government owned and about half are in active status. A new facility, the Mississippi Army Ammunition Plant in Picayune, Mississippi, is the first new plant since World War *II.* Other AMCCOM activities include the Central Ammunition Management Office-Pacific, HI; the Defense Ammunition Center and School, Savanna, IL; Technical Escort Unit, Aberdeen Proving Ground, MD; the Munitions Production Base Modernization Agency, Dover, NJ; and the Army Armament Research and Development Centers at Dover, NJ and Aberdeen Proving Ground, MD.

(6) AMCCOM is responsible for the research and development of gun weapons systems, to include ammunition and fire control, for the Army and for other DOD agencies as directed. The command's responsibility includes initial procurement life-cycle engineering.

(a) Two of its four major laboratories-the Large Caliber Weapon Systems Laboratory and the Fire Control and Small Caliber Weapon Systems Laboratory-and most of its administrative and technical support activities are located at Dover, NJ. The other two

principal laboratories-the Chemical Systems Laboratory and the Ballistics Research Laboratory-are at Aberdeen Proving Ground, MD. The Benet Weapons Laboratory, an element of the Large Caliber Weapon Systems Laboratory, is a tenant activity at Watervliet Arsenal, NY.

(b) Project managers for the Cannon Artillery Weapons Systems/JPM Semiactive Laser Guided Projectiles (CAWS), Sergeant York Air Defense Gun, and smoke/obscurants are assigned to AMCCOM.

(c) The command's mission-improving those systems already in the field and developing better systems to replace them-encompasses the following assigned materiel: Artillery weapon systems; infantry weapon systems; air defense systems; aircraft weapon systems; armor-piercing projectiles; surface vehicle mounted weapons; rocket and missile warhead sections; fire control systems; demolition munitions; mines, bombs, and grenades; pyrotechnic systems and munitions; smoke and other obscurants; chemical and riot control systems; chemical and biological protection systems; explosives and propellants; launch and disperser systems; and practice and training munitions.

d. AVSCOM serves as the DARCOM lead command for current and future Army aviation-related research, development, initial procurement, provisioning, and materiel support. AVSCOM is head quartered at St. Louis, MO, with subordinate activities located throughout CONUS. The scope of AVSCOM's work includes both fixed-wing and rotary-wing aircraft and projecting materiel needs, budgeting, cataloging, distribution maintenance, as well as research and development for Army aviation materiel.

(1) Project/product managers have specific systems requiring intensive centralized management. AVSCOM currently has project managers assigned to the AH-1S Cobra Helicopter and the UH-60A Black Hawk; a product manager for special electronic mission aircraft (SEMA).

(2) AVSCOM's Research and Technology Laboratories organization, with headquarters at Moffett Field, CA, consists of the Aeromechanics Laboratory at National Aeronautics and Space Administration (NASA) Ames Research Center, also at Moffett Field; the Propulsion Laboratory at INASA Lewis Research Center, Cleveland, OH; the Structures Laboratory at the NASA Langley Research Center, Langley AFB, VA; and the Applied Technology Laboratory at Fort Eustis, VA. These laboratories perform the majority of the aeronautical research and development work. Major ongoing technology demonstration efforts include advanced composite airframes, digital/ optical flight controls fuelefficient turboshaft engines, and adverse weather fire control systems. Three recent demonstrator aircraft sponsored by AVSCOM include: the Rotor Systems Research Aircraft (RSRA), the advancing blade concept (ABC) Aircraft, and the XV-15 Tilt Rotor Research Aircraft.

(3) The US Army Avionics Research and Development Activity (AVRADA), located at Fort Monmouth, NJ, is the aviation-electronics arm of AVSCOM. AVRADA's principal thrust is the development and integration of digital electronics systems for improved mission accomplishment and enhanced man-machine interface. The US Army Aviation Engineering Flight Activity (AEFA), Edwards Air Force Base, CA, conducts flight tests on Army aircraft and subsystems. AEFA has recently installed the Nation's newest real-time flight test data system.

(4) AVSCOM has Army Plant Representative Offices (ARPRO) at Boeing Vertol, Philadelphia, PA; Bell Helicopter Textron, Fort Worth, TX; and Hughes Helicopters, Inc., Culver City, CA. The ARPROs are responsible for contract administration, quality assurance, flight acceptance, and property administration at the contractor's facilities.

(5) The Advanced Scout Helicopter Project Manager (PM), Aircraft Survivability Equipment PM, CH-47 Modernization PM, Tactical Airborne Remotely Piloted Vehicle/Drone System PM, and more recently, the Joint Systems Advanced Vertical Lift Aircraft (JVX) PM are located with AVSCOM in St. Louis. While the PM office for the Advanced Attack Helicopter (Apache) is under the direct control of HQ, AMC, it is collocated with HQ, AVSCOM for administrative, technical, and contractual support.

e. The CECOM mission covers the full spectrum of services to the soldier in the field of communications-electronics. The initial process of converting concepts into new communications equipment and systems is conducted in the Research and Development Center comprised of 10 program/ project/product managers and three laboratories, and a center for systems engineering and integration. The Research and Development Center is dedicated to the development and acquisition of command, control, and communications (C3) systems that will enhance the ability of the battlefield commander to achieve assigned missions. Such systems help the commander, in a timely manner, perceive the battlefield, plan operations, allocate and sustain forces, and successfully engage the enemy. These systems represent an all-important force multiplier. CECOM's mission is twofold-development and acquisition of C3 systems and the support of those systems in the field.

(1) At the CECOM Research and Development Center, communicationselectronics weaponry for the US Army of the future is taking shape today in three laboratories, or centers as they are called. The Center Tactical Computer Systems (CENTACS) conducts technology-based research and development in embed-

ded computer science and systems and develops hardware and software for computer systems for diverse applications. CENTACS also shares technical expertise with development managers and provides postdeployment software support for communications systems.

(2) The Center for Communications Systems (CENCOMS) provides engineering support to the project managers for C3 systems and conducts research and development programs to produce advanced communications technology, equipment, and systems. With the goal of achieving survivable, mobile, intercept, and jam-resistant battlefield communications, key technology efforts address HF through millimeter wave radio, fiber optics, antennas, communications security, information distribution, and network management.

(3) Supporting the R&D Center operations are field offices throughout CONUS and an office in Heidelberg, West Germany. The CECOM organization includes 10 development managers. Seven project managers direct Army efforts in Army Tactical Communications Systems, Operations Tactical Data Systems, Position Locating Reporting Systems/Tactical Information Distribution Systems, Satellite Communications, Single Channel Ground and Airborne Subsystems, Field Artillery Tactical Data Systems, and Multiservice Communications Systems. A program manager directs the TMDE modernization effort. Reporting to him are two project managers-for Test, Measurement, and Diagnostic Systems; and for Army TMDE.

(4) Once a communications-electronics system or item moves out of the research and development stage, CECOM must acquire and manage it. As the Army’s direct link with the electronics industry, CECOM contracts for the full range of communications-electronics equipment and systems, along with spare parts, tools, and special items for maintenance repair. CECOM’s national inventory control point (NICP) plays a key role in keeping fielded communications-electronics equipment in a high state of readiness. This task includes worldwide materiel management of communications-electronics systems and support items. The CECOM national maintenance point (NMP) provides maintenance and engineering expertise on maintainability of communicationselectronics materiel from concept to obsolescence. Support is provided to field armies by CECOM’s field services activities through its Logistics Assistance Offices throughout CONIES and overseas.

(5) The CECOM Television-Audio Support Activity (TASA), at Sacramento (California) Army Depot, is the Army life-cycle manager for nontactical, commercial broadcasting and television equipment for the Armed Forces.

(6) CECOM’S Communications Security Logistics Agency (CLSA), at Fort Huachuca, Arizona, provides commodity management of communications security equipment, aids, and accountable spare parts.

(7) The Electronics Materiel Readiness Activity (EMRA), Vint Hill Farms Station, Warrenton, Virginia, furnishes commodity management and depot level management for signal intelligence/electronic warfare equipment and systems. It supports INSCOM and other SIGINT/EW units and activities worldwide.

f. DESCOM, with headquarters at Letterkenny Army Depot, Chambersburg, PA, commands and controls the 12 depots and seven depot activities in the United States and West Germany that comprise the US Army Depot System.

(1) DESCOM is a major AMC interface with the soldier in the field. The DESCOM depots store and ship a broad range of general supplies and munitions managed by the Army, Defense Logistics Agency (DLA), and other agencies, to US and allied units worldwide. Half of DESCOM’s personnel and three quarters of its budget are involved in depot-level maintenance on most of the equipment in the Army’s inventory. The depots also offer a wide variety of customer assistance to units in the field and provide extensive "on-the-job" training to both Active and Reserve Army personnel.

(2) DESCOM headquarters provides logistics planning and programming for worldwide asset control and equipment distribution through the Continuing Balance System-Expanded (CBS-X) and the Total Army Equipment Distribution Program (TAEDP).

(3) In addition, DESCOM is responsible for maintaining, overhauling, and repairing all major Army systems, from those as large as tanks to those as small and intricate as laser range-finding units. Providing this service not only keeps the Army in a state of readiness but offers the taxpayer an economical alternative to procurement. For example, DESCOM can overhaul and convert an M60A1 tank to the improved M60A3 configuration for 17 percent of the cost of buying a new one. The key to performing these missions is DESCOM’s employees, who possess a wide range of industrial skills in fields such as engineering, electronics, metalworking, and ammunition surveillance and maintenance.

(4) DESCOM includes:

Anniston Army Depot, Anniston, AL

Lexington-Blue Grass Depot Activity, Lexington KY

Corpus Christi Army Depot, Corpus Christi, TX

Letterkenny Army Depot, Chambersburg, PA

Savanna Army Depot Activity, Savanna, IL

Mainz Army Depot, Mainz, Germany

Oberramstadt Army Depot Activity, Oberramstadt, Germany
New Cumberland Army Depot, New Cumberland, PA
Red River Army Depot, Texarkana, TX
Sacramento Army Depot, Sacramento, CA
Seneca Army Depot, Romulus, NY
Sharpe Army Depot, Lathrop, CA
Sierra Army Depot, Herlong, CA
Tobyhanna Army Depot, Tobyhanna, PA
Tooele Army Depot, Tooele, UT
Pueblo Army Depot Activity, Pueblo, CO
Umatilla Army Depot Activity, Hermiston, OR
Fort Wingate Army Depot Activity, Gallup,NM
Navajo Army Depot Activity, Flagstaff, AZ

g. ERADCOM is the Army center for the research, development, and acquisition of intelligence and electronic warfare (IEW) equipment. ERADCOM also provides the Army with electronics and electro-optics technology basic research.

(1) The equipment developed by ERADCOM enables soldiers to see deep into the battlefield day or night, in any kind of weather, and through any type of obscurant.

(2) To protect friendly assets and to win on tomorrow's highly mobile, dispersed, and electronically dense battlefield, ERADCOM develops countermeasure and counter-countermeasure devices. Some of them neutralize the enemy's IEW efforts, while others make weapons less vulnerable to enemy sensors.

(3) ERADCOM also develops a broad range of electronic systems and components that support major Army battlefield systems. For example, ERADCOM builds fuses for the Patriot, the Multiple Launcher Rocker System (MLRS), and the eight-inch nuclear projectile; radars and radar detection systems for fixed-and rotary-wing aircraft; electronic surveillance and countermeasures devices for a wide variety of C31 systems and applications; night vision equipment for the TOW, Dragon, aircraft, tanks, and the individual soldier; power sources for unique applications such as fuses, expendable jammers, and surveillance devices; and meteorological acquisition and processing equipment that supports the field artillery and even the space shuttle.

(4) A widely dispersed Army command, its seven laboratories are devoted separately to basic research and systems applications. The research laboratories develop basic technology to the point where it is mature enough to put on a system. The system laboratories then take over and install the developed technology in a test bed to demonstrate its application in the field.

(5) Engaged in basic research are the Electronics Technology and Devices Laboratory (ETDL) at Fort Monmouth, NJ, Harry Diamond Laboratones (HDL) in Adelphi, MD, and the Night Vision and Electro-Optics Laboratory (NVEOL) at Fort Belvoir, VA. Developing the electronic weaponry for the Army's major weapon systems are the Electronics Warfare Laboratory (EWL) and the Combat Surveillance and Target Acquisition Laboratories (CSTAL) at Fort Monmouth and the Signals Warfare Laboratory (SWL) at Warrenton, VA. ERADCOM's seventh laboratory, Atmospheric Sciences Laboratory (ASL) at White Sands Missile Range, NM, is primarily a modeling lab engaged in meteorological research. Twelve meteorological teams stationed from Panama to Alaska carry out weather tests for ASL.

(6) In addition to its laboratories, ERADCOM has two project managersRemotely Monitored Battlefield Sensor System (FIREFINDER/REMBASS) and Battlefield Data System (BDS) along with one product manager, Modular Integrated Communications Navigation System (MICNS). All are located in the Evans area of Fort Monmouth. An aircraft support activity is located at Lakehurst, NJ. EWL also has two subordinate activities, the Intelligence and Materiel Development Support Office at Fort Meade, MD, and the Office of Missile Electronic Warfare at White Sands, NM

h. MICOM manages the Army's missile and rocket program. Their major responsibilities include research, development, procurement, and continued support of weapons systems once they achieve operational status with Army units worldwide. The command also manages all sales of Army missiles and rockets to friendly foreign nations.

(1) Most of the command's people and its headquarters are at Redstone Arsenal, AL. The 38,000-acre home of Army missiles includes flight test ranges, laboratories, and other specialized buildings and equipment with a total investment value of more than $525 million.

(2) Major weapon systems managed by special project/product offices within MICOM include the operational Hawk; Chaparral/FARR Missile and Radar System; Stinger; the 2.75-inch aircraft rocket; the TOW antitank guided missile; and the Pershing ballistic missile. Systems being developed under MICOM management include US Roland air-defense guided missile; the MLRS, a multiple-launch rocket system; Viper, a short-range antitank weapon; Hellfire, a helicopter launched air-to-ground missile; Pershing II, the Army's new, high-accuracy long-range ballistic missile; and Rattler, a replacement for Dragon.

(3) The command is also the center of laser research for the Army and manages efforts to develop laser weapons as well as laser designators used by soldiers to guide missiles to their targets.

(4) MICOM includes:

(a) The US Army Missile Intelligence Agency, which maintains, produces, and disseminates scientific and technical intelligence concerning foreign missile and space activities.

(b) The US Army Redstone Arsenal Support Activity.

(5) The US Army Patriot Project Office is dedicated to managing the Patriot Air Defense System. Though based in neighboring Huntsville, AL, and administratively supported by MICOM, it reports directly to AMC headquarters.

(6) The US Army TMDE Support Group has worldwide responsibility for calibration support of all Army weapons and equipment. Though based at and administratively supported by MICOM, the support group is under direct control of HQ, AMC and reports to the executive director for TMDE.

i. TACOM, with headquarters in Warren, MI, develops, procures, distributes, and supports combat, tactical, special-purpose, and construction vehicles. Its mission is worldwide in scope and includes among its customers DOD users and those of friendly foreign governments. One of the major functions of TACOM is to serve as an NICP and as an NMP point for the tank automotive material which it manages. As the lead laboratory for all tank science and technology base programs, the command serves as system integrator and provides central management and program direction. The TACOM work force, military and civilian, are assigned to project and product managers for improved TOW vehicle, M60 tank program, heavy equipment transporter, M113 family of vehicles, armored combat vehicle technology, commercial construction equipment/ selected materials handling equipment, light armored vehicle and armored combat earthmover. The command also provides engineering services to program managers, M1 Abrams tank system, and Bradley fighting vehicle systems.

j. TECOM is located at Aberdeen Proving Ground, MD. TECOM's mission is to plan, conduct, and report results on systems development tests and on other tests performed during the Army material life cycle-production, postproduction, product improvement, and feasibility. TECOM also evaluates and tests foreign materiel for possible US acquisition.

(1) The command directs and manages nine test agencies from the Chesapeake Bay to the western desert of Yuma, AZ, and from Alaska to the Republic of Panama.

(2) The Army, Navy, Air Force, and Marines use the commands assets. As the operator of the US Army White Sands Missile Range, NM, the only all-land national missile range in the United States, TECOM performs tests for NASA.

(3) Testing for AMC subordinate developing commends is a routine part of the TECOM mission. Each developing command develops and produces specific hardware. Since none have the total facilities to test what it produces, TECOM's unique capabilities are used by almost every producer of Army materiel.

(4) The TECOM job is to insure that the soldier-in combat or in support-gets what he expects from his materiel and that he can count on it working.

k. TROSCOM is an MSC, located in St. Louis, MO, tasked with providing people, material, and facilities to support soldiers around the world. An action command, TROSCOM's mission is to provide research, development, and material support for a wide range of troop support equipment for the entire DOD and 50 friendly nations of the world. The scope of this work ranges from fleets of amphibians and watercraft to field support items such as generators, bridges, water purifiers, camouflage, mine detectors, airconditioners, heaters, fuel storage and distribution equipment, compasses, and surveying instruments.

(1) Personnel are located in St. Louis, and at the St. Louis Area Support Center in Granite City, IL; the US Army General Materiel and Petroleum Activity in New Cumberland, PA; and the US Army Support Activity in Philadelphia, PA.

(2) Materiel support includes the management processes of projecting the materiel needs; determining quantity; insuring timeliness of items; cataloging and systemizing the supply; and budgeting, distribution, and maintenance for troop support items, as well as handling all requisitions for this equipment.

(3) To effectively and efficiently fulfull these diverse responsibilities, TROSCOM coordinates operations through project and product managers, readiness project officers, and materiel and item managers.

(4) TROSCOM's research and development tasks are accomplished at its 240-acre headquarters and main laboratory complex supplemented with an 820-acre test area located on Fort Belvoir, and the US Army Fuels and Lubricants Research Laboratory (AFLRL) in San Antonio, TX. Research and development in fuels and lubricants there are designed to improve the survivability and operational readiness of combat equipment. Its research and development, engineering, and initial production buys are concentrated in the areas of mobility/countermobility, survivability, energy, and logistics systems. All are geared to provide the United States with a superior combat and deterrent force through development of a superior materiel and technical capability in both combat support and combat service support.

(a) The command holds Army lead laboratory status for countermine in the mobility/countermobility area. Other fields of endeavor in this program area are bridging, construction equipment, and barriers.

(b) Survivability includes camouflage, another lead-laboratory designation; field fortifications; physical security; tunnel detection; topographic equipment; and counterintrusion sensors.

(c) In the energy program area, the command's fields of endeavor are electric power, fuels and lubricants, and heaters and air-conditioners.

(d) Logistics comprises water supply, fuels handling, supply distribution, marine craft, and support equipment.

(e) Among TROSCOM's many and varied projects in support of the field Army, top priority is currently assigned to eight developments. They are the airborne minefield detection system (AMIDS); the counterobstacle vehicle; the surface launched unit, fuel air explosive (SLUFAE) mine neutralization system; the 300 gph reverse osmosis water purification unit (ROWPU); petroleum distribution equipment; the 1.5 kW methanol-air fuel cell; the light assault bridge; and pulse power sources for weapons systems. Readiness project officers manage a wide range of combat support systems and commodities. They are responsible for the success or failure of systems' programs, providing a single resource element for the field, creating lasting problem solutions, providing timely support, and promoting confidence in TROSCOM's ability to handle routine and priority problems. Materiel and item managers are responsible for a diverse group of commodities, such as altimeters, rotor blades, repair shops for clothing, bath units, water purification sets, and mapping and topographic equipment.

(f) Rapid deployment force water supply equipment heads the command's priority first-time buys. Others are the 600 gph ROWPU; the bridge erection boat; the lighter, air cushion vehicle, 30-ton capacity (LACV-30); and the link reinforcement set for the medium girder bridge (MGB).

(g) The wide range of advanced technology inherent in TROSCOM's scientific and engineering work force attracts substantial funding from project managers-including those of Patriot, FIREFINDER/REMBASS, and the M-1 Abrams Tank; from other defense agencies; and from Government departments such as Energy.

(5) Additional research and development functions are performed at TROSCOM's Natick Laboratories in Natick MA. NLABS has the responsibility of sustaining and protecting the soldier in any environment.

(a) Military and civilian employees assigned to the four major laboratories at Natick constantly seek new or better ways to provide improved uniforms, combat clothing, and field equipment; combat rations; field feeding preparation and serving equipment and systems; and the means to rapidly deliver needed personnel and supplies from the air.

(b) Aeronautical and mechanical engineers and parachute equipment specialists develop the means for delivering personnel and supplies from aircraft in flight, while still others design and develop organizational support equipment such as shelters and heaters.

(c) Important developments include the highly efficient MC-1 steerable personnel parachute and the CTU-2A torpedo-shaped pod container, which can be dropped from high-speed aircraft to pinpoint locations

. *(d)* Research and development in the protective clothing and food areas provide basic necessities for the survival of the combat soldier.

(e) A vastly improved personnel body armor system, consisting of a new helmet and protective vest made of a high-strength synthetic fiber (Kevlar) and providing significantly increased protection to the soldier, was adopted by the Army in 1978.

(f) Because of its revolutionary advances in the composition, packaging, and preparation of foods, the Food Research and Development Program has provided a wide variety of new and efficient food service systems to feed military combat personnel.

l. AMC-EUR, (formerly DARCOM-EUR), an extension of AMC, exercises, command or operational control of all AMC activities supporting USAREUR. Its major responsibilities include long-range planning for peacetime and emergency/ mobilization; providing logistics assistance; serving as focal point for AMC support to USAREUR; and functioning as a clearinghouse for AMC personnel entering or leaving Europe.

(1) Activated in July 1982, AMC-EUR is located at Hammond Barracks in Seckenheim, Germany, and employs approximately 90 civilian and military personnel. AMC-EUR is a new command established onsite to improve overall AMC support to Europe, and involves more than 40 activities and locations throughout the European theater. Additionally, force modernization efforts, which increase the number and types of systems requiring support, add to the need for centralized command or control.

(2) AMC-EUR strengthens AMC's support role under wartime planning by providing one control element in the theater for DARCOM activities. This command monitors TMDE repair and calibration activities in Europe; maintains continuous overview, monitorship, and coordination of the Force Modernization Program for all AMC activities in Europe; and performs liaison activities to improve customer service. AMC-EUR also facilitates communication between USA-REUR elements and the supporting DARCOM CONUS logistical base.

(3) AMC-EUR's long-term benefit to USAREUR is improved readiness, AMC-EUR's support to the soldier in the field is driven by its readiness and willingness

to help anywhere at anytime.

m. USASAC administers the Army's security assistance program for the Commander, AMC, who has been designated as the DA Executive Agent for Security Assistance. USASAC manages the program from the initial planning phases and definition of requirements for materiel and services to the completion of accounting and closure of individual Foreign Military Sales (FMS) cases and MAP Grant Aid lines.

(1) USASAC is the focal point within DA for coordination and interface of security assistance program activities worldwide. Policy guidance is received from HQDA, Office of the Secretary of Defense, and the Department of State. AMC major subordinate commands, General Services Administration (GSA), DLA, and the private industrial sector all provide material and services for foreign customers. USASAC works closely with many foreign countries and their embassies, other military services and unified commands, Defense Attache Offices, Military Assistance Advisory Groups, and other incountry organizations to provide friends and allies of the United State an increased capability to defend themselves. The PM for the Saudi Arabian National Guard (SANG) reports directly to USASAC.

(2) USASAC is located at Alexandria, VA, and New Cumberland Army Depot, PA.

3-4. Program/project/product management

a. Program/project/product management, which involves intensive centralized management of a weapon system or service, has proven its worth in the AMC community as a modern and efficient management technique.

b. An analysis of AMC operations will disclose that a relatively small number of programs account for a large percentage of AMC's allocated financial resources. Consequently, in most cases, AMC gives these programs special management attention by placing them under program/project/product managers.

c. The criteria used to identify these special programs include: significant anticipated expenditure of funds or a high total system unit cost; high-level interest in the program by Congress, the Secretary of Defense, the Secretary of the Army, or the Chief of Staff, US Army; significant impact on the US military posture; complexity requiring an unusual amount of participation by numerous commands and agencies; and unusual difficulties which need intensive management to satisfy an urgent requirement.

d. The managers are selected by a DA General Officer Board and each receives a formal written charter, signed either by the Secretary of the Army or the Commanding General, AMC. That charter gives each manager responsibility for the assigned program and the full-line authority of the Commanding General, AMC, to accomplish his tasks.

e. Using the money and other resources provided, the managers then direct activities in such a manner as to successfully reach stated cost, performance, and schedule goals. This might involve tasking the AMC major subordinate commands or agencies outside the AMC community. Depending upon the nature and complexity of the program, a manager either reports directly to the Commanding General, AMC, or the appropriate major subordinate commander.

f. The following managers report directly to HQ, AMC: Advanced Attack Helicopter; Target Acquisition Designation System/Pilot Night Vision System; Defense Communications Systems (Army); Bradley Fighting Vehicle Systems; Joint Tactical Fusion Program; Mobile Electric Power; Nuclear Munitions; Patriot; Training Devices; and M1 Abrams Tank.

g. Other managers are listed in appropriate subcommand narrative portions of this pamphlet.

3-5. AMC laboratories/centers/office

a. Each of the research and development and commodity commands has one or more laboratories integrated into its structure. These laboratories perform research and development in the sciences and technologies necessary for conceiving, designing, developing, and evaluating weapons, equipment, and systems-all at minimum total cost and with adequate performance to meet approved operational requirements.

b. The Human Engineer Laboratory (MEL) is located in Aberdeen Proving Ground, MD. This is a unique central laboratory that provides research and development support to AMC commodity commands and project managers in the human factors engineering technology area. It conducts: fundamental and applied research; weapon system concept feasibility studies; and system performance studies.

(1) It provides human factors engineering applications support on materiel items in various research and development stages and serves as the lead Army agency in the areas of Military Operations in Builtup Areas (MOBA) and robotics.

(2) Created in 1951, the laboratory has gathered facts and references from all over the world into a data bank which serves all appropriate DOD agencies and their contractors. The laboratory publishes over 1,100 technical reports on its research findings in a wide variety of subjects pertaining to human performance and the design of weapons, tanks, small arms, aviation, artillery, missile systems, communication and electronic equipment, clothing, body armor, and helmets.

c. Army Materials and Mechanics Research Center (AMMRC) is located in Watertown, MA, at the site of the former historic Watertown Arsenal. AMMRC is the modern materials research and development activity

responsible for managing and conducting the AMC research and exploratory development program in materials and solid mechanics. Its charter as the AMC lead laboratory for materials, solid mechanics, and materials testing technology (MTT) requires the center to perform research and development projects ranging from the synthesis of new and improved materials and designs to the prototype manufacturing of components for Army weapon systems.

(1) In addition, the center develops both destructive and nondestructive methods of materials testing and manages the MTT program for AMC. As an integral part of its MTT mission, AMMRC conducts the AMC Nondestructive Testing (NDT) Certification Program and provides NDT field support throughout DOD. The center is also responsible for managing and directing the Army portion of the Defense Standards and Specifications Program for materials.

(2) AMMRC manages DOD Information Analysis Centers, such as the Metals and Ceramics Information Center (MCIC) at Battelle Columbus Laboratories; the Thermophysical and Electronics Properties Information Analysis Center (TEPIAC) at Purdue University; and the Nondestructive Testing Information Analysis Center (NTIAC) at Southwest Research Institute.

(3) Examples of the utilization of advanced materials fostered by AMMRC include: a polyphosphazene rubber air plenum seal in the Abrams tank; a transparent blast shield for the Apache attack helicopter; spell suppression liners for the M113 armored personnel carrier; composite rotor blades for the Chinook cargo helicopter; and a cast titanium impeller for the T62 auxiliary power unit.

(4) AMMRC’s research program is planned within seven major thrust areas: aircraft, armament, combat and tactical vehicles, missiles, mobility equipment, logistics, and personnel support. Among the primary guidance sources in formulating and prioritizing the program are the AMC Long-Range Research, Development, and Acquisition Plan; Training and Doctrine Command priorities and mission area analyses; and the material needs of the AMC MSCs and program managers.

(5) In-house research projects are carried out by the Ballistic Missile Defense Materials Program Office (BMDMPO) and three laboratories organized along technology lines: Mechanics and Engineering; Metals and Ceramics; and Organic Materials. Through close coordination within the entire DARCOM community, MMRC is able to fulfill its mission of assisting the Army in developing and maintaining the finest in modern weapon systems.

d. US Army Research Office (ARO), located in the Research Triangle Park, NC, is closely allied with AMC laboratories. Its mission is to develop the AMC research program for mathematics and for the physical, engineering, environmental, and life sciences according to Army-wide requirements.

(1) This office manages the contracts and grants with educational institutions, research institutes, and Government and industrial laboratories. It administers the Scientific Services Program, the Junior Science and Humanities Symposium Program, and the Army Science Conference. It also coordinates Army participation in the International Science and Engineering Fair Program and the International Mathematics Olympiad. ARO also manages the Army’s participation in the University Research Program for the Army, the Uninitiated Introduction to Engineering Program, and Research and Engineering Minority Apprenticeship Program.

(2) The research element of the US Army Research, Development, and Standardization Group-United Kingdom, is located in London, England. It supports the overall research and development program of the Army by initiating and maintaining technical liaison with leading scientists and research and development organizations of western Europe, the Middle East, and Africa. It also provides help to defray the administrative costs of international conferences and symposia.

3-6. AMC schools

AMC schools provide training to military personnel from all of the services and to civilian employees of DOD agencies.

a. The Army Logistics Management Center (ALMC) is located at Fort Lee, VA. ALMC’s main mission is education, and its family of courses encompasses the spectrum of logistics management from research and development to property disposal and recycling. Students attending these logistics and logisticsrelated courses range from intern, middle management, and executive civilian personnel to noncommissioned officers and senior military officers.

(1) ALMC provides counseling and advice to activities installing learning resource centers. Students may pursue advanced degrees through a cooperative program with the Florida Institute of Technology and may qualify for certification in logistics-related areas through arrangements with several professional associations.

(2) ALMC formulates and publishes Army and defense logistics management doctrine through field manuals, pamphlets, technical manuals, and other official publications. It also provides an information service on Army and defense logistics systems as well as consultant services on logistics management problems.

(3) ALMC supervises the Intern Training Center

at Red River Army Depot in Texarkana, TX, which conducts four engineering courses, a preengineering course, a supply management course, and a maintenance management course.

(4) ALMC is the home of the bimonthly Army Logician magazine, the Defense Logistics Studies Information Exchange and, through a cooperative agreement with Fort Lee, the Army Logistics Library.

b. The US Army Management Engineering Training Activity (AMETA), located at Rock Island Arsenal, IL, plays a vital role in training throughout the Federal Government in scientific management practice. AMETA offers a 94-course curriculum, encompassing the latest advances in scientific management and technology.

(1) The course offerings range from basic technique application to the analysis of principles and concepts of management theory, with special emphasis on acquiring knowledge and skills that can be applied when the student returns to his installation. Included are executive development, automatic data processing, management analysis, quality assurance, reliability and maintainability, work measurement, work planning and control systems, value engineering, and associated management engineering applications.

(2) Consulting and research are also an integral part of the overall mission accomplished by the AMETA staff and faculty.

(3) Students have received training at AMETA since its inception in 1952. Resident as well as onsite courses are conducted worldwide for AMC, DA, DOD, and other activities of the Federal Government.

(4) In 1974, AMETA also joined with the Florida Institute of Technology, Melbourne, FL, in offering an evening graduate-level management development curriculum, designed to provide a master’s degree program for Federal employees as well as others in the surrounding non-Government community. The program is available to individuals who meet the admission requirements of the Florida Institute of Technology.

c. The Joint Military Packaging Training Center (JMPTC), located at Aberdeen Proving Ground, MD, conducts training in the doctrine and techniques of preservation, packaging, marking, and packing of military supplies and equipment for storage and transportation. Instructions are presented in resident, onsite, correspondence, and accredited off-campus classes. Students eligible for training are military and civilian personnel of all DOD services, other Federal agencies, Security Assistance Training Program countries, State, and municipal governments, and industrial contractors. Established in 1951 by the Secretary of Defense, JMPTC has trained military and civilian students worldwide.

(1) JMPTC conducts research to identify, develop, and adapt new concepts and techniques of packaging engineering into the training program and assigned Army-wide Training Literature Program (ATLP). This center develops, revises, and produces official training motion picture films, graphs, training aids, closed-circuit television tapes, three-dimensional training aids, and other educational media for use in the ATLP used by DOD activities to support JMPTC training.

(2) The mission also includes direction and coordination of the Training Assistance Program to military schools, and reviewing programs of instruction, lesson plans, and other joint training materials.

(3) Graduates of JMPTC courses may be able to obtain academic credit towards vocational certificates, associate or baccalaureate degrees.

(4) JMPTC serves as principal adviser to the Commanding General, AMC on military packaging training for DOD.

(5) AMC Industrial Training Programs are also conducted to meet a one-time or continuing need for AMC-related industrial training. The skills and techniques taught are associated with material testing, corrosion control, product inspection, and occupational safety and health. The programs are:

(a) Safety Training Program, conducted at the Field Safety Activity, Charlestown, IN.

(b) Materials Inspection and Nondestructive Testing Training Program, conducted at AMMRC, Watertown, MA.

(c) Prevention of Materials Deterioration: Corrosion Control, conducted by ARRCOM, Rock Island, IL.

(d) Product Assurance Industrial Training Program, conducted by CECOM, Fort Monmouth, NJ.

(e) Quality Assurance Training Program for Vehicle Inspection and Acceptance, TACOM, Warren, MI.

3-7. Other commands, Installations, and activities

a. Automatic Data Processing (ADP) Design Agencies Providing the Army and its customers with effective and reliable weapons systems and munitions for national defense and mutual security requires effective and reliable logistics systems. Emphasis on the development, installation, and operation of standardized ADP systems and equipment can be a major contributing factor to attainment of the required effectiveness and reliability in logistics systems and is a continuing process within AMC.

b. Standard ADP system design and development activities of the command are managed principally by two central system design agencies under the operational control of the Director of Management Information Systems. These agencies are:

(1) The Automated Logistics Management Systems Activity (ALMSA), located at St. Louis, MO, was

activated in 1967 as a central systems design activity HQ, AMC, responsible for designing, integrating, programing, testing, documenting, installing, and maintaining standard ADP systems and equipment configurations for AMC material readiness and research and development command elements. It also serves as the AMC focal point for ADP advanced technology as well as advanced techniques in teleconferencing, office automation, and information resources management (IRM). In this capacity, ALMSA has developed and maintained one of the largest ADP business and accounting systems ever developed, the Commodity Command Standard System (CCSS). The system is now installed at each of the material readiness command elements and provides rapid and effective support in all functional areas of logistics management.

(a) In addition, modern business systems in support of AMC project managers under the title of Executive Level Interactive Terminal Environment (ELITE) are operational throughout AMC using portable terminal and cathoderay tube (CRT) work stations. Continued development and systems enhancement, using new state-of-the-art techniques, are the goals of ALMSA in maintaining the CCSS.

(b) As follow-on standard systems are developed for the material readiness and research and development commands, new innovations in hardware, software, and human engineering will provide a major thrust in meeting productivity increases. ALMSA is authorized 644 civilian and military personnel to perform these missions.

(2) Logistics Systems Support Activity (LSSA), located in Chambersburg, PA, is a central systems design activity of AMC responsible for the design, development, integration, programing, testing, documenting, installing, and maintenance of standard ADP systems and the preparation of directives to implement and maintain these systems for AMC activities and data banks. An integral part of the total scope of its program is standard systems applications, an integration of unique applications brought together for use by all AMC depots and other selected AMC activities.

(3) USACC is assigned communications-electronics, with headquarters at Fort Huachuca, AZ. USACC units are located at AMC installations to operate and maintain communication facilities required by those installations to meet mission needs. Although the units are under command of USACC-AMC, located at the AMC headquarters in Alexandria, VA, each is under the operational control of the installation commander and the director/commander of each USACC-AMC unit serves on the staff of the installation in the role of communications-electronics officer. Communications electronics requirements at DARCOM installations are expressed through DARCOM channels for validation and, when approved, are installed, operated, and maintained by USACC-AMC units.

(4) USA DARCOM Catalog Data Activity (CDA), New Cumberland Army Depot, PA, is a staff element of HQ, AMC, and has Army management responsibility for the central collection, maintenance, and distribution of logistics management data. CDA also serves as the Army manager for the Federal Catalog Program and the Defense Integrated Data System.

(a) The Army Central Logistics Data Bank maintained at CDA serves as the focal point for non-quantitative logistics management data in support of Army logistics operations. A wide variety of ADP products and services is provided to Any activities from this data bank including monthly logistics data file updated for Army standard and nonstandard automated systems, special file replacements and extracts, management statistics, Supply Bulletin (SB) 700-20 publication data, files reconciliations, and interrogation and retrieval services using automated systems input or remote terminals. An extension of the data bank services offered by CDA is the Management Information Research Assistance Center (MIRAC) which provides "HOTLINE" management data research assistance to Army activities worldwide.

(b) As the Army manager for the Federal Catalog Program, CDA must participate in all catalog and logistics programs for DOD. The activity provides interpretation of Federal catalog policy as it applies to the Army.

(c) CDA also manages Army participation in the Defense Integrated Data System (DIDS) and participates at all levels in the development of DOD policies and procedures.

(d) CDA operates a Micrographics Service Center that develops and produces logistics publications on microfiche for worldwide distribution to Army activities, MAAG/mission, friendly foreign governments, and US Government contractors. In addition, micropublishing services are provided to other AMC activities. CDA maintains the largest micropublishing facility in the Army, producing over 38 million microfiche annually in support of approximately 13,800 customers.

(5) The US Army Central Test, Measurement, and Diagnostic Equipment Activity (USACTA), located at Lexington, KY, provides centralized life-cycle management of the Army-wide TMDE program. Its objectives include reducing proliferation of the TMDE inventory; improving the utilization of fielded TMDE; and maximizing cost-effectiveness and readiness.

(6) US Army Defense Ammunition Center and School (USADACS) is located at Savanna Army Depot Activity, Savanna, IL, and is under the command jurisdiction of the Commanding General, ARRCOM. It provides technical, logistical, engineering, training,

career management, and other specialized services for and in support of worldwide ammunition logistics functions. The Ammunition School, an integral part of USADACS, provides technical ammunition training (both resident and mobile) for civilian career development programs and worldwide Army, Navy, Air Force, and military assistance programs for military and civilian personnel. The Defense Ammunition Center manages the Ammunition Depot Modernization Program and the Ammunition Civilian Quality Assurance Career Programs; executes the DA program standardization of palletization, unitization, transportability, and storage methods and techniques for class V and related hazardous material; and develops ammunition peculiar equipment (APE) items and systems in support of the worldwide Army and single-manager ammunition logistics responsibilities.

(7) AMC Field Safety Activity (FSA), located at Charlestown, IN, performs several major mission elements in support of the AMC safety program. These include: engineering support services; onsite safety program evaluations, which include occupational, explosives, motor vehicle, radiation and system safety, and industrial hygiene; safety approval of APE, depot maintenance work requirements (DMWR), standing operating procedures (SOP), and construction plans for explosive operations; assignment of DOD and Department of Transportation (DOT) hazard classifications for new explosives items; resident and onsite safety training for all AMC personnel and intern training for safety specialists; accident analysis; management of AMC accident countermeasure program and accident data management service; publication and/or procurement of safety information and promotional materials for AMCwide distribution; management of AMC range safety program; management of preparation of safety engineering design handbooks; and management of the AMC chemical agent safety program.

(8) The US Army Equipment Authorizations Review Activity (EARA), located at Woodbridge, VA, performs a technical review and analysis of all Army equipment authorization documents to insure that stated requirements are essential, compatible, and that economical considerations are applied; reviews requirement documents for introduction of new material into the Army supply system; and provides commentary on the validity of stated requirements, appropriateness of maintenance support, and the propriety of associated items. In addition, it provides technical assistance for updating other equipment-related publications and programs.

(9) US Army Foreign Science and Technology Center (FSTC), located at Charlottesville, VA, provides all-source, worldwide’ scientific and technical intelligence to meet the requirements of; AMC, ACSI, and DIA. Specific responsibilities of FSTC include discovering scientific and technological threats to the security of US Army ground forces; forecasting foreign military trends and developments; identifying foreign equipment improvements that could benefit US weapon and equipment systems; and pinpointing deficiencies in foreign developments. In support of this effort, FSTC controls two oversee teams and manages the US Army program for the acquisition and exploitation of foreign material.

(10) US Army Industrial Base Engineering Activity (IBEA) is located at Rock Island Arsenal, IL, serving as the technical arm of HQ, AMC, on the Industrial Preparedness and Manufacturing Technology Programs and as production consultants throughout AMC. IBEA supplies engineering, technical, economic, planning, and management services to AMC installations and activities in the areas of industrial preparedness planning; provision of industrial facilities; layaway of industrial facilities; plant equipment program; industrial plant equipment; economic analysis; and manufacturing methods and technology techniques and processes.

(11) AMC Installations and Services Activity (I&SA), established in 1958 at Rock Island Arsenal, IL, performs technical staff supervision over AMC base operations functions and provides technical assistance to AMC subordinate elements. I&SA develops and recommends policy, procedures, system concepts, standards, and performance criteria; serves as the field technical element and performs compliance inspections for HQ, AMC; and provides consultive services to MSCs, installations, and activities in the field of equipment management, transport management, audiovisual activities, post restaurants, commissary troop issue and troop dining facilities, retail supply, support agreements, base operations contracts, real property management, utility systems, energy conservation, environmental control, natural resource management, fire prevention, utility contracts, and all major construction.

(12) The AMC Logistics Assistance Program (LAP) includes a network of Logistics Assistance Offices (LAO) located at major field command headquarters and major installations in CONUS and overseas. They serve as the AMC commander’s representative on all logistical matters of mutual interest, providing onsite technical assistance to users of AMC’s fielded equipment with emphasis on day-to-day problem solving in supply and maintenance matters.

(13) AMC Logistics Control Activity (LCA), located at the Presidio of San Francisco, CA, provides by way of the Logistics Intelligence File (LIF) visibility on individual requisitions and shipments as they are processed throughout the Army’s logistics pipeline. The LIF is a centralized computeroriented data base con-

taining supply and transportation data on Army-sponsored requisitions submitted to the wholesale supply system. The LCA is in the singular position of providing both inquiry-response services to its customers for near real-time supply and transportation status and tailored logistics management reports to activities from the supply support activity level to HQDA. These reports include trends in support to Army customers by the wholesale supply and the defense transportation systems. The LCA also provides special analysis support to satisfy indepth management information needs of individual users. Additionally, the LCA functions as the Army's airlift clearance authority, controlling all Army shipments into the Military Airlift Command (MAC) system and forecasting both long-and short-range overocean cargo requirements for DARCOM and DA into air and surface transportation modes.

(14) AMC Materiel Readiness Support Activity (MRSA), located in Lexington, KY, provides AMC with a user-oriented organization capable of providing logistics evaluations and reports/findings to HQ, AMC and materiel developers of new or product-improved materiel. The principal thrusts of the MRSA organization are to positively influence the Army's goal to field fully supportable items of equipment to the soldiers and to improve Army materiel readiness. Accordingly, MRSA is the lead AMC activity for ILS and logistics support analysis (LSA) program and implementation procedures and serves as the DOD LSA support activity providing LSA/logistics support analysis record (LSAR) assistance throughout DOD; conducts logistics status reviews on selected systems during the development, acquisition, and initial issue phases of the life cycle; supports the DA and AMC Army Force Modernization Program; evaluates logistics support for Army equipment in the hands of the user; provides direct Support System (DSS) assistance; and develops prescribed load lists/ authorized stockage lists in support of fielded activities. MRSA also provides units with mandatory parts lists under the standardized prescribed load list/authorized stockage list (PLL/ASL) Program and serves as AMC executive agent for the DOD Military Standard Systems.

(a) National level data bases are maintained for the Army Maintenance Management System, modification work order reporting, Materiel Condition Status Reporting Program, and the ILS and Force Modernization Milestone Reporting Systems. In addition, management services are provided for DA programs such as the Army Oil Analysis Program, the Materiel Condition Status Reporting Program, Sample Data Collection, and new maintenance doctrine such as reliability-centered maintenance.

(b) This activity serves as the data base manager for wholesale-level Standard Army Maintenance System SAMS); exercises operational control of the AMC portion of the Army equipment publications program; and serves as the preparing and lead activity for the DOD Technical Manuals Specifications and Standards Program (TMSS). It is the home of PS Magazine, the Army's preventive maintenance monthly.

(15) The US Army Materiel Systems Analysis Activity (AMSAA), Aberdeen Proving Ground, MD, serves as the AMC center for independent materiel and weapons effectiveness studies and analysis. It is also the lead activity for survivability, systems analysis, battle-field systems integration, and for reliability, availability, and maintainability methodology. In addition, AMSAA performs independent test design and overall evaluation for decisions on major, designated nonmajor, and selected other systems; provides overview of life surveillance program for materiel systems in inventory; provides weapon systems effectiveness estimates for cost and operational effectiveness analyses; provides systems analysis support to AMC major subordinate commands; serves as the AMC field activity for administering the Joint Technical Coordinating Group for Munitions Effectiveness; and performs logistics and readiness related analysis. AMSAA was established to provide AMC with the professional systems analysis capability to evaluate complex modern weapon systems. AMSAA is also assigned responsibility for the Inventory Research Office (IRO), Philadelphia, PA; Logistics Studies Office (LSO) and Army Procurement Research Office (PRO), both at Fort Lee, VA. The assignment provides these offices with more access to systems analysis and logistics expertise for conducting procurement, logistics, and inventory research studies for improving Army and DOD logistics management.

(16) AMC Packaging, Storage, and Containerization Center (AMC PSCC), located in Tobyhanna, PA, serves as the focal point for the Army logistics system in the areas of packaging and storage policies and materials handling methods/procedures; collaborates in the development of new facilities, equipment, and materials handling concepts; and provides the chairman and US delegates to the North Atlantic Treaty Organization (NATO) Materials Handling Working Party. AMC PSCC also directs AMC's transportation and traffic management functions insofar as they apply to the personal property shipment program, unaccompanied dependent travel, safe transportation of hazardous material, and transportability. It manages the operation of the joint Army/Air Force fleet of CONEX and Army-owned MILVANs for the worldwide movement of military cargo.

(17) AMC Product Assurance Test Field Activity (PA&TFA), located in Lexington, KY, serves under the operating control of the Product Assurance Director, HQ, AMC. The PA&TFA mission includes serving as

a field operating activity-providing technical and logistical quality assurance assistance to AMC elements in the execution of functional responsibilities for management of product/ quality assurance and quality control operations. Also provides technical and management services in support of the AMC product assurance and test mission during all phases of the lifecycle management of Army materiel.

(18) The US Army Toxic and Hazardous Materials Agency (USATHAMA), located in the Edgewood area of Aberdeen Proving Ground, MD, has dual Army responsibility for lethal chemical demilitarization and installation restoration. It also serves as the lead agency within AMC for pollution abatement and environmental control technology development.

(a) USATHAMA was formerly the project manager for chemical demilitarization and installation restoration.

(b) Current USATHAMA demilitarization projects include the Chemical Agent and Munitions Disposal System (CAMDS), a prototype plant for the development and demonstration of advanced procedures and equipment required for future large-scale demilitarization programs involving the lethal chemical agent and munitions stockpile; a self-contained transportable Drill and Transfer System (DATS) for disposal of leaking chemical munitions; the disposal of chemical agent training sets; the development of methods and facilities for the disposal of the incapacitating agency BZ and munitions stockpile; and the proposed Johnston Atoll Chemical Agent Disposal System.

(c) The installation restoration program provides means to identify hazardous materials at Army installations and to contain or abate those contaminants which could present a potential environmental threat if they migrate off post.

(d) USATHAMA's role in pollution abatement and environmental control technology includes monitoring AMC funds allocated for controlling pollution, managing related research and development, and serving as a focal point in coordinating and consolidating environmental technology.

3-8. AMC and Reserve components

a. AMC recognizes the vital role of the Reserve components. The Army National Guard and the Army Reserve comprise over 54 percent of the total Army's deployable forces. Logistics support provided the Reserve components by AMC conforms with objectives, specific requirements, and priorities established by HQDA. In every respect, the Reserve components are supported as full-fledged members of the "one-Army team."

b. Recognizing that the Guard and Reserve provide approximately 67 percent of the total Army's logistics support, to include over 80 percent of the general support units. AMC has established a very close working relationship with the Reserve components. Through AMC's network of depots, arsenals, and other unique logistics facilities, technical on-the-job training is provided to Reserve components personnel, over 200 units (in excess of 26,000 personnel) conduct 2 weeks annual and/or weekend training at 21 AMC installations yearly.

c. Many AMC installations are active participants in mutual support programs with selected Army Guard and Reserve units. These units, while training at a AMC installation, accomplish mission tasks for the commanderthereby, contributing significantly to the enhanced readiness of the total Army. There are now 32 Reserve component units "affiliated" with AMC depots under the DA Affiliation Program. The depots provide these units with training support designed to improve their operational readiness.

d. A planning and training association has also been formally established between designated DARCOM depots and activities and selected Reserve component units. These units will mobilize at their associated depot/ activity and augment the AMC work force in accomplishing the surge workload that will be generated by a mobilization and deployment of forces.

e. AMC is now solely responsible for the training supervision and deployment planning of five Army National Guard aviation maintenance units. These units, known as aviation classification and repair activities, depot (AVCRAD), will upon mobilization become AMC organic units and round out the DESCOM aviation maintenance capability. AMC is also responsible for the training, supervision, and employment planning of four Army Reserve strategic military intelligence detachments.

f. These units, upon mobilization, become AMC organic units and round out the FSTC on strategic research and analysis of enemy capabilities.

g. AMC also administers one of the Army's largest mobilization designee programs, involving approximately 1,000 trained Army Reserve of officers and enlisted personnel. These mobilization designees enter active duty for 2 weeks each year and train in the job they will fill in a wartime mobilization. Additionally, each year over 3,000 individuals receive instruction through ALMC or participate in on-the-job training at various AMC installations under the Army Reserve counterpart training program.

3-9. Ballistic missile defense program manager

The Ballistic Missile Defense (BMD) Program Manager plans, develops, and coordinates the staff position of DA concerning ballistic missile defense. The Program Manager is responsible for a BMD program of two complementary efforts, the Advanced Technology Pro-

gram (ATP) and the Systems (STP). The ATP investigates and develops new technologies and concepts for application to all types of future ballistic missile defense systems. The STP is a research and development effort which advances the technologies of ballistic missile defense systems and provides a systems technology base for a broad range of future strategic defense applications. The Program Manager is delegated all authority with respect to the US Army's BMD organization composed of the BMD Program Office, the BMD systems command, and the BMD Advanced Technology Center.

3-10. Medical materiel

a. Medical materiel is a highly specialized category of supply, generally having no application beyond the care and treatment of patients. By its nature, the medical commodity lends itself to centralized management. DLA (chapter 7) performs the DOD-wide wholesale-level management of medical material.

b. Within DA, TSG is responsible for managing medical materiel programs for the Army-wide support of Army health services. Medical supply and the maintenance of medical supplies and equipment is considered a subfunction of the health care system under TSG, and operates within the framework of the overall Army logistics system. Operating under basic DA policies TSG is responsible for establishment of appropriate implementing policies and procedures. Further, the surgeon at each echelon command is responsible for the implementation, coordination, and direction of medical materiel programs. The management of medical materiel cannot be included with other commodities with-out approval of TSG.

c. The specific medical materiel responsibilities of TSG are:

(1) Planning, directing, and supervising medical materiel systems, Army-wide. Formulating medical concepts, doctrines, estimates, and plans involving medical materiel management, medical equipment maintenance, and optical fabrication.

(2) Developing medical force structures, organizations, programs, and capabilities to support Army and other service requirements for medical materiel and medical equipment maintenance services.

(3) Developing general and detailed functional system requirements and system design criteria for command-unique and DA standard ADP systems for the management of medical materiel, and participating in the implementation of ADP systems for medical material.

(4) Serving as a member on the Defense Medical Materiel Board which is responsible for the medical and technical aspects of all DOD medical materiel.

(5) Operating the Service Item Control Center (SICC) for medical materiel, which is the US Army Medical Materiel Agency. The functions performed by this agency include computation of peacetime and mobilization consumption rates and pre-positioned war reserve stocks; maintenance of the medical portion of the Army Master Data File; dissemination of catalog and other essential medical supply information; monitoring oversee command requisitions for medical materiel; management of obligated war reserves and operational project stocks in CONUS; operation of the medical NMP; operation of depot medical maintenance activities within CONUS; and operation of a customer assistance program for medical activities. The US Army Medical Materiel Agency is the mission-assigned agency to medical materiel.

(6) Developing and operating the Army Medical Department research, development, test, and evaluation program. These responsibilities are exclusive of those aspects which support the Army in the field, which are assigned to the US Army Training and Doctrine Command (TRADOC).

(7) Developing the basis of issue for medical materiel, including expendables and recommending the basis of issue for all materiel used by Army Medical Department units. These responsibilities are exclusive of those aspects which support the Army in the field, which are assigned to TRADOC.

(8) Monitoring the financial management programs for medical materiel Army-wide.

(9) Monitoring, through appropriate commands and surgeons, medical materiel programs, operation of medical depots, and medical maintenance support.

(10) Managing the medical materiel portion of the Army Security Assistance Program, including grant aid and FMS, and accomplishing all international standardization agreements covering medical materiel.

(11) Preparing the medical supply annex for incorporation in the AMC support plan, which applies to each approved contingency plan.

(12) Reviewing, as a member of the DOD Health Council (DHC), requests from the three military services for high-cost medical equipment. The DHC evaluates each item requirement, resolves issues not previously resolved at lower review levels, and approves or disapproves the item requirement.

3-11. US Army Computer System Command

The US Army Computer Systems Command (CSC), located at Fort Belvoir, VA, is the project manager for all standard Army multicommand management information systems (STAMMIS) and for other such systems when so designated. New technology is constantly being exploited for the benefit of these systems, which are managed in accordance with DOD directives. *a.* The CSC is the principal Army developer of mul-

tiple command, ADP systems and functions as the project manager (AR 70-17). In response to functional requirements approved by HQDA, this command designs, integrates, programs, tests, documents, installs, and maintains assigned systems. Technical assistance is furnished to Army Staff agencies and to the major Army commands(MACOM) to aid them in executing their roles with respect to ADP systems. Communication needs are identified and coordinated with the USACC and the DCSOPS to ensure compatibility between telecommunications and multiple command systems.

b. The command conducts software research programs and maintains the standard configuration of assigned systems. Additionally, standards are established for software design, programing, documentation, and testing. The standards are applied not only to multiple command systems, but also to any command-unique related system which shares data processing equipment with a multiple command system.

c. CSC participates in the DOD program for standarizing data elements. Liaison is maintained with other agencies and with each MACOM headquarters concerning matters of mutual interest. Training associated with the extension of standard multiple command systems is monitored.

3-12. Oversea commands

a. Each major oversee command is involved in logistics management and planning, being responsible directly to the Chief of Staff, US Army. All of these commands have major subordinate elements with varying degrees of autonomy in supply matter, such autonomy normally being established to meet specific operational needs.

b. The general organizational pattern for Army logistics activities overseas outlines a flexible structure which may be modified as necessary to suit any given situation in varying combat environments. Combat service support units, organized into brigades, groups, or battalions, are directly responsible to the Theater Army or the corps support command. Each combat service support unit is individually structured as to be responsive to theater or corps requirements for the items and services for which it is responsible. A fixed organization is not prescribed for the corps; hence, numbers and types of logistics support units are determined by the mission, assigned combat and combat support units, availability of nuclear weapons, terrain and weather within the area of operations, and composition and capability of the probable hostile forces.

c. Supply installations are located throughout the communications zone, the corps rear areas, and in some cases division service areas. They are dispersed so as to minimize the effect of nuclear weapons and, at the same time, are located so as to facilitate rear area security.

3-13. Retail-level supply

a. AMC is the principal wholesale supplier for Army-managed items. It mission relates directly to the retail segment of the supply system. It is AMC which develops needed items and initiates procurement based upon the anticipated demands from the retail segment. Catalog information for Armymanaged items is placed in the files of the Defense Logistics Services Center (DLSC), where it is available to non-Army users in developing their catalogs. AMC CDA collects and publishes catalog data for all Army-used items in the Army Master Data File, which it furnishes to retail supply activities. Stockage at retail-level installations (posts, camps, stations, oversee commands) is based upon demand or upon an approval by proper authority that an item is required as mission essential, for standby, or for application to the maintenance float. The ability of retail-level installations to effectively accomplish their supply support functions is directly related to the responsiveness of the supply agencies, the supply guidance furnished by higher commands, and the speed and accuracy with which the retail-level installations make their requirements known to the NICPs. Within CONUS, the principal supply agencies are the materiel readiness commands of AMC (where the NICPs are located), the supply centers of the DLA, and the regional offices of the GSA.

b. These agencies support the supply systems established at Army retaillevel installations. They are responsible for the management of inventories of assigned commodities and for meeting the retail installations' supply needs.

c. Requisitions reflecting the requirements of the general and direct support units and activities are produced by the ADP system of the units' materiel management center and transmitted electronically to CONUS ICPs. Shipments are made directly from CONUS distribution depots under the direct support system to an oversee unit if a full-container/ 436L Air Force pallet is generated within allowable time frames; otherwise, shipments will be directed to the supporting Army Consolidation and Containerization Point for onward movement to the requesting units. For CONUS direct support system shipments, materiel are shipped from the supporting distribution depot to an installation's central receiving point, and then directly to the requesting unit, bypassing the installation supply account which supports all nondirect support system customers. An extension of the direct support system is the Airline of Communication (ALOC). Under the ALOC, all air eligible class IX repair parts are shipped by air to specific oversee units regardless of priority.

d. CONUS activity for receipt of requisitions for support of non-US units is the US Army Security Assistance Center, New Cumberland Army Depot, Pennsylvania. That activity edits the requisitions, converts them, if necessary, to the format of the Military Standard Requisitioning and Issue Procedures, and forwards them to the appropriate activity of the Army, DLA, or GSA.

Chapter 4
The Navy Supply System

Section I
Introduction

4-1. Background

a. The unique characteristics of the Navy as it exists and operates today determine to a large extent the dimensions of its supply management. The Navy is a composite warfare system, a mix of ships and submarines, aircraft of various kinds and configurations, missiles, and supporting installations manned by military personnel and civilians contributing their special skills and talents to a capable and highly mobile force.

b. Prior to 1963, the basic organization of the Navy Department was bilinear in nature; i.e., the users of materials and services constituted one side of the structure and the producers, buyers, or manufacturers of those things that satisfy the requirements of the users constituted the other side; both reporting to the Secretary of the Navy. Heading the user organization was the Chief of Naval Operations who commanded all functions and activities of the operating forces of the Navy, and in that capacity determined the broad material requirements of these forces including weapons or weapon systems, supplies, facilities, maintenance, and supporting services. When the military hardware was provided in response to the requirements from the Chief of Naval Operations, he became responsible for its use. He had no responsibility for development, production, or procurement of the hardware or for the supporting supplies and facilities. These functions were assigned to the producers and the various material bureaus. Although the structure of these bureaus changed from time to time, they generally were organized along broad material categories such as ships, aircraft, ordnance, and facilities. In addition, separate service bureaus with responsibilities in functional areas such as personnel management, medicine, and supply management also reported to the Secretary of the Navy.

c. As a result of a management review conducted in 1962, certain changes were prescribed. A Naval Material Support Establishment was formed to coordinate the activities of the various bureaus. It was still a bilinear organization with the Chief of Naval Operations responsible for user logistics functions and a Chief of Naval Material responsible for coordination of the producer logistics functions of the various bureaus.

d. Additional progressive changes were made, culminating in the implementation of General Order Number 5, effective 1 May 1966. In effect, the new changes abandoned the bilinear system and resulted in the present organization. All responsibilities for logistics support of the operating forces as well as all the organizations that provide this support now come under the Chief of Naval Operations.

4-2. Secretary of the Navy

a. In any discussion of the organization of the Department of the Navy, it is important to keep in mind that here, unlike other military departments, two military services are being administered. The Secretary of the Navy, under the direction, authority, and control of the Secretary of Defense, is responsible for the policies and control of both the Navy and the Marine Corps. Although the Marine Corps will be discussed in chapter 6, it should be noted that the departmental administration emanates from the Secretary of the Navy and his staff.

b. By statute, the Department of the Navy is separately organized under the Secretary of the Navy. It is composed of the executive part of the Department of the Navy; the Headquarters, United States Marine Corps; the operating forces including the aviation elements of the Navy and the Marine Corps, and the Reserve components of those operating forces; and all shore (field) activities, headquarters, forces, bases, installations, activities, and functions under the control or supervision of the Secretary of the Navy. It includes the United States Coast Guard when it is operating as a service in the Navy (United States Code (USC), title 10, section 5011).

4-3. Assistant Secretary of the Navy (Manpower, Reserve Affairs, and Logistics)

The Secretary of the Navy is assisted by a number of civilian and military executive assistants. Two of these are of direct interest to the subject of supply manage meet. The Assistant Secretary of the Navy (Manpower, Reserve Affairs, and Logistics) is responsible for the department wide policy supervision of all matters related to production, procurement, supply, and distribution of material.

4-4. Chief of Naval Operations

a. The second and principal assistant is the Chief of Naval Operations who is responsible for both user and producer logistics in the Navy. The producer agencies are responsible to the Chief of Naval Operations through the Chief of Naval Material.

b. The Chief of Naval Operations is the senior military officer of the Department of the Navy. He is the principal naval adviser to the President and the Secretary of the Navy on the conduct of war, and on the conduct of the activities of the Department of the Navy. The Chief of Naval Operations is a member of the Joint Chiefs of Staff (JCS), and is responsible for

keeping the Secretary of the Navy fully informed on matters considered or acted upon by the JCS.

c. The Chief of Naval Operations is responsible for planning and determining the material support needs of the operating forces of the Navy (less Fleet Marine Forces and other assigned Marine Corps forces) including equipment, weapons or weapon systems, materials, supplies, facilities, maintenance, and supporting services. This responsibility includes the determination of the military performance requirements and priorities for things to be developed or procured; and the determination of the order in which ships, aircraft, surface craft, weapons or weapon systems, and facilities are to be acquired, constructed, maintained, altered, repaired, and overhauled.

d. The Deputy Chief of Naval Operations (Logistics) is the principal adviser to the Chief of Naval Operations on the conduct of logistics affairs and is responsible for planning and providing the logistics support needs of the operating forces of the Navy, except for those areas elsewhere assigned. Logistics support for the operating forces is coordinated by the Commander, Surface Forces, United States Atlantic Fleet; and Commander, Naval Logistics Command, United States Pacific Fleet. Support of the fleet is provided from Continental United States (CONUS) and oversee supply points as well as from supply ships and logistics aircraft during underway replenishment.

Section II
The Naval Material Command

4-5. Chief of Naval Material

a. The Chief of Naval Material, under the Chief of Naval Operations, commands all activities of the Naval Material Command. He is responsible to the Chief of Naval Operations for providing the material support to the operating forces of the Navy, and to the commandant of the Marine Corps for providing certain material support for the Marine Corps.

b. The Naval Material Command includes the Headquarters, Naval Material Command and five principal subordinate commands, known as the systems commands; separately organized project management offices; and the shore (field) activities which are a part of the Naval Material Command. These shore activities include industrial activities, research and development centers, and laboratories.

c. The chain of command within the Naval Material Command normally runs from the Chief of Naval Material to the systems commanders. However, the Chief of Naval Material may also establish designated project managers for selected weapons, equipments, or systems for which intensified procedures are desired. Figure 4-1 shows the Naval Material Command organization.

4-6. Naval Air Systems Command

The Naval Air Systems Command is responsible for aircraft and airborne weapon systems, other aviation-related equipment, and the systems integration of aircraft weapon systems.

4-7. Naval Electronics Systems Command

The Naval Electronics Systems Command is responsible for shore-based electronic systems and certain common-use airborne and shipboard electronic equipment, such as navigation, communications, electronic countermeasures, and general test equipment. The command serves as central technical authority on electronic standards, technology, and compatibility.

4-8. Naval Facilities Engineering Command

The Naval Facilities Engineering Command is responsible for the administration of the Navy military construction program, facilities planning, facility maintenance and utility operations, real property inventory management, and natural resources and pollution control programs. It performs material support functions related to public works, floating cranes, pontoons and moorings, ocean structures, and equipment for transportation, construction, and weight-handling. The command also provides engineering and technical services in nuclear shore power and radioisotope power devices.

4-9. Naval Sea Systems Command

The Naval Sea Systems Command is responsible for whole ships and craft and for ordnance shipboard components, such as propulsion (including nuclear), power generating, sonar, search radar, and auxiliary equipment; coordination of system integration of all shipboard subsystems; procurement, technical guidance, and supervision of operations related to salvage of stranded and sunken ships and craft. The command is the central technical authority for ships and nuclear power safety. It is responsible for shipboard weapon systems and expendable ordnance and air-launched mines and torpedos. The command is the central technical authority on explosives, propellants, and actuating components, and on explosive and nuclear safety and explosive ordnance disposal.

4-10. Naval Supply Systems Command

a. The Naval Supply Systems Command is responsible for supply management policies and methods; administration of the Navy Supply System, publications and printing, the resale program, the Navy Stock Fund, the field contracting system, transportation of Navy property; and material functions related to materials

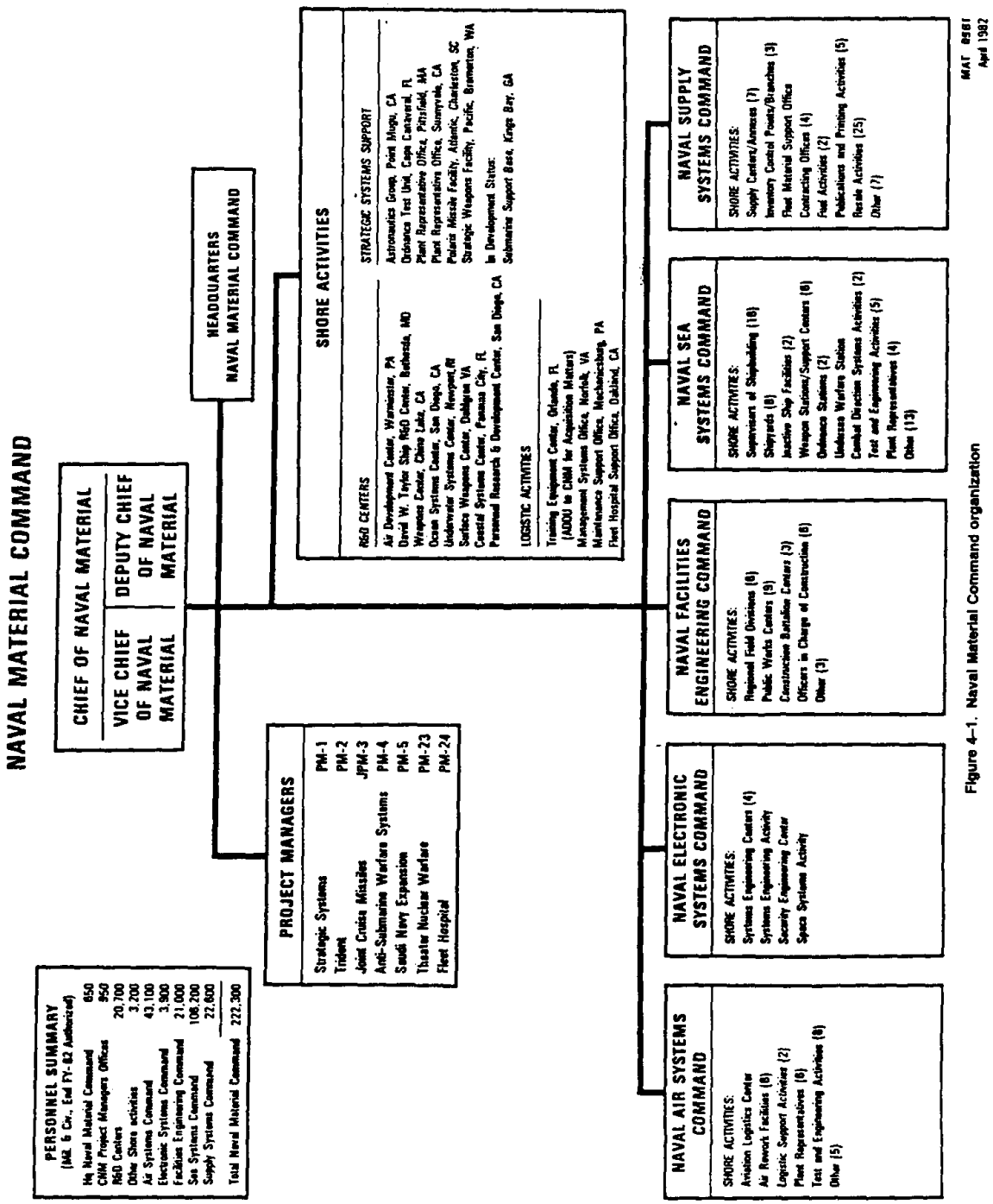

Figure 4–1. Naval Material Command organization

handing equipment (MHE), food service, and special clothing. The command is responsible for the supply, budgetary, fiscal, and statistical functions in support of assigned military assistance/international logistics programs. The international logistics staff, as the program manager, discharges the command responsibility for the international logistics program by exercising executive authority over the Navy International Logistics Control Office, which is the focal point for requisitioning, financial accounting, and reporting in the Navy International Logistics Programs.

b. The Naval Supply Systems Command is responsible for the contracting of materials and services throughout the Department of the Navy for which no other contracting activity, office, or command is otherwise delegated contracting authority. The Naval Supply Systems Command is also responsible for conducting the formalities of contracting by formal advertising for other Navy procuring activities to the extent provided in regulations. Of the 4 million items in the Department of Defense (DOD) supply system, about 1.7 million are used by the Navy. Forty-five percent of these items is managed and controlled by the Naval Supply Systems Command through its directly managed inventory control points (ICP), the Aviation Supply Office, and the Ships Parts Control Center. Other Navy commands and offices exercise inventory management over some 22,000 major items of material such as missiles, aircraft engines, ordnance, shipboard machinery, and electronics equipment. The remaining items are managed by the Defense Logistics Agency (DLA) or General Services Administration (GSA) but are controlled for the Navy through the Navy Retail Office located at the Fleet Material Support Office, Mechanicsburg, PA.

c. It is Navy policy that all material used by the Navy will be considered as items of supply to be managed by an ICP unless the material is assigned to another integrated material manager responsible for supplying retail stock or fulfilling end-use requirements for all military services. Also exempted are those items for which acquisition and continued control are essential to the discharge of specific missions; these will be managed by the hardware systems commands of the Navy Department. The guidelines that specifically apply in implementation of this policy are:

(1) The Naval Supply Systems Command will manage items procured for other than immediate use. These items consist of equipment, components, repair parts, consumables, installations material, and items required for test and repair purpose. This includes not only items required in support of equipment and systems installed and in use, but reparables which are returned for overhaul, repair, or modification, and subsequent return to storage for later distribution.

(2) Item management by the other systems commands is limited to items in a research and development stage, items requiring engineering control decisions, items unstable in design, and items expressly assigned to a single command by a separate authorizing directive of the Naval Material Command.

d. The Navy supply system functions on the basis of centralized control of assets. Its nerve centers are the ICPs-the offices specifically designed to bring together into a single organization the supply management functions under the guidance of the Naval Supply Systems Command and the technical or engineering functions under the guidance of the hardware systems commands. In effect, the ICPs perform functions of the Naval Supply Systems Command and the other technical and hardware systems commands which have been decentralized to the field. In this respect, they are not divisible from the Naval Material Command for they represent an essential element in discharging the material support functions for which the Chief of Naval Material is responsible. As the Navy supply manager, the commander of the Naval Supply Systems Command heads the ICPs.

e. There are two Navy ICPs. Their basic assigned material responsibilities are:

Inventory Control Points	**Material Responsibilities**
Aviation Supply Office	Equipment and parts peculiar to Navy and Marine Corps aviation; photographic and aerological equipments and parts.
Ships Parts Control Center, Mechanicsburg, PA	Conventional ammunition, shipboard, base and ordnance equipment, electronics equipment, and repair parts.

f. In addition, the Naval Publications and Forms Center at Philadelphia performs inventory manager functions for Navy-managed forms, publications, and placards; and is the DOD single stock point for specifications and standards.

Section *III*
Bureau of Medicine and Surgery

4-11. Responsibilities

The Bureau of Medicine and Surgery is responsible for:

a. Acting as technical adviser to the Chief of Naval Operations, Chief of Naval Material, and Commandant of the Marine Corps regarding medical and dental material.

b. Serving as Navy point of contact with the Deputy Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) and the Assistant Secretary of

Defense for Health Affairs in medical and dental materiel matters.

c. Serving as a member of the Defense Medical Materiel Board.

d. Conducting the Bureau of Medicine and Surgery portion of the Defense Standardization Program, including maintenance of specification files. Serves as Navy custodian for standardization documents of a medical and dental interest which are not managed by the Directorate for Medical Materiel, Defense Personnel Support Center.

e. Developing and managing the investment equipment program for the Bureau of Medicine and Surgery and its commands.

f. Determining the requirements associated with construction and renovation projects under military construction programs.

g. Developing budgetary requirements for initial outfitting of activities and special programs with medical and dental material.

h. Determining mobilization requirements of medical and dental material for the Department of the Navy, in accordance with the policies and guidance of appropriate authorities. Furnishing these requirements to the Defense Personnel Support Center, together with the factors, and assumptions upon which the requirements are based.

i. Acting on type classification, reclassification, and suspension and release of wholesale stocks of medical and dental material.

j. Developing and maintaining allowance lists of medical and dental material for units ashore and afloat, advanced base functional components, and Fleet Marine Force units.

k. Reviewing the specified requisitions and purchase requests for medical and dental material prepared throughout the Department of the Navy.

l. Evaluating a customer, the wholesale and retail medical and dental supply systems operated by DLA and the Navy.

m. Cooperating with the Navy Fleet Material Support Office, promulgation of directives and publications regarding medical and dental material standardization, availability, suspension, release, and general management.

n. Cooperating with the Navy Facilities Engineering Command, in the development of technical and quantitative requirements for medical and dental vehicles.

Section IV
The Fleet Supply System Base Supply Support

4-12. Characteristics

a. The prime characteristics of the operating forces, their readiness, mobility, and endurance, prescribe the form of support which the Navy supply system renders. The fleet is virtually always mobilized-only the tempo varies. Conceptually, Navy fleet supply support is based upon an organic level of supply and two echelons of resupply: the mobile logistics support ships and oversee bases; and the supply centers in CONUS.

b. The organic level provides the material specified in the Coordinated Shipboard Allowance List or Aviation Consolidated Allowance List, this material being carried on board the ship itself. The allowance list is tailored to the individual ship based on the ship’s equipments, military essentiality of the ship’s systems, and composition and size of the crew. The range and quantities of demand-based allowances usually are computed to provide balanced support for an average endurance period of 3 months. This objective must be modified in the case of large bulky consumable items when space constraints do not allow a full supply allowance to be carried. The allowance list also provides for low demand items. These are items having a predicted usage of less than one in 3 months, but which are vital to support the primary mission of the ship or vital to the crew’s safety or welfare. The objective of the allowance list is to maximize endurance and provide balanced support for a specified period.

c. The first echelon of combat resupply support consists of the ships of the Mobile Logistics Support Forces which include tenders, repair ships, and fleet issue ships. This force is augmented by a few oversee depots. This echelon of fleet support backs up the allowance list material carried in the combatant ships. Fleet issue ships play a special role. These ships carry cargoes of consumable items and frequently requested repair parts tailored to the combat forces they support. They rendezvous with task forces in the forward area and, by ship-to-ship or helicopter transfer, keep the fleet at sea and on station for extended periods of time.

d. The material carried in the mobile logistics support ships is prescribed in accordance with load lists which reflect support mission and types of ships supported. The load lists, like the ships’ allowance lists, prescribe both the range and quantity of material to be carried aboard the individual mobile logistics support force ships. They do not duplicate those low demand items included in the combatant ship’s allowance lists. Instead, they increase the combatant ship’s endurance by providing a convenient source of certain repair parts and general consumable items. This combination of supply levels satisfies the Chief of Naval Operations’ policy that the deployed fleet will be self-sufficient during wartime operations lasting 3 to 6 months without resupply from CONUS.

e. The second echelon of resupply provides the materials located predominantly at the tidewater centers in the United States. These supply activities serve as

the material reservoir and act as pipelines between industry and other supply systems and the fleet. Supply centers stock material managed by the Navy, DLA, and GSA. This material is issued to the mobile logistics support forces and directly to the operating forces.

f. In addition to fleet support, the supply centers provide support to the activities of the Shore Establishment: the air stations, ordnance stations, shipyards, training stations, and smaller shore activities. The scope of the supply departments at shore activities varies, depending on the size and mission of the activity; it can range all the way from a small retail outlet called a ready supply store to a large supply department at a shipyard or an air station. These large supply departments at major air stations, shipyards, ammunition depots, and construction centers are also a significant element of the wholesale supply system. Naval supply centers provide support to Marine Corps, Coast Guard, and other military services, and friendly foreign countries under the Military Assistance Program (MAP). This support consists of medical items, technical aviation items, and a limited number of ammunition items.

g. The basic responsibility for providing this supply to meet total user needs for most of the Navy supply items rests in the ICPs.

h. The ICPs determine the quality and range of items to be carried at specific locations; position these inventories at the major stock points; and determine, in collaboration with the hardware systems commands and customers served, the individual support missions that these stock points will carry out. In addition to the centers, which are subject to control by the Naval Supply Systems Command, the supply departments of major air stations, shipyards, ammunition depots, and construction centers are significant elements of the Navy supply system for receipt, storage, and issue of material on a Navy-wide basis.

i. The stocks of material located at secondary stock points, smaller air stations, training stations, naval bases, and ordnance stations are held primarily for their own use. These activities generally determine their own requirements and do not support any significant number of activities other than themselves. Although the ICPs establish policies for stock levels and analyze financial inventory reports for material at these activities, they do not directly control these inventories; consequently, the ICPs do not use the stocks held at these points to meet needs elsewhere and do not have the same control over the operations of these points that they do over the major points.

Section V
Retail Level Supply

4-13. Establishment

The Navy established a Navy Retail Office at the Fleet Material Support Office to exercise financial control and retail management of material managed at the wholesale level by DLA, GSA, and other services. This office provides these integrated managers with certain Navy program requirements, and develops and publishes working procedures for management of retail stocks. Retail stock levels are monitored by using financial inventory control data and by field service visits rather than through an individual item reporting system. For items centrally managed by DLA, GSA, and other services, certain functions are performed by the Navy. These functions include the computation of requirements for war reserve stocks and their pre-positioning, physical stockage, and issue of DLA stocks on a reimbursable basis, and the management of such stocks within the Navy distribution system ashore and afloat.

Chapter 5
The Air Force Supply System

Section I
Introduction

5-1. Background

a. The first positive step toward the creation of the Air Force as a separate service occurred in 1942 during a reorganization of the War Department. The Army Air Force was given coequal status with the Army Ground and Service Forces, and attained a degree of autonomy short only of independence.

b. A year earlier, the Air Service Command was activated as the central supply organization of the Army Air Corps. By the end of 1943, 12 air depots and 68 specialized depots had been established. The specialized depots were required to handle the overflow of materiel which could not be handled by the 12 control depots. During World War II, the need for overhauling and improving the existing supply system became apparent.

c. Following the cessation of hostilities, bills were introduced in Congress to establish an independent Air Force. Finally in 1947, the National Security Act designated the Air Force as one of three separate military departments to provide for the security of the United States.

d. The Air Service Command became the Air Materiel Command which later changed its name to the present Air Force Logistics Command (AFLC).

e. Following ratification of the National Security Act, the Army and Air Force Staffs reached agreements on the transfer of property and certain basic functions. The agreements stipulated that the two services would use each other's facilities whenever resultant economies did not downgrade operational efficiency.

f. From the beginning, the Logistics Command bore the major burden of supplying the Air Force. With the progressive sophistication of modern weapon systems and equipment, the original half million supply support items grew to a peak of more than 2 million in 1962. They have now declined slightly because the creation of the Defense Logistics Agency (DLA) and the emphasis on interservice logistics support curbed their growth.

g. Technological improvements in communications, computers, and transportation changed the supply system from a network of oversee and regional depots to a tightly knit direct support supply system. Minimal stock levels are now maintained at worldwide Air Force installations, which draw supplies from five surviving Continental United States (CONUS) depots, called air logistics centers and from other wholesale suppliers. Reliance is placed upon rapid transportation of materiel to the requisitioners, who order over an almost instantaneous Department of Defense (DOD) communication system, the automatic digital network (AUTODIN).

h. The supply system from the wholesale level of the air logistics centers to the final user is now almost fully automated. Although the system was in varying stages of transition from manual to automated operations during the Berlin airlift, the Korean war, the Cuban crisis, and the Southeast Asia conflict, it proved its ability to provide effective supply support.

Section II
Department of the Air Force

5-2. Mission

The mission of the Department of the Air Force is to provide an Air Force that is capable, in conjunction with the other armed forces, of preserving the peace and security of the United States, providing for its defense, supporting the national policies, implementing the national objectives, and overcoming any nation responsible for aggressive acts that imperil the peace and security of the United States. In general, the Air Force includes both combat and service aviation forces, not otherwise assigned. It is organized, trained, and equipped primarily for prompt and sustained offensive and defensive aerospace operations. It is responsible for the preparation of the aerospace forces necessary for the effective prosecution of war except as otherwise assigned; and in accordance with integrated joint mobilization plans for the expansion of the peacetime components of the Air Force to meet the needs of war.

5-3. Secretary of the Air Force

The Secretary of the Air Force is responsible for and has the authority necessary to conduct all affairs of the Department of the Air Force, including those necessary or appropriate for the training, operations, administration, logistical support and maintenance, welfare, preparedness, and effectiveness of the Air Force, and including research and development and such other activities as may be prescribed by the President or the Secretary of Defense, as authorized by law. He conducts the business of the department in such manner as the President or Secretary of Defense may prescribe. In the absence of the Secretary, the Under Secretary performs the duties of the Secretary; in the absence of the Secretary and Under Secretary, the Assistant Secretaries in the order fixed by their length of service as such perform the duties of the Secretary.

5-4. Under Secretary of the Air Force

The Under Secretary of the Air Force, as principal assistant to the Secretary, acts with full authority of the Secretary on all affairs of the department. He is responsible for the overall direction, guidance, and supervision of the affairs of the department, and its plans, policies, and programs. He supervises the activities of the Reserve components of the Air Force pursuant to 10 USC 264*(b)*, and is a member of the Reserve Forces Policy Board. He is responsible for the direction, guidance, and supervision of the international activities of the department.

5-5. Assistant Secretary of the Air Force (Research, Development, and Logistics)

The Assistant Secretary of the Air Force (Research, Development, and Logistics) is responsible for direction, guidance, and supervision over all matters pertaining to the formulation, review, and execution of plans, policies, and programs relative to scientific and technical matters; basic and applied research; exploratory development and advanced technology; integration of technology with, and determination of, qualitative Air Force requirements; research, development, test, and evaluation of weapons, weapon systems, and defense materiel; technical management of systems engineering and integration; production and contract management of weapon systems; the industrial defense program; industrial resources and readiness; procurement activities, including required determinations and findings, contracting, and administration and termination of contracts; contractors' equal employment opportunities; renegotiation affairs, contract appeals, and related activities; Contract Adjustment Board matters; small business; Canadian Production and Development Sharing Program; supply management, including requirements determinations, storage, distribution, reutilization, and disposal of all materiel; equipment maintenance and modification management; international logistics programs; materiel and logistics planning and programing; civil aviation, including the DOD Advisory Committee on Federal Aviation, and the Interagency Group on International Aviation; transportation, communications, and other service activities; economic utilization policy; and commercial or industrial activities program.

5-6. Assistant Secretary of the Air Force (Financial Management)

The Assistant Secretary of the Air Force (Financial Management) is responsible for direction, guidance, and supervision over all matters pertaining to the formulation, review, and execution of plans, policies, and programs relative to the Air Force programing processes and the preparation and validation of all program documentation, including program changes; budgeting, fund management, cost analysis, and cost control; accounting and accounting systems; finance, including disbursement and collection of funds; development and application of management information and control systems, progress and statistical reporting, special program status reports, and interpretation of such management data; auditing; contracts for management engineering services; contract financing; and automatic data processing (ADP) policy and programs. He is the Air Force Senior policy official for ADP. The Assistant Secretary of the Air Force (Financial Management) is responsible for directing and supervising the Comptroller of the Air Force. While the Comptroller is directly responsible to the Assistant Secretary (Financial Management), he has a concurrent responsibility to the Chief of Staff of the Air Force.

5-7. The Assistant Secretary of the Air Force (Manpower, Installations, and Logistics)

The Assistant Secretary of the Air Force (Manpower, Installations, and Logistics) is responsible for the overall supervision of manpower and Reserve component affairs and installations management of the Department of the Air Force. General responsibilities include direction, guidance, and supervision over all matters pertaining to the formulation, review, and execution of plans, policies, and programs relative to Air Force Reserve component affairs; manpower and organization; military and civilian personnel, including procurement, assignment, training, promotion, career development, pay and benefits. utilization, separation, medical care, and all factors affecting morale and well being; programs to prohibit discrimination because of age, race, creed, color, sex, or national origin, except programs applicable to contractors; Civil Air Patrol; Reserve Officers' Training Corps; Air National Guard; contracts for personal services and training; travel and per diem allowances; Air Force Board for Correction of Military Records; Secretary of the Air Force Personnel Council and its component boards, including the Air Force Discharge Review Board, the Air Force Disability Review Board, the Air Force Physical Disability Appeal Board, the Air Force Decorations Board, and the Air Force clemency and parole functions; manpower management programs and techniques, to include manpower mix policies and military essentiality issues; installations planning, programing, utilization, and annexation of installations by municipalities; acquisition and disposal of real estate; construction of bases and facilities; family housing resources acquisition, construction, maintenance, and disposal; maintenance of real property and provision of utilities services; environmental quality; and occupational safety and health.

Section *III*
The Air Staff

5-8. Chief of Staff

a. The Chief of Staff, United States Air Force, serves as a member of the Joint Chiefs of Staff (JCS) and the Armed Forces Policy Council. In his JCS capacity, he is one of the principal military advisers to the President, the National Security Council (NSC), and the Secretary of Defense. He is the principal military adviser and executive to the Secretary of the Air Force on activities of the Air Force. He presides over the Air Staff, and supervises such members and organizations of the Air Force as the Secretary of the Air Force determines, consistent with full operational command assigned to commanders of specified and unified combatant commands. He is responsible for transmitting to the Secretary the plans and recommendations of the Air Staff, for advising him with regard thereto, and, after their approval by the Secretary, for acting as his agent in carrying them out.

b. The Chief of Staff is directly responsible to the Secretary of the Air Force for the efficiency of the Air Force and preparation of its forces for military operations. He supervises the administration of Air Force personnel assigned to unified organizations and unified and specified combatant commands, and support of forces assigned to these organizations and commands as directed upon the Air Force by the Secretary of Defense. He supervises the following activities when responsibility for them has been assigned to the Air Force by the Secretary of Defense; the carrying out of any supply or service activity common to more than one military department; the development and operational use of new weapons and weapon systems; and the performance of such functions as may be transferred from other departments or agencies of DOD. He also performs other activities not directly related to supply management.

5-9. Vice Chief of Staff

The Vice Chief of Staff assists the Chief of Staff in the exercise of all his responsibilities. Under delegated authority from the Chief of Staff, he supervises the US Air Force consistent with policy guidance and statutory limitations. In the absence or disability of the Chief of Staff, or in the event of a vacancy in that office, he exercises the authority and performs the duties of the Chief of Staff. He serves as Chairman of the Air Force Council.

5-10. Assistant Vice Chief of Staff

The Assistant Vice Chief of Staff assists the Chief of Staff and the Vice Chief of Staff in the discharge of their duties. He assists in the development, implementation, and review of plans, programs, and policies, and in the overall direction of the Air Force and exercises general supervision over the organization and administration of the Air Staff.

5-11. Director of Administration

The Director of Administration is responsible to the Assistant Vice Chief of Staff for internal administration and management of the Air Staff. He supervises management programs for efficient utilization of Air Staff resources.

5-12. The Air Force Scientific Advisory Board

The Scientific Advisory Board advises the Secretary of the Air Force and the Chief of Staff on all scientific matters of interest to the Air Force mission. The board reviews research and technological developments for possible further development for military application, reviews and evaluates the Air Force long-range plans for research and development, and provides advice on the adequacy of the Air Force program.

5-13. Chief Scientist

The Chief Scientist serves as chief scientific adviser to the Chief of Staff of the Air Force in all areas of research and development. He recommends changes in policies, plans, and organization to improve research and development programs.

5-14. Chief, Operations Analysis

The Chief of Operations Analysis serves as scientific adviser to the Secretary of the Air Force and the Chief of Staff on matters relating to Air Force-designated and functional studies, and he provides focus and direction to the worldwide Air Force Operations Analysis Program. The Operations Analysis Office makes scientific studies of the problems of air warfare in order to provide intelligence for command and management decisions. It uses the method of operations research to study and evaluate weapons and tactics, strategy, logistics, and other subjects related to the Air Force mission.

5-15. The Inspector General

The Inspector General acts as an adviser to the Chief of Staff and serves as a professional assistant to the Secretary of the Air Force. He determines the status of combat readiness, command mission accomplishment, logistics effectiveness, and discipline; evaluates the efficiency, economy, and adequacy of the Air Force; investigates matters within Air Force jurisdiction involving crime, violations of public trust, subversion, disaffection, and related activities; directs the counter

intelligence program; establishes security policy; develops and directs the ground, flight, missile, and nuclear safety policies, programs, and procedures; and establishes effective Air Force facilities for inspection, security, investigation, law enforcement, and safety.

5-16. The Judge Advocate General

The Judge Advocate General, United States Air Force, acts as legal adviser to the Chief of Staff and exercises general supervision over the administration of military justice and civil law matters pertaining to the Air Force. He is responsible for the establishment and operation of the legal system of appellate reviews of courts-martial records as provided by the Uniform Code of Military Justice.

5-17. Assistant Chief of Staff, Studies and Analysis

The Assistant Chief of Staff, Studies and Analysis, formulates the Air Force Designated Studies Program for approval by the Chief of Staff, and conducts or assists in conducting all studies so approved. Designated studies are important, high-priority studies of particular significance to the Air Force. Generally, they deal with strategic offensive and defensive, general-purpose, and airlift force composition. The Assistant Chief of Staff, Studies and Analysis, also conducts technical and specialized operational feasibility analyses and cost-effectiveness evaluations to assist in major force level decisions.

5-18. Comptroller of the Air Force

The Comptroller of the Air Force is responsible for budgeting, accounting and disbursing, progress and statistical reporting, and for the administrative organization structure and managerial procedures related thereto. Develops and maintains systems needed for accomplishing these functions in the Air Force and establishes methods and procedures for effective management of funds and other resources. Functions as Air Staff focal point for coordinating all data systems design efforts. Under Section 8014*(d)*, Title 10 USC and 100.1 (17 April 1972), the Comptroller is under the direction and supervision of and directly responsible to the Assistant Secretary of the Air Force (Financial Management) and has concurrent responsibility to the Chief of Staff.

5-19. Deputy Chief of Staff, Programs and Evaluation

The Deputy Chief of Staff, Programs and Evaluation, is responsible for developing Air Force programs pertaining to the attainment of operating and supporting forces, and directing the implementation of necessary actions relating thereto. He exercises Air Staff leadership in effecting maximum balance of available resources and integration of effort toward optimum operational capability of all weapon and support systems. Provides management for the Air Force part of the foreign military assistance program (MAP).

5-20. Deputy Chief of Staff, Plans and Operations

The Deputy Chief of Staff, Plans and Operations, is responsible for formulating overall Air Force operational concepts, objectives, policies, plans, missions, and doctrines. He translates assigned roles and missions into Air Force tasks and determines force requirements to support approved national strategy. His planning functions include unilateral aerospace planning and joint planning. He is also responsible for those operating functions which are in support of the JCS. He is the Operations Deputy to the Air Force Chief of Staff in the latter’s capacity as a member of the JCS and is responsible for participation by the Air Force in joint and combined policymaking, planning, and operational activities.

5-21. Deputy Chief of Staff, Research, Development, and Acquisition

The Deputy Chief of Staff, Research, Development, and Acquisition, is responsible for identification of desired operational capabilities for aerospace systems and subsystems to perform military tasks. He develops and directs plans and programs for the Air Force in the field of basic and applied research, advanced engineering development, development planning, research support, and test activities. He serves as the focal point for all matters relating to space, including the coordination of Air Force activities with other Government agencies. He is responsible for projecting developments to meet future Air Force mission requirements, and directs Air Force research and development activities in the nuclear energy field.

5-22. Deputy Chief of Staff, Logistics and Engineering

The Deputy Chief of Staff, Logistics and Engineering, is responsible for developing and directing plans, programs, policies, and procedures for the management of Air Force and Reserve Forces activities in the field of logistical support. This involves systems and support equipment development, quantitative logistical requirements determination, acquisition, supply and services, production, industrial planning, maintenance engineering, and transportation. This also includes responsibility for execution of the Air Force portion of the foreign

military assistance program, Air Force small business affairs, and technical programs security.

Section IV
Field of the Air Force

5-23. Introduction

There are 15 major commands and 14 separate operating agencies which together represent the field organization of the Air Force. These commands are organized on a functional basis in the United States and on an area basis overseas. The commands are given the responsibility for accomplishing certain phases of the worldwide activities of the Air Force. They are responsible for organizing, administering, equipping, and training their subordinate elements for the accomplishment of assigned missions. Those organizations having no direct relationship to the supply management activities discussed in this book have been excluded.

5-24. Air Training Command

The Air Training Command provides individual training for Air Force officers and airmen. This includes basic training and indoctrination for all Air Force recruits; flying training; special technical field training; and such other training as directed. It is also charged with the recruiting function for the Air Force.

5-25. Military Airlift Command

The Military Airlift Command is a major command of the Air Force and a JCSspecified command. Its primary mission is to provide air transportation for personnel and cargo for all the military services on a worldwide basis. In addition, it furnishes weather, rescue, and audiovisual services for the Air Force.

5-26. Strategic Air Command

The Strategic Air Command is a major command of the Air Force and a JCSspecified command. Its primary mission is to organize, train, equip, administer, and prepare strategic Air Forces for combat, including bombardment, missile, special mission, and strategic reconnaissance units, and to conduct strategic air operations.

5-27. Tactical Air Command

The Tactical Air Command is a major command and is the Air Force component in the US Readiness Command. Its mission is to organize, train, and equip forces to participate in tactical air operations which includes air support for the Army; and joint amphibious and airborne operations in coordination with the other services in accordance with doctrines established by the JCS. The Tactical Air Command participates with the Army, Navy, and Marine Corps in developing doctrine, procedures, tactics, techniques, training, and equipment for joint operations, and provides combat ready aid elements to the readiness command.

5-28. Oversea commands

The US Air Forces in Europe, Pacific Air Forces, and Alaskan Air Command constitute the oversee commands. They are responsible for the offensive, defensive, transport, and logistics functions in their area of operation. They provide the air element for the unified command to which they are assigned and assist Air Forces of other countries.

5-29. Air Force Systems Command

a. The Air Force Systems Command has complete acquisition responsibility for new weapon systems including advance technology, development, tests, procurement, production, and site activation. The Systems Command has four product divisions, each with a special field of developmental responsibility: Space and Missile Systems Organizations, responsible for space systems and ballistic missile systems development and acquisition; Aeronautical Systems Division, for conventional aircraft and aeronautical systems; Electronic Systems Division, for developing command, control, and communications systems compatible with the new weapon systems; and Armament Development and Test Center, for acquiring nonnuclear air armament for tactical and strategic forces. Other Air Force Systems Command organizations include: the Aerospace Medical Division for patient care, medical research, and medical education; the Foreign Technology Division for foreign technology intelligence analysis; the Contract Management Division for contract surveillance; the Arnold Engineering Development Center for testing jet and rocket propulsion systems; the Air Force Flight Test Center for testing aircraft; the Eastern and Western Test Ranges for testing space vehicles and operational satellite launching; and several laboratories for research.

b. A system program office is established for each system program no later than receipt of a system management directive, and remains active until the acquisition phase is over. This office normally is located at the division of the Air Force Systems Command that is responsible for appointing the system program director who heads the office. The system program office is made up of representatives from the Air Force Systems Command, Air Force Logistics Command, Air Training Command, and the operating commands who will eventually use the system under development. Other organizations and agencies may also be represented if this is warranted. The system program office is the only systems management organization during the acquisi-

tion phase. As the central point for guidance, this office provides whatever instructions are necessary to insure the effective execution of the system program.

c. The Air Force Systems Command Headquarters is located at Andrews Air Force Base, Washington, DC 20331.

5-30. Specialized Air Force data automation centers

a. Centers within the Air Force Communications Command provide specialized management for Air Force data automation. Three important centers within the command are: Air Force Data Service Center, Air Force Data Systems Design Office, and the Federal Automatic Data Processing Simulation Center. *b.* These centers/offices perform ADP support beginning with the conceptual stage of a data system and extending through its operational life. *c.* The Air Force Data Systems Design Office, Directorate of Logistics, Supply and Services Division, provides ADP management for the Standard Base Supply System.

5-31. Air Force Logistics Command

The AFLC provides logistics support and services for Air Force organizations, systems, and materiel. The activities of this command are directed from its headquarters at Wright-Patterson Air Force Base, OH. Its main functions are to develop procedures and furnish policy guidance to air logistics centers and other field activities. Through these centers and its other subordinate activities, the AFLC performs:

a. Inventory management of assigned Federal supply groups, classes, and items.

b. Central procurement of initial repair parts, components, and aerospace ground equipment of a common nature.

c. Central procurement of replenishment items for weapon, support, space, command, and control systems, and support equipment.

d. Procurement support for oversee Air Force commands.

e. Depot-level maintenance.

f. Materiel modification and product improvement programs.

g. Assignment of engineering responsibility for selected inservice aeronautical and allied equipments.

h. Providing a system for calibrating the precision measurement and test equipment used by the Air Force.

i. Operating and managing the Air Force Technical Order System, and maintenance engineering technical systems.

j. Providing depot overhaul of ground communications-electronics equipment for which the Air Force Communications Command has installation responsibility.

k. Providing transportation planning and services in support of the Air Force logistics system.

l. Acquiring support systems in conjunction with the Air Force Systems Command.

m. Conducting industrial mobilization planning.

n. Providing supply and maintenance support for the Air Force nuclear weapons program.

o. Providing supply and maintenance support to international logistics programs.

p. Managing the stock fund program.

q. Providing other logistics support services as required. Figure 5-1 shows the AFLC organization.

5-32. Air logistics centers

a. The AFLC operates five air logistics centers in CONUS. These centers control depot storage operations and provide logistics assistance to Air Force activities within their geographic area of responsibility. The centers are worldwide managers for commodity classes and weapon systems assigned to them. The air logistics centers are: Warner Robins, GA; Oklahoma City, OK; Ogden, UT; San Antonio, TX; and Sacramento, CA. *b.* HQ, AFLC, has assigned sole supply management responsibility for assigned weapon-oriented Federal supply classes and assigned items in commodity-oriented Federal supply classes among the inventory managers at the five centers. These inventory managers perform the worldwide supply management functions of computing requirements, cataloging, distribution, and disposal for assigned items. Air bases requisition materiel directly from the inventory manager who has been assigned responsibility for supply of the desired item.

5-33. System support

a. Commodity specialization has raised the problem of coordination among the inventory managers. For example, the various components and repair parts needed to keep an aircraft or missile operational and combat-ready (airframe repair parts, engines, navigational guidance equipment, fire control instruments, and ground support equipment) may be stored at, and managed by, several air logistics centers. A temporary supply failure at any one center can nullify the efforts of all the others to maintain support for a particular aircraft or missile. One of the most important consequences of this problem has been the adoption of system support management for certain systems.

b. Use of the concept improves materiel management and support of the modern, complex Air Force weapon systems in keeping with the tempo of highly

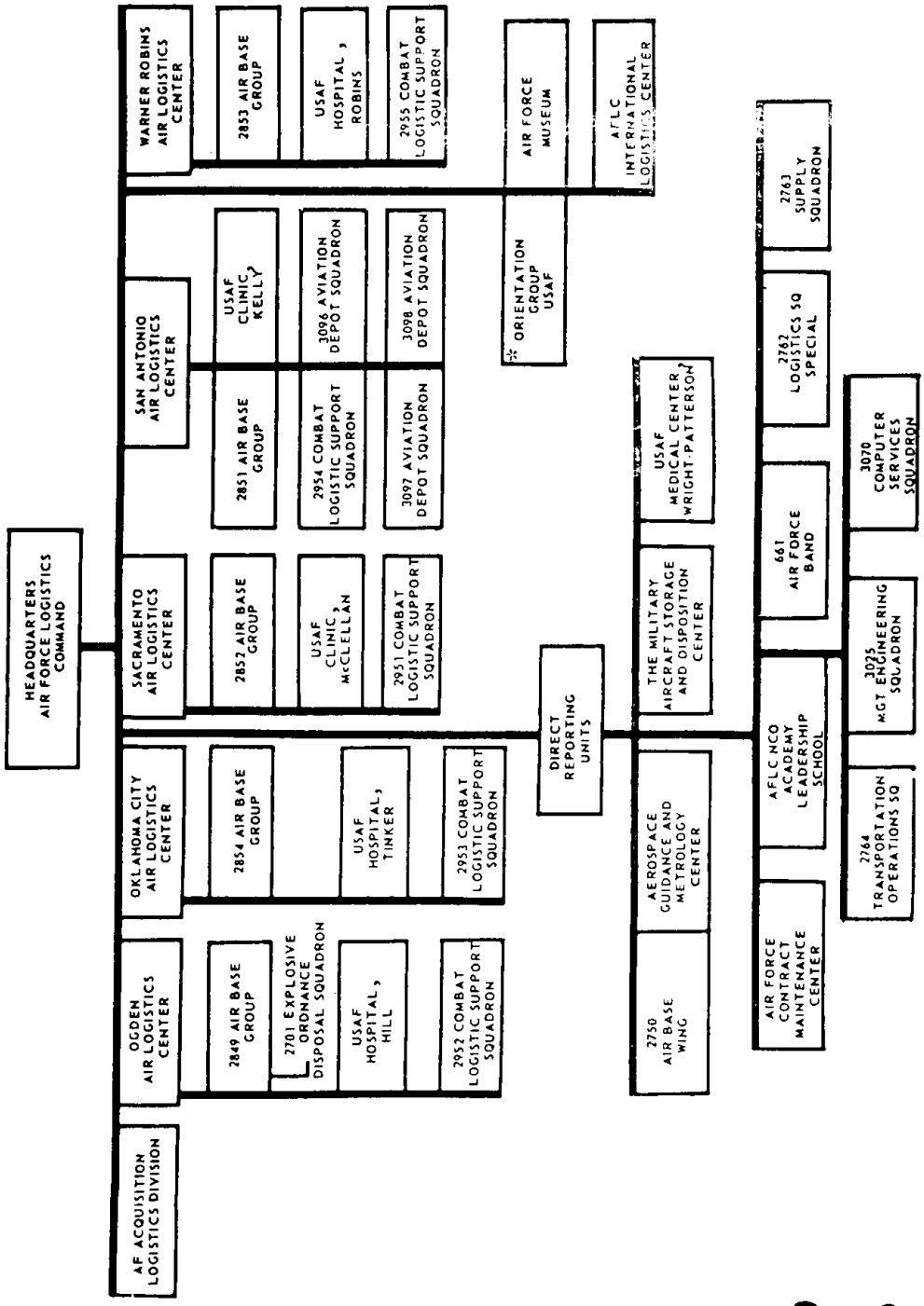

Figure 5–1. AFLC organizational directory.

2-C

mobile global operations. System managers have been designated for first-line weapons and supporting systems, including guided missiles. The system manager is responsible for integrating the logistics support of the weapon systems assigned to him, and this responsibility begins with the initial test phase and ends only with the termination of the operational life of the weapon systems. In discharging his responsibility for assigned systems, the system manager insures rapid and positive response to the supply demands of tactical units, no matter where they may be deployed. Under this system, airlift generally is used to transport stock to oversee tactical units, but all forms of transportation are used in the CONUS.

5-34. Area support

Each air logistics center gives certain kinds of assistance to units within the area. These services include providing technical surveillance over base supply functions, sending technical assistance teams to bases, and monitoring the logistics phases of activation or inactivation of bases within the area.

5-35. Specialized AFLC organizations

a. Air Force Acquisition Logistics Division, Wright-Patterson Air Force Base. This division was established in 1976 to achieve reduction of weapon systems life-cycle costs. The division improves the interchange of information between AFLC and Air Force Systems Command, particularly the flow of feedback data from Air Force combat commands using the systems. The division provides knowledge and experience in systems operations and logistics support requirements in initial design and development phases. It also conducts reviews on reliability, maintainability, and contract specifications.

b. Aerospace Guidance and Metrology Center, Newark Air Force System. This center repairs aircraft displacement gyroscopes and inertial guidance and navigation systems for aircraft and missiles. It also manages the Air Force metrology and calibration program and hosts the Air Force measurement standards laboratory.

c. Air Force Contract Maintenance Center, Wright-Patterson Air Force Base. The center has more than 20 separate units throughout the world. It administers about 2,600 contracts annually, worth approximately $4.4 billion.

d. Military Aircraft Storage and Disposition Center, Davis-Monthan Air Force Base. This center manages the storage, reclamation, return to flying status, and disposition of all aircraft not currently required in the DOD operational inventory. It stores approximately 3,500 individual aircraft of the Air Force, Army, Navy, and Coast Guard.

Section V Retail-Level Supply

5-36. Air Force bases

a. Because aerospace operations depend on adequate supply support, supply management is a vital element in every echelon of command. At major command level, the Director of Logistics or the Deputy Chief of Staff for Logistics, as a member of the headquarters staff, is charged with planning and supervising logistics support of the entire command. If the command is divided into numbered Air Forces, the Director of Logistics at each Air Force headquarters has similar responsibilities for that Air Force. This pattern applies through all the echelons down to, and including, the wing.

b. The bases controlled by the major commands are the primary customers of the Air Force wholesale supply system. Each base or major grouping of organizations is assigned an account number. Bases also draw support from the other services, DLA, and the General Services Administration (GSA). Oversea bases are on direct support and requisition directly from the applicable source of supply.

c. To meet nuclear age requirements, considerable attention has been focused on the development of faster means of communication and transportation. All retail customers are not tied to the Air Force wholesale supply system by AUTODIN, a high-speed data transmission and switching system. Within the United States, an air transport system, logistics airlift, operated by commercial carriers under contract with the Air Force, links air logistics centers, bases, and aerial ports of embarkation on regular schedules. Oversea air movement is handled by the Military Airlift Command, augmented by commercial carriers where necessary.

5-37. Base supply

a. At air base level, the consolidated base supply activity is responsible for the overall management, technical supervision, and maintenance of account able records for most of the supplies consumed by operating units. The base supply activity is the heart of the retail system, and the first echelon of the Air Force supply system, where supplies are issued to the customers or consumed by the base itself. As the final point of demand, the base provides the necessary consumption data which serve to guide the worldwide replenishment, distribution, and procurement of Air Force stocks.

b. The base supply system is completely automated and standardized throughout the Air Force, using the same procedures, organizational structures, forms, and computer programs regardless of base mission, size, or location. It is termed the Standard Base Supply System

and operates on U1050-II computers at approximately 116 locations. Bases, Reserve units, and Air National Guard supply accounts which do not have sufficient logistics activity to fully use a computer share time on nearby base U1050-IIs. There are more than 182 such satellite supply accounts.

c. The Standard Base Supply System is an online processing system, providing immediate update to both supply and financial records upon input of a single transaction. To accommodate both input and output requirements, teletype remote devices are provided to various work centers. The system is programed to interface with the supply processing and management systems of the AFLC, the DLA, the GSA, and supported major commands.

Chapter 6
The Marine Corps Supply System

6-1. Introduction

a. The United States Marine Corps is an integral part of the Department of the Navy, and is at all times subject to the icings and regulations established for that department. Within the department, there are two services: the Navy and the Marine Corps. Each is a separate service, although individuals and forces of one may be assigned to serve with and become a part of specified units of the other.

b. The Commandant of the Marine Corps is the senior officer of the Marine Corps. He is directly responsible to the Secretary of the Navy for Marine Corps administration, discipline, internal organization, training, requirements, efficiency, readiness, operation of its materiel support system, and for the total performance of the Marine Corps.

c. The primary missions of the Marine Corps are: to provide Fleet Marine Forces of combined arms and supporting air, for the seizure and/or defense of advanced naval bases in land operations essential to naval campaigns; to provide detachments for service on armed vessels of the Navy and security detachments for the protection of naval stations and bases; to develop, in coordination with other services the tactics, techniques, and equipment for landing forces in amphibious operations; and similarly, to develop doctrine, procedures, and equipment of interest to the Marine Corps for airborne operations, which are not provided by the Arms; to the prepared, in accordance with joint mobilization plans, for wartime expansion; and finally, to perform other missions as the President may direct.

d. To support these forces, the Marine Corps has been authorized by the Secretary of the Navy to develop a separate and distinct supply system. The mission of the Marine Corps supply system is to provide and manage those items necessary for the equipment, maintenance, and operation of the Fleet Marine Forces, supporting establishments and the Marine Corps Reserve.

e. The system is controlled by the Commandant. It is designed for effective operation in both peace and war, with the capability of rapid transition from one to the other, but dedicated to the single purpose of providing the necessary support to Marines in combat. It makes the Marine Corps essentially self-sustaining in logistics operations and is structured to be responsive to, the needs of the operating and supporting forces no matter where located. It is characterized by centralized management and stock control, decentralized distribution points, and maximum use of automatic data processing (ADP).

f. In support of the Marine Corps supply system, the Navy provides aviation, medical, and chaplain supplies directly to Marine Corps using units. To manage this aspect of the system Navy supply officers are assigned to Marine Corps air activities; medical officers and chaplains are assigned to Marine Corps units: and Marine Corps officers and men are trained in Navy supply matters.

g. Headquarters, Marine Corps is the inventory management agency for ammunition within the Marine Corps; however, the physical handling of the major portion of stores assets is accomplished at Army and Navy ammunition depots.

6-2. Supply system structure

The supply system consists of three essential elements or managerial levels: Marine Corps Headquarters, the in-stores, and the out-of-stores functional elements. The system extends from the headquarters down to the user. Concepts, policies, and guidance emanate from the headquarters; distribution is performed by the in-stores system, while the ultimate user is the retail or out-of-stores element.

6-3. Headquarters

a. The Commandant is directly responsible for the headquarters total performance, including requirements, efficiency, readiness, and operation of its supply system. Direction of the supply system by the Commandant encompasses planning and determining the support needs of the Marine Corps for equipment, weapon systems, materiel, supplies, facilities, maintenance, and supporting services. Further responsibilities include providing staff assistance to the Assistant Secretary of the Navy (Ship building and Logistics) in matters pertaining to supply, determining military characteristics for Marine Corps equipment to be procured or developed, and the training required to prepare Marine Corps personnel for combat. Assisting the Commandant with these responsibilities is the function of the headquarters staff.

b. The Deputy Chief of Staff for Installations and Logistics is the principal logistician on the general staff of the Commandant. He is responsible for logistics plans and policies, materiel program objectives, and programs relating to materiel readiness. He plans and establishes requirements for research and development efforts in the area of logistics and is responsible for the ground materiel equipment required for support of amphibious operations.

c. The Deputy Chief of Staff for Installations and Logistics is also the principal staff advisor to the Commandant in the supply matters and is responsible for the management of the supply system; the procurement of

materiel and services; the management of the Marine Corps stock fund; the management of the utilization and disposal program; and the provisioning of engineering and technical services in acquisition, support, and maintenance of ground equipment. In addition, he is responsible for all matters pertaining to facilities management; all phases of transportation and traffic management; the supervision and direction of service support functions which includes subsistence, food services, commissary sales stores, laundry and drycleaning facilities; and the maintenance and operation of Marine Corps exchanges through nonappropriated funds. Figure 6-1 shows the organizational structure of the Installations and Logistics Department of the Marine Corps.

d. Although the Deputy Chief of Staff for Installations and Logistics is the principal staff officer concerned with the management of the supply system, significant overall contributions are made by each of the other staff agencies. Examples of these are: the Fiscal Director, who provides the fiscal policy and manages the funding and financial aspects of the system; the Director of Command Control, Communications and Computer (C4) Systems, who develops data systems, concepts, policies, and objectives, and provides the ADP hardware for the system; and the Deputy Chief of Staff for Research, Development, and Studies, who directs and coordinates in the areas of research, development, test, evaluation, and studies.

6-4. In-stores element

a. The in-stores element includes those assets and the management functions that are under centralized item and/or financial accountability and control. The in-stores element is managed under the Marine Corps Unified Materiel Management System. This concept has converged all management functions normally associated with military supply into a single integrated system. In-stores element began in May 1967. The system uses advanced management technology and ADP to the fullest, and incorporates all standardized requirements of the Department of Defense (DOD). It is compatible with interfacing systems of the Defense Logistics Agency (DLA), the General Services Administration (GSA), and other military services through the use of standardized formats and languages.

b. The organizational structure to satisfy the objectives of the Marine Corps 1 Unified Management System consists of Headquarters, Marine Corps, one inventory control point (ICP) which is a part of the Marine Corps Logistics Base (MCLB), located at Albany, GA, and two remote storage activities (RSA). These two RSAs are located at the MCLB at Albany, GA and the MCLB, at Barstow, CA. The RSA at Albany, GA, provides logistics support for Fleet Marine Forces (including Reserve) in the Eastern United States and the Atlantic theater. The RSA, located at Barstow, CA, provides logistics support for Fleet Marine Force units (including Reserve) in the Western United States and the Pacific theater.

c. As with the overall supply system, policy for the operation of the Marine Corps Unified Materiel Management System emanates from Headquarters, Marine Corps under the auspices of the Deputy Chief of Staff for installations and Logistics. To fulfill his responsibilities for the operation, maintenance, and improvement of the supply system, the Deputy Chief of Staff for Installations and Logistics develops procedures and management objectives, and analyzes the system’s effectiveness.

d. The ICP is the central supply processing point and the central coordination and technical direction agency for the operation of the Marine Corps Unified Materiel Management System. As such, the ICP controls all the actions required in the acquisition, availability, and disposal of the materiel assets in the system.

e. The Commanding General, MCLB, Albany, GA, is designated as the commander of the ICP. He is responsible for the inventory control of all centrally managed and centrally procured items (other than subsistences and commissary items) procured under the Marine Corps stock fund, plus the majority of appropriation stores account items (excluding ground ammunition). The functions conducted at the ICP include requirements determination, procurement, receipt control, stock and issue control, inventory analysis, budgeting, financial store accounting, performance measurement, and determination of excesses. Additionally, the ICP performs the functions relative to pricing, cataloging, reporting, and computing mobilization reserve requirements for centrally managed, locally procured, and integrated manager items. Further, technical direction over the RSAs is exercised.

f. The administrative tasks and functions required in the operation of the Marine Corps Unified Materiel Management System are organized into 15 subsystems operated as 1 integrated system by the ICP through a large-scale computer program. The subsystems are interrelated and data in each subsystem are available to the others for use. The subsystems fall into three general areas. Two areas, supply/financial and technical, pertain to the functions at the ICP. The third area pertains to functions of the RSAs. There are seven subsystems in the supply/financial area. These are concerned primarily with inventory control, accounting, procurement, budget, and supply management reports. The five subsystems in the technical area perform such functions as provisioning, technical data, war reserve, data control, and applications. The remaining two subsystems deal with the RSAs. They are the mechanization of

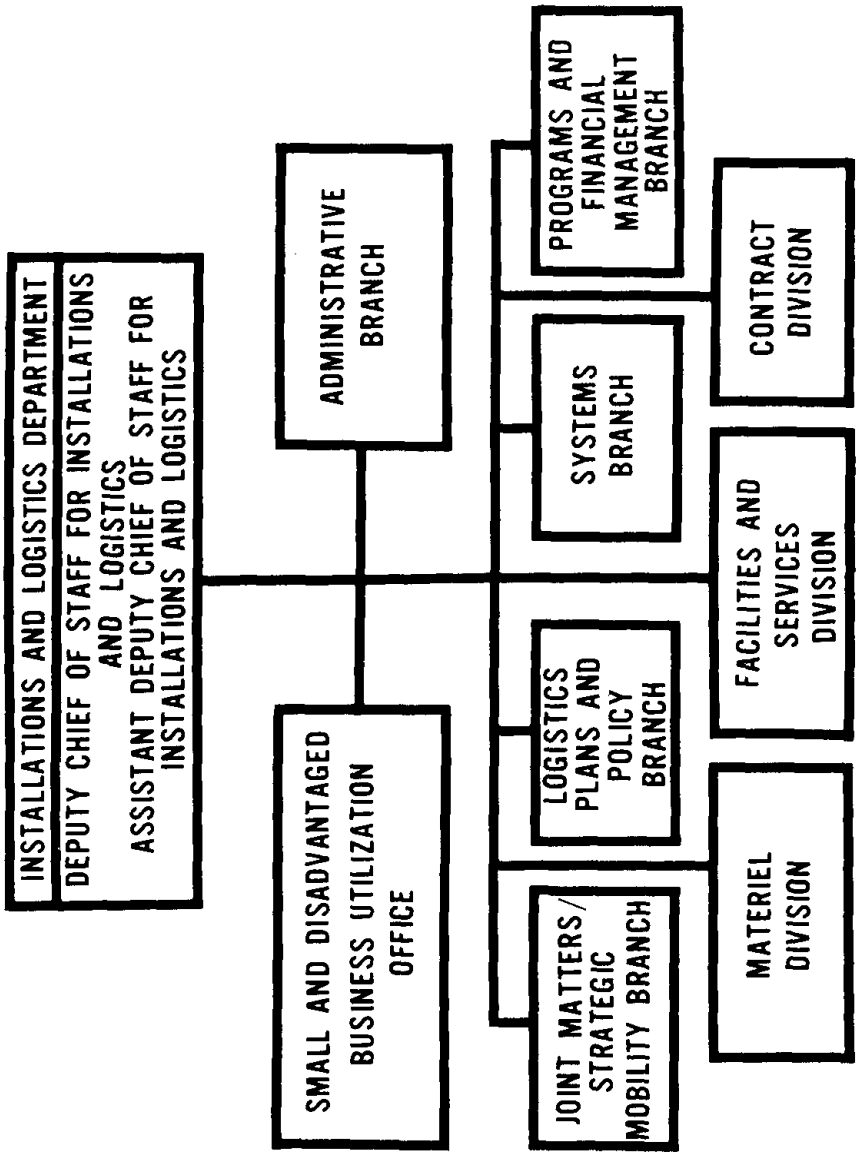

Figure 6-1. Organizational structure of the Installations and Logistics Department of the Marine Corps.

warehousing and shipping procedures and direct support stock control.

g. The two remote storage locations in the Marine Corps Stocks Distribution System are geographically located adjacent to the Continental United States (CONUS) units they serve and are able to effectively support units deployed overseas from either coast of the United States. Each RSA is a part of the base at which it is located. The base commanders exercise all aspects of command over the RSA except in the area of technical direction, which is under the cognizance of the ICP.

h. The missions of the RSAs are:

(1) To receive, maintain, and issue in-store stocks and equipment to units located in their vicinity.

(2) To operate a decentralized local direct support stock control system, to include positioning of materiel, maintenance of, stock levels, disposition, and item accounting for items assigned.

(3) To operate customer issue outlets as part of the decentralized stock control subsystem, to include fuel, lumber, clothing, subsistence, shop stores, and self-service ready issue points. In addition, five commands are designated as ground ammunition storage points; they are the Marine Corps Recruit Depot at Parris Island and the Marine Bases at Camp Lejeune, Camp Pendleton, Quantico, and Twentynine Palms.

i. The general functions conducted at the RSAs are warehousing, materiel management, customer service, physical distribution control, and complete management; of locally, controlled items. The RSAs function primarily in direct support of the Fleet Marine Forces by providing depot level repair and rebuild, and by serving as the principal storage sites for pre-positioned mobilization stocks of both major and secondary items. In addition, they stock and issue items for which the Marine Corps is the integrated material manager and for other service-/agency-owned stock.

j. Stocks are received at the RSAs as a result of procurement actions placed by the Headquarters, Marine Corps and the ICP. Materiel are released for delivery in accordance with materiel release orders issued by the ICP in response to customer requisitions. All materiel transactions at the RSAs are reported internally from remote input/output stations. These data are also used in the various subsystems of the Marine Corps Unified Materiel Management System for shipment planning, warehouse management, work measurement, and computation of other requirements.

6-5. Out-of-stores element

a. The third portion of the Marine Corps supply system is the out-of-stores element. This is the user element and consists primarily of the assets held by units of the Fleet Marine Forces (Divisions, Air Wings, and Force Service Support Groups), posts, camps, stations, and Marine Corps Recruiting and Reserve Districts.

b. Materiel in the out-of-stores element are not centrally managed. Stockage objectives for class IX repair parts at the using unit level are based on actual usage and for classes II, IV, and VII by table of equipment allowances published for each unit by Headquarters, Marine Corps. Special allowances, when approved by Headquarters, Marine Corps, may be maintained on hand to support unique operations. All phases of supply accounting for class II, IV, VII, and IX materiel at the organic or using unit, including procurement control and disposition of materiel, are performed under the rules of the Supported Activities Supply System (SASSY).

c. In the Force Service Support Groups, supporting each division and air wing or combined division/wing team are intermediate supply support elements called SASSY management units (SMU). The SMUs are the connecting links between the unit level account and the ICP or the integrated materiel manager. They are mechanized, mobile, and capable of deploying with the major troop units, and they stock the materiel necessary to support the major units for a prescribed level of operations. These support elements perform their own inventory accounting through standard computerized procedures controlled by Headquarters, Marine Corps. The using units requisition materiel from the general accounts of the SMUs, where their demand is either filled, backordered, or passed to the integrated materiel manager. The SMUs replenish their general accounts in accordance with stock levels computed from usage by requisitioning materiel from the appropriate source of supply.

6-6. System operation

a. The interrelated actions produced by a customer’s request for materiel illustrate the overall operation of the supply system. Essentially, the using unit or individual customer places demands on the system in two ways the informal, nonrequisition demand and the formal requisition conforming to Military Standard Requisitioning and Issue procedures (MILSTRIP).

b. The majority of informal demands are processed within the Direct Support Stock Control Subsystem, through such outlets as the self-service center, retail clothing store, shop stores, and military clothing sales store.

c. The SMUs submit formal requisitions directly to the appropriate integrated materiel manager by way of the automatic digital network (AUTODIN), if available, or by mail or message, if not available. When the integrated materiel manager is the Marine Corps, the ICP processes the requisition against the assets of the

in-stores system and transmits a materiel release order directing an RSA to release the materiel. If the materiel are not in stock, the requirement is placed on back order and procured by the ICP from a commercial source for direct delivery to the requisitioner in accordance with the urgency of the priority assigned to the requisition.

d. Examples of actions at the ICP which are generated upon receipt of customer requisitions are: The Master Inventory File Stock/Financial Record is updated; the requestor's allotment is charged of appropriate; and management action is taken as required. The normal test of assets, due-ins, and leadtime is made to determine whether procurement action is required. If required, a procurement document is produced. The system also produces daily workload forecasts, materiel release orders, reports of materiel availability, special category release orders, warehousing summary listings, supply effectiveness reports, and performance measurement reports. The ICP automatically schedules such storage functions as surveillance inspections, requirements for selective inventory, and care in storage.

e. Finally, the performance and effectiveness of the system are constantly monitored by Headquarters, Marine Corps to insure that maximum support is rendered by all phases of the system.

Chapter 7
Defense Logistics Agency

Section I
Introduction

7-1. Background

a. The Secretary of Defense announced the establishment of the Defense Supply Agency in 1961. Since that time, the agency's responsibilities have been substantially increased, and in 1977 it was renamed the Defense Logistics Agency (DLA).

b. The agency employs approximately 48,000 civilian and military personnel at its headquarters in Alexandria, VA, 25 primary level field activities and almost 221 other locations (37 overseas) throughout the world.

c. The agency is headed by a three-star military officer appointed by the Secretary of Defense and approved by the President. He is the commander of an operational military logistics organization responsible for providing responsive, effective, and economical worldwide support to the military services and other Department of Defense (DOD) components, Federal civil agencies, foreign governments, and others. The director represents the agency and DOD at the highest echelons of Government, including relationships with Congress, DOD, military departments, senior representatives of foreign governments, industry, and the public at large.

d. The name change in 1977 reflected its increased role in the defense military logistics system. The effort and operations of the agency are oriented primarily toward logistics support of the missions of the military services and the unified and specified commands under all conditions of peace and war. These mission areas encompass a wide variety of responsibilities.

7-2. Mission

a. The mission of DLA is to provide effective and economical support to the military services, other DOD components, Federal civil agencies, foreign governments, and others, as authorized, for assigned materiel commodities and items of supply including weapon systems, logistics services directly associated with the supply management function, contract administration services, and other support services as directed by the Secretary of Defense. Furthermore, DLA administers the operation of DOD programs as assigned.

b. Under the direction and operational control of its director, DLA is responsible for the performance of the following major functions:

(1) Materiel management encompassing item management classification, requirements and supply control, contracting, quality and reliability assurance, industrial mobilization planning, storage, inventory and distribution, transportation, maintenance and manufacture, provisioning, technical logistics data and information, value engineering, and standardization.

(2) Contract administration services provided in support of the military departments and other DOD components, the National Aeronautics and Space Administration (NASA), other designated Federal and State agencies, and foreign governments.

(3) Providing scientific and technical information support services to the Defense Research, Development, Testing, and Evaluation (RDTE) community, consistent with Office of Under Secretary of Defense (Research and Engineering) policy guidance, through operation of the centralized management information and technical report data banks at the Defense Technical Information Center and administrative management by Defense Technical Information Center of assigned contractor-operated DOD information centers in selected fields of science and technology.

(4) Administering assigned DOD systems and programs including the DOD Coordinated Acquisition Program; Federal Catalog System; DOD Excess, Surplus, and Foreign Excess Personal Property Disposal Program, including hazardous materials and wastes; DOD Retail Interservice Support Program; Defense Materiel Utilization Program; DOD Industrial Plant Equipment Program; Foreign Military Sales (FMS); operating Military Parts Control Advisory Groups for standardization of parts at the system equipment design stage; DOD-wide program for redistribution/reutilization of excess Government-owned and -rented automation equipment; Defense Precious Metals Recovery Program; Executive Agent for Materiel Redistribution via the Defense European and Pacific Redistribution Activity; assigned logistics operations contingent to the Federal Emergency Management Program; assigned aspects of the DOD Food Service Management Program; DOD-wide Interchangeable/Substitutable Program; Military Standard Logistics Systems; Logistics Data Element Standardization and Management Program; Defense Automatic Addressing System; Defense Procurement Management Review; providing manpower data support to DOD and other Government agencies; the DOD Hazardous Material Information and Hazardous Materials Data Bank System; and the Program Manager for the Defense Energy Information System.

(5) Monitoring DOD supply relationships with the General Services Administration (GSA).

(6) Serving as the operating agency for the DOD Automated Placement Programs, and providing administrative support to the Centralized Referral Activity whose functions are under Assistant Secretary of Defense (Manpower, Installations, and Logistics) supervision. These programs are the Centralized Referral

System which provides for the placement of displaced DOD employees, and returning oversee career employees, Oversea Employment Referral Program, and the Automated Career Management System for placement of employees registered in the DOD-wide career program for acquisition/ contracting and quality assurance personnel.

(7) Systems analysis and design, procedural development, and maintenance for supply and service systems as assigned by the Secretary of Defense. *c.* The approximately 48,000 personnel authorized to DLA are assigned at the headquarters (approximately 900) and:

(1) Six commodity-oriented supply centers or inventory control points (ICP). Two of which have collocated depots.

(2) Six service centers.

(3) Four defense depots.

(4) Nine defense contract administration services regions (DCASR) that geographically divide the United States. Of this number, approximately 1,041 are military, from all four services, with 16 general and flag officers.

d. DLA receives approximately 25 million requisitions per year with almost 20 million of these being filled directly with assets stocked in the DLA distribution system. The agency administers contracts with a face value of $88 billion. Yearly direct obligations include:

(1) Over $1.3 billion in the Operation and Maintenance Appropriation.

(2) Over $17 million in the Research, Development, Test and Evaluation Appropriation.

(3) Over $17 million in the Procurement Defense Agencies Appropriation.

(4) Over $42 million in the Military Construction Appropriation.

(5) Over $27 million in the Defense Industrial Fund.

(6) Over $17 billion in the Defense Stock Fund.

7-3. Organization

a. DLA is headed by a director, and assisted by a deputy director, a deputy director for acquisition management, a headquarters establishment, 25 primary level field activities, and their subordinate activities. There are also a number of headquarters management support activities which are controlled by headquarters staff elements. Figure 7-1 shows the DLA organization.

b. The DLA headquarters staff assists the director in the exercise of direction and control over the agency as a whole and is responsible for policy development, broad planning, and staff supervision of the total mission of DLA.

c. The headquarters central staff consists of the offices of Assistant Director, Plans, Policies, and Programs, Comptroller, General Counsel, Telecommunications and Information Systems, Command Security Officer, Legislative and Public Affairs, Installation Services and Environmental Protection, Administration, Personnel, and Small and Disadvantaged Business Utilization. This central staff provides common administrative, professional, technical, and managerial support.

d. The headquarters mission elements consist of the executive directorates, supply operations, contracting, technical and logistics services, contract management, and quality assurance. The mission elements exercise staff supervision over the execution of the mission operations.

e. The 25 primary level field activities are categorized as six defense supply centers, four defense depots, six service centers, and nine DCASRs. These activities report directly to the director.

f. The defense supply centers are responsible for materiel management of assigned commodities and items of supply relating to food, clothing, textiles, medical, chemical, petroleum, industrial, construction, electronics, and general items of supply. The Defense Fuel Supply Center is additionally responsible for contracting for commercial petroleum services, coal, crude oil, and petroleum products for the Strategic Petroleum Reserve. Two of the supply centers and the four defense depots receive, store, and issue assigned commodities.

g. The service centers (Defense Logistics Services Center (DLSC), Defense Industrial Plant Equipment Center (DIPEC), Defense Property Disposal Service (DPDS), Defense Technical Information Center (DTIC), DLA Systems Automation Center, and the DLA Administrative Support Center) furnish varied support services, which are described in detail later.

h. The nine DCASRs, also discussed later, provide contract administration, production, quality assurance, and data and financial management activities and small business/labor surplus programs within the United States, and such external areas as specifically authorized. The DCASRs have subordinate management areas and plant representative offices.

7-4. Operations

a. In most key categories, Fiscal Year 1982 totals stayed at the high levels reached in the previous year. In large measure, this reflects the inflationary conditions prevalent throughout the economy until recently.

b. In procurement, the total value of awards in Fiscal Year 1982 was $15,223.4 million. Other key statistics, such as the total line items received and shipped by depots are also shown in table 7-1 which provides an illustration of the scope and magnitude of DLA operations.

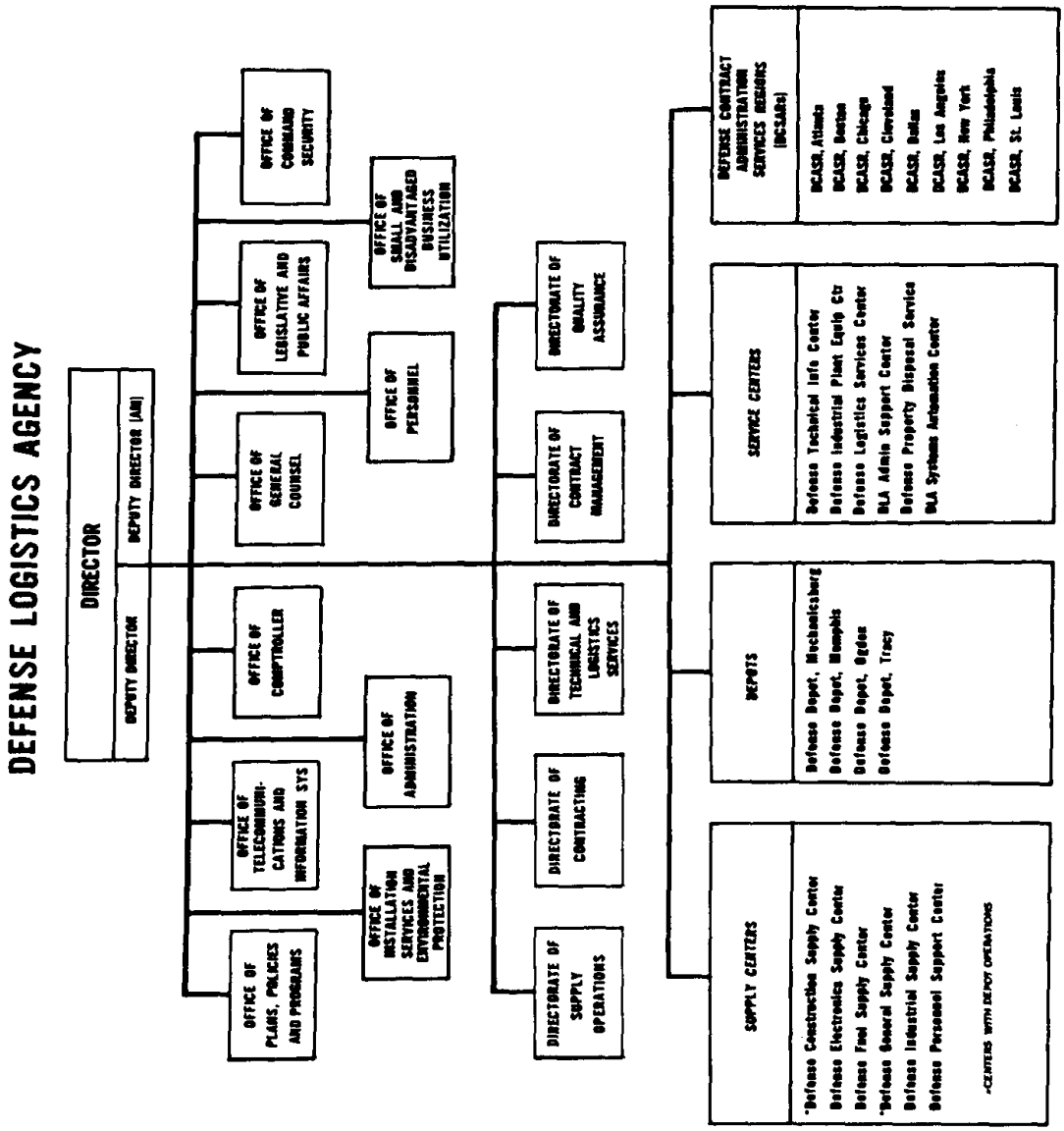
DEFENSE LOGISTICS AGENCY
DIRECTOR
DEPUTY DIRECTOR
DEPUTY DIRECTOR (AM)
OFFICE OF PLANS, POLICIES AND PROGRAMS
OFFICE OF TELECOMMUNI-CATIONS AND INFORMATION SYS
OFFICE OF COMPTROLLER
OFFICE OF GENERAL COUNSEL
OFFICE OF LEGISLATIVE AND PUBLIC AFFAIRS
OFFICE OF COMMAND SECURITY
OFFICE OF INSTALLATION SERVICES AND ENVIRONMENTAL PROTECTION
OFFICE OF ADMINISTRATION
OFFICE OF PERSONNEL
OFFICE OF SMALL AND DISADVANTAGED BUSINESS UTILIZATION
DIRECTORATE OF SUPPLY OPERATIONS
DIRECTORATE OF CONTRACTING
DIRECTORATE OF TECHNICAL AND LOGISTICS SERVICES
DIRECTORATE OF CONTRACT MANAGEMENT
DIRECTORATE OF QUALITY ASSURANCE
SUPPLY CENTERS
*Defense Construction Supply Center
Defense Electronics Supply Center
Defense Fuel Supply Center
*Defense General Supply Center
Defense Industrial Supply Center
Defense Personnel Support Center
*CENTERS WITH DEPOT OPERATIONS
DEPOTS
Defense Depot, Mechanicsburg
Defense Depot, Memphis
Defense Depot, Ogden
Defense Depot, Tracy
SERVICE CENTERS
Defense Technical Info Center
Defense Industrial Plant Equip Ctr
Defense Logistics Services Center
DLA Admin Support Center
Defense Property Disposal Service
DLA Systems Automation Center
DEFENSE CONTRACT ADMINISTRATION SERVICES REGIONS (DCSARs)
DCASR, Atlanta
DCASR, Boston
DCASR, Chicago
DCASR, Cleveland
DCASR, Dallas
DCASR, Los Angeles
DCASR, New York
DCASR, Philadelphia
DCASR, St. Louis

Figure 7-1.

c. The large increase in the number of items managed between Fiscal Years 1981 and 1982 resulted from the Deputy Secretary of Defense directed transfer of integrated materiel management responsibility for some 200,000 consumable items from the military services to DLA.

d. The Federal Government's small business and socioeconomic programs are of continuing concern. This has been demonstrated by the establishment of annual performance goals for these programs, which are assigned by the director and the headquarters staff each fiscal year; the progress thereunder is reviewed monthly. The purpose of these actions is to maintain constant awareness by management officials of national, social, and economic objectives and to insure concerted efforts toward achieving the maximum in contract awards to eligible business concerns consistent with sound acquisition practices. During Fiscal billion, or 43.8 percent of its total awards to US business firms. Also during Fiscal Year 1978, procurement totaling $159 million wasYear 1978, the agency awarded to small business concerns prime contracts amounting to $2.7 billion, pr 43.8 percent of its total awards to US business firms. Also during Fiscal Year 1978, procurement totaling $159 million was

Table 7–1
Magnitude and Scope of DLA Operations

	FY 78	FY 79	FY 80	FY 81	FY 82
Items Managed	1,957.2	2,005.9	1,969.5	1,968.2	2,188.5
Items Centrally Procured	1,889.5	1,936.0	1,899.9	1,899.6	2,120.8
Gross Requisitions Recd (Stocked)	19,475.9	18,836.5	19,327.0	20,024.9	20,642.7
Line Items Handled (In and Out)	18,292.1	18,022.0	19,285.5	19,190.1	19,776.1
Tons Handled (In and Out)	1,540.6	1,545.8	1,605.3	1,728.9	1,820.6
Stock Availability (%)	91.9	91.6	91.0	90.6	91.3
On Time Fill—All Issues (ICP & Depot) (%)	80.0	85.2	81.7	83.7	86.4
Defense Stock Fund:					
Net Sales	$ 6,618.1	$ 7,100.0	$10,911.1	$ 16,999.6	$ 16,174.2
Obligations	$ 7,148.0	$ 7,486.1	$11,263.8	$ 18,655.8	$ 17,283.5
Net Investment Change	$ +529.9	$ +386.1	$ +352.7	$ +1,656.2	$ +1,109.3
Procurement Line Items Awarded Less Ed Supplies	2,841.5	2,910.5	3,121.9	3,269.8	3,245.3
Value of Awards (MIL)	$ 8,199.0	$ 7,815.1	$11,262.1	$ 17,991.7	$ 15,998.5
Procurement Deliveries (MIL)	$ 6,069.7	$ 6,935.9	$10,104.3	$ 16,429.0	$ 14,561.2
Materiel On Order (EOP) (MIL)	$ 2,255.8	$ 2,341.0	$ 2,775.4	$ 4,087.1	$ 6,095.0
Contract Administration Services:					
Contracts Administered	241.3	257.3	272.5	302.7	304.2
Value of Contracts (MIL)	$67,863.9	$76,451.4	$88,496.9	$105,884.3	$130,277.9
Value of Materiel Inspected and Released for Shipment (MIL)	$22,152.7	$23,134.8	$26,910.0	$ 32,654.4	$ 40,402.8
Personnel (End Strength):					
Civilian	47,534	47,124	46,120	47,007	47,653
Military	968	987	961	965	1,008

awarded as a result of set-asides for firms located in designated labor surplus areas and other firms certified by the Department of Labor (DOL) as eligible to receive preference in the award of defense contracts. In addition, during Fiscal Year 1978, contracts totaling $103.3 million were placed with the Small Business Administration (SBA) for subcontracting with minority business enterprises. This program is sponsored by the SBA under section 8*(a)* of the Small Business Act.

e. DLA has implemented a program for extensive mechanization of materials handling functions within its depot activities. The equipment has been installed throughout the agency's primary storage sites after successful installation of a pilot system in 1967. This new equipment, costing $16.2 million, completes the initial mechanization effort with more specialized projects planned in the future for selected commodities and storage sites.

f. Further evidence of the expanding mission was the agency's assumption of responsibility for Government-wide supply of packaged petroleum and electronic items in 1969 and procurement responsibility for bulk fuel. Responsibility was assigned to DLA for the worldwide supply of wholesale bulk petroleum on 1 July 1973 and for subsistence on 1 May 1973.

g. The agency's program to provide special management attention to items already under its management which are indentified by the services as critical to selected weapon systems, now encompasses approximately 168,000 items. The number of military service-managed weapon systems which these items support is now 70. Included in the program are the Polaris, Minuteman, and Hawk missile systems; the B-52, F-4, and F-111 aircraft; and the Army's Sheridan Tank and M-155 Howitzer.

h. The agency's role in support of service weapon systems is basically confined to the supply of maintenance support items which are more of the commercial type. They are considered to be the "bits and pieces" of the systems, as opposed to major assemblies, components, and items, and major equipment which continue to be supplied directly by the services. For a brief discussion of the War Reserve Program, see the DLA portion of chapter 16.

i. DLA also has the special purchase mission originally provided oversee support of the Army and Air Force activities overseas (excluding Pacific Air Force) for decentralized, nonstocked, and noncataloged items. In January 1967, this responsibility was increased when oversee support of Pacific Air Force was assumed.

j. The procurement operation is now functioning as part of a highly sophisticated logistics system called the Standard Automated Materiel Management System. This system provides procurement with a direct interface with other functions such as supply, cataloging, provisioning, and financial. Some of the major improvements in the procurement area attributable to the Standard Automated Materiel Management System include:

(1) Computer-generated purchase requests with a history of the last six buys.

(2) Mechanized funding for all purchase requests and contracts-commitment and obligation.

(3) Computer-generated request for quotations for awards up to $10,000 and the computer evaluation of vendor quotes and the computer generation of the resultant purchase orders (DD Form 1155).

(4) Mechanized small purchase awards for procurement of up to $250 against preestablished blanket purchase agreements (BPA).

(5) Mechanized contract delinquency control at the contract line item level.

(6) Computer-generated procurement report for both center and headquarters use.

k. DLA Regulation 4155.22 implemented the agency's Quality Audit in 1970. Quality audit teams were established for each of the defense supply centers. The audit teams make random sampling of shipments received from procurement for depot stock. Associated procurement documents are reviewed for accuracy and adequacy of quality requirements. Product items are inspected for conformance to contract requirements. Products are inspected after all source or depot inspections have been completed and items are placed in depot stocks. Results are plotted as trend lines to highlight problem areas needing management attention. Warranty actions for nonconforming products reported are based on contract provisions.

Section II
Federal Catalog System

7-5. Item identification

a. The Federal Catalog System is a Government-wide program to provide a uniform system of item identification and assign national stock numbers (NSN) to all items of personal property used by the Government departments and agencies. Through its operation, item duplication is prevented, interchangeability among items revealed, standardization data are made available, logistics support throughout the Government is facilitated, and Government/ industry relations are strengthened; all to the improvement of materiel management, military effectiveness, and efficiency and economy in logistics operations. North Atlantic Treaty Organization (NATO) and other foreign countries participate by agreement or on an individual basis. Established by law, it is administered by DOD in conjunction

with the Administrator of GSA. DLA is responsible for management and administration of the operation of the system.

b. Table 7-2 shows those items most representative of the type items managed.

c. The Catalog System has about 5.7 million items of which 5.0 million are active. DOD manages 4.0 million of these, with DLA managing 2.2 million items.

7-6. DLA value engineering and standardization programs

a. Still another technical program receiving emphasis at all levels of management is the Value Engineering program. DLA explores every opportunity to find any element of cost that does not contribute to the function of equipment or materiel being procured and managed

Table 7-2
Some DLA-Managed Commodities

Subsistence (Defense Personnel Support Center, Philadelphia, Pennsylvania)	Meat, poultry, and fish. Fruits and vegetables. Tobacco products. Coffee, tea, and cocoa. Food oils and fats. Soups and bouillon. Jams, jellies, and preserves. Composite food packages.	Dairy foods and eggs. Bakery and cereal products. Nonalcoholic beverages. Sugar, confectionary, and nuts. Condiments and related products.
Medical, Dental, and Veterinary (Defense Personnel Support Center, Philadelphia, Pennsylvania)	Drugs. Medicines. Surgical equipment. Opticians' equipment. Laboratory equipment.	Chemical analysis instruments. Biologicals Hospital furniture. X-ray equipment.
Clothing, Textiles (Defense Personnel Support Center, Philadelphia, Pennsylvania)	Clothing and individual equipment. Textiles, leather, and furs. Notions and apparel findings. Badges and insignia.	Boots and shoes. Flags. Bedding. Tents and tarpaulins.
Fuel and Petroleum Products (Defense Fuel Supply Center, Cameron Station, Alexandria, Virginia)	Gasoline and jet fuel. Fuel oils. Coal (procure only).	Diesel.
Construction (Defense Construction Supply Center, Columbus, Ohio)	Diesel engines and components. Pipe and conduit. Hose and tubing. Plumbing fixtures. Fuel-burning equipment. Wallboard and building paper. Fencing, fences, gates. Vehicular power transmissions. Engine fuel system components. Vehicular furniture and accessories. Lubrication equipment.	Truck, tractor attachments. Plywood and veneer. Conveyors. Power and hand pumps. Winches, cranes, derricks. Roofing and siding. Water purification equipment. Gasoline engines. Vehicular cab and frame components. Engine accessories. Cooling system components. Brake, steering, and components. Materials and handling equipment.

table 7–2 (continued)

Industrial (Defense Industrial Supply Center, Philadelphia, Pennsylvania)	Hardware. Metal bars, sheets, and shapes. Blocks, tackle, rigging. Fiber rope, cordage, and twine.	Bearings. Chain and wire rope. Rope, cable fittings. Electrical wire and cables. Packing and gasket materials.
General (Defense General Supply Center, Richmond, Virginia)	Service and trade equipment. Furniture. Food preparation equipment. Recreation and athletic equipment. Office machines. Rubber fabricated materials. Photographic supplies. Chemicals. Compressed gasses. Dyes.	Office supplies. Toiletries. Cleaning equipment and supplies. Packaging materials. Plastic fabricated materials. Household furnishings. Electrical hardware and supplies. Electrical system components. School items—library materials.
Electronics (Defense Electronics Supply Center, Dayton, Ohio)	Resistors. Capacitors. Filters and networks. Fuses and arrestors. Circuit breakers. Electron tubes, transistors. Semiconductor devices, synchros and resolvers.	Switches. Connectors. Crystals. Relays and solenoids. Coils and transformers. Headsets and handsets. Antennas and waveguides.

by the agency. The objective is to achieve the lowest overall cost consistent with the performance and reliability required by the military services. *b.* During Fiscal Year 1982, DLA audited savings for value engineering was $42.3 million.

c. DLA has established Military Parts Control Advisory Groups at selected defense supply centers to perform a technical review of parts selected for use in new design. In Fiscal Year 1982, the Parts Control Program has totaled $115.5 million in cost avoidance savings at a cost of about $2.6 million.

d. Internally, the DLA has implemented four projects in the area of the standardization of automated systems, procedures, and programs.

(1) The first project is the Standard Automated Materiel Management System which is designed to provide uniform materiel management procedures throughout the agency.

(2) The second project, the Mechanization of Warehousing and Shipping Procedures, pertains to standardized data processing for storage depot operations, and the related warehousing and traffic management.

(3) The third project is the Mechanization of Contract Administration Services. This service, by DLA, furnishes computer-assisted data processing and retrieval to the complex sequence of services which are provided by the DCASRs and district offices to the buying offices, the item managers, and the industrial producers. The bulk of documentation inherent in Government contracts and the administration thereof provides a tremendous challenge to the computer programers, contract administrators, and industry.

(4) The fourth project is the Base Operating Supply System.

7-7. DLA Inventory Control and Distribution System

a. As a manager of over 2 million of the 5 million items in the Federal Supply Catalog, the DLA is the primary supply support element for DOD.

b. The 2.2 million items assigned the agency for integrated management are centrally managed by six defense supply centers which perform all normal inventory control functions. Materiel distribution is accomplished through a supporting pattern of storage activities which receive, store, and issue DLAowned materiel under direction of the center having item accountability.

7-8. Storage and distribution activities

a. There are 33 storage locations in the Continental United States (CONUS) which comprise the Defense Logistics Materiel Distribution System. These depots have the responsibility for receipt, storage, physical inventory, maintenance in storage, and issue of assigned materiel. Perishable subsistence and bulk petroleum products are not stored at these depots. They are stored at specific storage points and terminals. Of the 33 storage locations for DLA materiel, six are managed by DLA. The other 27 storage locations are service managed. Chapter 20 lists the storage locations for DLA materiel.

b. Storage activities of the DLA Materiel Distribution System are identified as either principal distribution depots or specialized support points in accordance with the type of distribution mission being performed. A principal distribution depot is a DLA-managed storage activity of the DLA Materiel Distribution System which is established to receive, store, and issue materiel of one or more DLA commodities as directed by defense service centers in support of all demands generated by all DOD and civil agency requisitioning activities located within the designated depot's geographic distribution area. A specialized support point is a military service-managed storage activity performing a specialized distribution mission for DLA-owned materiel in which the commodity range and depth is tailored to NSNs meeting specific demand criteria of a specified range of military service requisitioners, such as Navy Fleet and oversee bases or Army direct support system in Europe.

c. The six principal distribution depots operate as missions assigned to the following activities whose commanders report to the Director, DLA.

(1) Defense Construction Supply Center, Columbus, OH.

(2) Defense General Supply Center, Richmond, VA.

(3) Defense Depot, Mechanicsburg, PA.

(4) Defense Depot, Memphis, TN.

(5) Defense Depot, Ogden, UT.

(6) Defense Depot, Tracy, CA.

d. The eight specialized support points in CONUS are:

(1) Naval Supply Center, Norfolk,Virginia.

(2) Naval Supply Center, Charleston, South Carolina.

(3) Naval Supply Center, Oakland, California.

(4) Naval Supply Center, Puget Sound, Washington.

(5) Naval Supply Center, San Diego, California.

(6) Naval Shipyard, Philadelphia, Pennsylvania.

(7) Naval Training Center, Great Lakes, Illinois.

(8) New Cumberland Army Depot, Pennsylvania.

e. In addition, outside CONUS DLA is responsible for operational management of the subsistence storage activities at Bremerhaven Cold Stores, Gumershein Reserve Storage Activity, and Kaiserslauten Cold Stores in Germany. These storage activities are under the mission cognizance of the Defense Personnel Support Center, Deputy Commander for Subsistence, and Commander, Subsistence Field Activities with direct management and supervision by the Commander, Defense Subsistence Region, Europe, Zweibrucken, Germany.

7-9. DLA service centers

a. The DLA service centers consist of the DLSC, the DPDS, the DIPEC, the Defense Technical Information Center, the DLA Systems Automation Center, and the DLA Administrative Support Center.

b. Responsibilities assigned to these centers include the administration of programs and services as follows: DOD-wide cataloging (DLSC); materiel utilization, surplus personal property utilization and disposal (DPDS); focal point within DOD for maintaining records of in-use Government-owned industrial plant equipment and for storage and redistribution of idle industrial plant equipment (DIPEC), operation of DOD RDTE scientific and technical information systems; acquisition, storage, announcement, retrieval, and secondary distribution of scientific and technical documents, and primary distribution of foreign technical reports (DTIC); DLA automated systems and telecommunications support worldwide (DSAC); and the provision of administrative support and common service functions to DLA activities within the Washington, DC, metropolitan area (DSAC).

Section *III*
Contract Administration Services

7-10. Background

a. The DCAS mission was assigned to DLA after extensive study and represents one of the most significant efforts of the Defense Department to improve logistics management. The consolidation does not embrace, nor affect the procurement function itself, but rather the administration of contracts in the field after they have been executed by the contracting offices of the military departments and DLA. A prime objective of the merger was to provide a "single face to industry."

b. During 1962 and part of 1963, a study known as Project 60 was conducted under the policy guidance of high-level DOD military and civilian personnel. The study indicated the existence of considerable overlap and duplication in contract administration services functions among the military services under the US Army

Materiel Command, the Office of Navel Material, and the Air Force Systems Command; the study further indicated the feasibility of consolidating the functions for centralized management. The Secretary of Defense in 1964 assigned responsibility for these functions to DLA.

c. A national planning group, composed of temporary duty personnel from the military services and DLA, developed a National Implementation Plan which was approved by the Secretary in December 1964. The planning group formed the nucleus of the headquarters element of the DCAS organization. During the development of the plan, a memorandum of understanding was developed with NASA concerning contract administration services performance on NASA contracts.

d. The National Implementation Plan provided for gradual permanent staffing of the DCAS headquarters element and for a time-phased schedule for consolidating and merging the contract administration services components of the military services and DLA into 11 DCASRs, responsible for administering contracts under the centralized management concept. The headquarters element was established on a permanent basis on 1 February 1965.

e. Conversion and organization of the DCAS field structure was completed in 1965. Since the establishment of DCAS, the field structure has been reduced from 11 to 9 regions. The DCASR, San Francisco, was consolidated with DCASR, Los Angeles, and DCASR, Detroit, with DCASR, Cleveland in 1976. Each of the nine regions is responsible for contracts within a specific geographical alinement in CONUS, as well as Canada and certain oversee areas. Figure 7-2 shows the DCASRs.

f. These oversee areas include Alaska, Hawaii, Mariana and Marshall Islands, Greenland, Iceland; Ascension, Virgin, and Bahama Islands; Bermuda, Puerto Rico, Central America, and South America. In addition, DCASRs have subordinate organizations which perform contract administration services for specific areas within regions, areas, and offices located in certain contract plants. These organizations consist of management areas (area responsibility) and plant representative offices (contractor plant responsibility). The DCAS management areas and the plant representative offices are now listed in DOD 4105.59-H, DOD Directory of Contract Administration Services Components.

7-11. Management concepts

a. DLA, as the hub around which the overall integrated materiel management system evolves, operates under a basic management philosophy of central policy direction and decentralized operating responsibility. Essential to this philosophy is a total management review process, which makes use of performance evaluation and management reporting systems throughout the agency to: evaluate efficiency and economy in resource utilization; highlight deviations from approved program goals, objectives, and forecasts; determine casual factors, arrive at conclusions, and make decisions regarding courses of action to correct deficiencies or improve operations.

b. The DLA Planning and Programing Budget System Document, together with the Annual Operating Budget and its Special Program Analysis Guidance, are means whereby program goals and objectives, workload forecasts, and resource programs are established for each program area. The review and analysis process uses the approved programs and objectives as the primary basis for appraising actual performance and resource utilization. An automated data bank incorporating manpower, cost and performance data reported by field activities is a principal source of data for the continuous appraisal of program operating results, personal productivity, and operating costs trends.

c. Management review is performed on a continuous basis, vertically within each functional area or activity and horizontally across the entire spectrum of the DLA programs. This grid approach insures the detection of strengths and weaknesses in specialized functions. The vertical review is accomplished through various specialized operational reports directed to the functional managers concerned, the Highlight Reporting System, the Inspector General reports, and director’s official visits, and the indepth appraisals of a given functional area presented at special briefings or during the course of various management reviews. Composite review and appraisals by top management in DLA, encompassing more than one functional area are conducted at the regularly scheduled monthly management reviews, and commanders conferences which in are principal executive forums for collective consideration of actual or potential problems. The forums considered vital to the DLA management review process are:

(1) *Monthly Management Review.* Provides recurring performance appraisals addressing operating results and resource utilization in all mission areas.

(2) *DLA Commanders Conference.* Problem-oriented appraisals covering performance as well as preselected topics are presented to the Director, DLA and the heads of principal staff elements arid field activities on a semiannual basis.

(3) *Command/Management Objective Briefings.* These presentations cover the status and progress of those projects on which the Director, DLA, desires to focus personal top-management attention. These presentations feature direct personal dialogue between the director and the action officer to facilitate timely de-

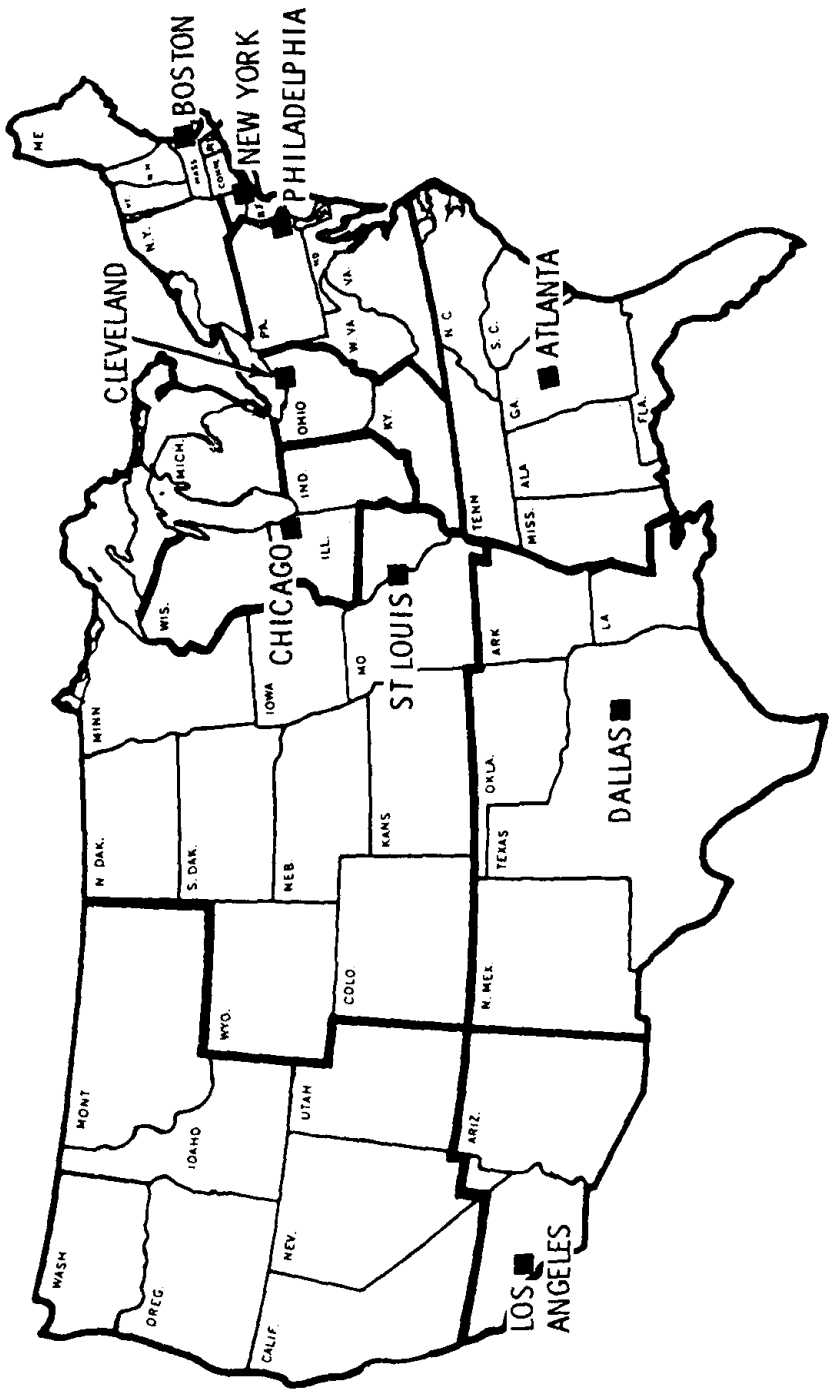

Figure 7-2. Defense Contract Administration Services Regions (DCASRs)

cisions on project accomplishment. The briefing schedule is on a case-bycase basis.

(4) *Director's Staff Conferences.* Held at the call of the director, these conferences are reports of progress and discussion of subjects having general interest to the senior staff.

Chapter 8
General Services Administration

Section I
Supply Support to the Department of Defense

8-1. Introduction
The supply support role of the General Services Administration (GSA) is to provide an efficient and economical procurement, supply, and services support to the Federal Government. Its Office of Federal Supply and Services, in close coordination with the Department of Defense (DOD) and the military services, provides worldwide supply support to military activities for those items assigned to GSA for integrated materiel management. Federal Supply and Services is instrumental in developing supply policies and methods governing civil agencies of the executive branch. This chapter describes the organization, mission, and responsibilities of GSA with particular emphasis on the operations of Federal Supply and Services as they relate to providing supply support to DOD.

8-2. Establishment
GSA was established by the Federal Property and Administrative Services Act of 1949 to provide an economical and efficient system for the management of Government property and records which includes the construction and operation of buildings; procurement and distribution of common-use supplies; disposal of surplus property; transportation and communication management; stockpiling of strategic and critical materials; and creation, preservation, and disposal of records.

8-3. Organization
a. The Administrator of General Services, appointed by the President with the advice and consent of the Senate, directs the programs of GSA. He appoints the Deputy Administrator who assists him in directing the programs of the agency and serves as acting administrator during his absence.

(1) The Office of the Administrator is responsible for providing overall direction and procedures in the field of standards of conduct and conflicts of interest; for coordinating and controlling the flow of all written communications and projects to and from the administrator's office; for tracking, monitoring, and expediting the completion of critical projects, problems, and issues; and for furthering the use of small and disadvantaged businesses by GSA.

(2) The Office of the Inspector General is responsible for policy direction and conducting audits and investigations relating to the programs of GSA. The Board of Contract Appeals is an independent administrative/judicial tribunal to hear, consider, and decide disputes under the provisions of the Contract Disputes Act of 1978. The Information Security Oversight Office oversees and insures Government-wide implementation of the information security program.

(3) The Office of Operations supervises the regions and insures that they are operated in accordance with Central Office policies in the most cost-effective manner possible. The Office of Policy and Management Systems is responsible for assisting the administrator in the formulation of agency policy. The Office of the Associate Administrator for Administration oversees organizational effectiveness and provides advice on major policies and procedures. The Office of the Comptroller is responsible for planning, implementing, directing, and coordinating all financial reporting and accounting support for GSA.

(4) The Office of Acquisition Policy exercises GSA procurement authority as delegated by the administrator and serves as the principal focal point in GSA for acquisition and contracting matters. The Office of General Counsel is responsible for all legal activities within GSA nationally.

b. GSA has five separate but integrated offices/services. They are Information Resources Management, Federal Property Resources, Federal Supply and Services, National Archives and Records, and Public Buildings. Figure 8-1 portrays the GSA organization.

8-4. Missions
a. The Office of Information Resources Management is responsible for the direction and coordination of a comprehensive Government-wide program for the management, procurement, and utilization of automatic data processing and communications equipment and services. It is also responsible for planning, developing, establishing, and operating the Federal Telecommunications System and for coordinating with DOD in the planning, research, development, application, and evaluation of electronic equipment and associated communications facilities. The service is responsible for five Federal Data Processing Centers which provide data processing services to Federal agencies nationwide.

b. The Federal Property Resources Service promotes the utilization of real property and its transfer among Federal agencies; and disposes of personal and real property surplus to the needs of the Federal Government by donation, sale, of other means. The service also acquires, stores, and maintains inventories of strategic and critical material essential to military and industrial use in times of national emergency and disposes of such material when it is no longer required.

General Services Administration/Organizational Chart

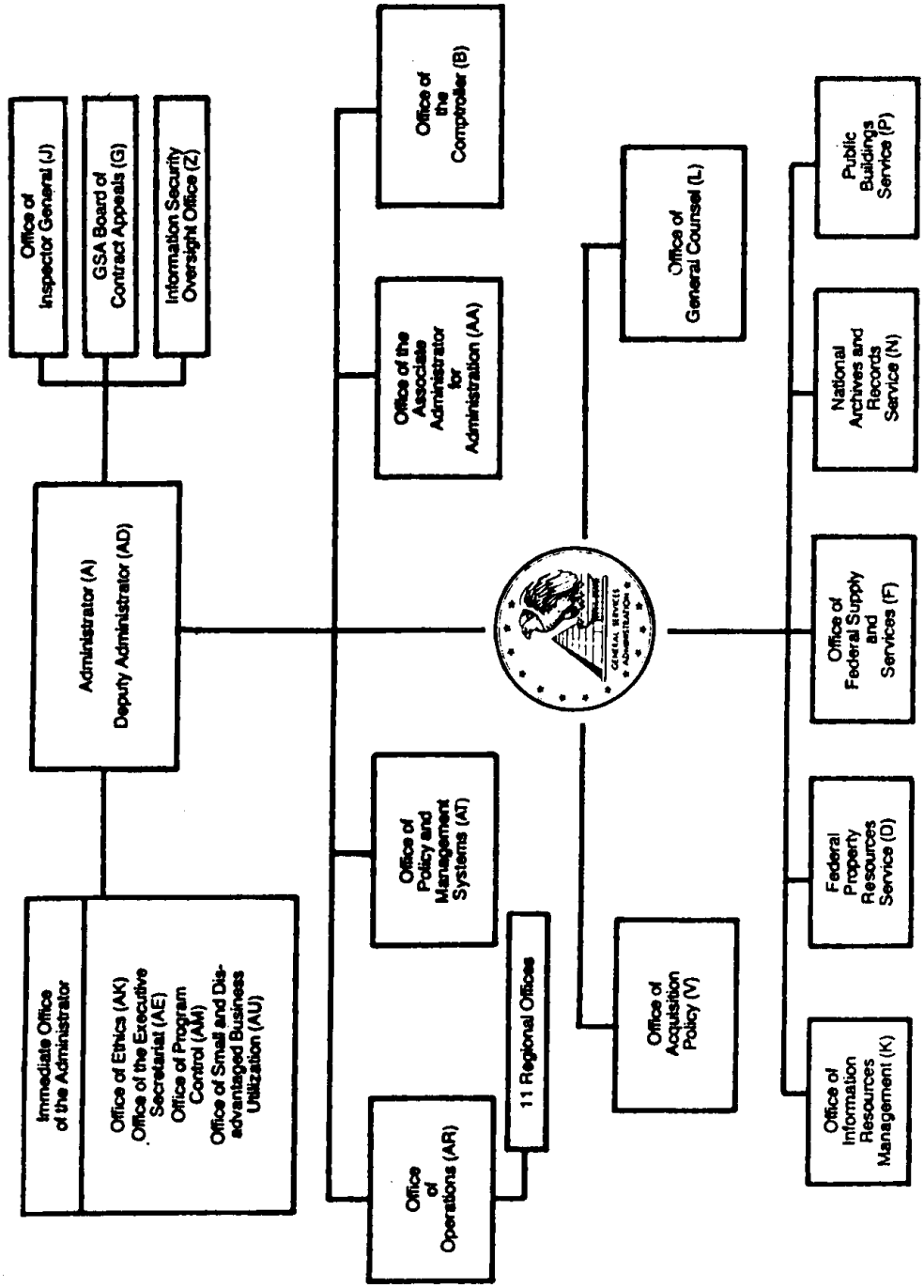

Figure 8–1.

c. The Office of Federal Supply and Services procures personal property and nonpersonal services for Federal agencies; stores and distributes supplies; promugates Federal specifications and standards; maintains Federal catalog data; handles the utilization, donation, and sale of excess personal property; and manages GSA travel and transportation services.

d. The National Archives and Records Service selects, preserves, and makes available to the Government and the public the permanently valuable noncurrent records of the Federal Government. It promotes improved records management and paperwork practices in Federal agencies. It publishes those laws, constitutional amendments, Presidential documents, and administrative regulations having general applicability and legal effect, and administers the Presidential libraries.

e. The Public Buildings Service is responsible for the design, construction, and management of federally owned and leased buildings, and for the acquisition and custody of the real property of GSA and the related personal property.

f. Regional offices are established in 11 cities throughout the United States. Within its area of jurisdiction, each regional office is responsible for executing the programs of GSA. The organization plan established for each regional office (see figure 8-2) provides for completely integrated operations and closely parallels the pattern established for the central office. Operating authorities and responsibilities have been delegated to the regional administrators. Regional offices are located in Boston, Massachusetts; New York, New York; Philadelphia, Pennsylvania; Washington, DC; Atlanta, Georgia; Chicago, Illinois; Kansas City, Missouri; Fort Worth, Texas; Denver, Colorado; San Francisco, California; and Auburn, Washington. Primary geographical areas serviced by each region are shown in figure 8-3.

Section II
Federal Supply and Services Supply Operations

8-5. Procedures

a. The Federal Supply System integrates the functions of cataloging, standardization, inventory management, quality control, distribution, and contract administration. It involves the management, procurement, receipt, storage, and distribution of materials and equipment, either from stocks maintained in a system of distribution facilities or by procurement from suppliers for direct delivery to ordering agencies. The system reduces manual operations and uses computer operations to the maximum. It interfaces with DOD by use of a standardized requisitioning and priority system which is compatible with standard military procedures. Requisitions received in other than the standard format are converted prior to processing. *b.* The Office of Federal Supply and Services uses a single computer under the FSS-19 System to determine which region will process a requisition. This is accomplished by the use of various computer files and tables which take into account the location of stock, quantity needed, where the order must be shipped, who must buy it if the item is not in stock, priority of the order, and other considerations.

c. The Federal Supply and Services uses a Zonal Distribution Concept to realize economies in shipping by routing orders for shipment from the optimum cost favorable depot with available inventory. Under this concept, the Federal Supply and Services has established 14 major domestic zones encompassing 3,350 counties with 5,000 value codes which are used to sequence counties and zones to depots in an economical pattern. Similarly, 56 export zones covering 232 foreign countries with over 2,000 value codes are used to sequence our oversea shipments.

8-6. Supply operations

a. Complete study operations are carried out by the regions. Each region has a counterpart organization of the Office of Federal Supply and Services Central Office and is headed by an assistant regional administrator, who is responsible to the regional administrator and is under the technical oversight of the central office. Each of the 11 regions has distribution facilities under its control. Requisition processing is accomplished in both the centralized and decentralized modes. Centrally, the FSS-19 System determines if stock is available and where it is located and then routes requisitions to the proper region. If stock is not available, it determines whether and where it will be back ordered. The FSS-19 System also processes the requisition, generates status, fills and ships the order to the customer. Items are stocked in various locations based upon demand history. This system is known as the variable socking pattern and its objective is to minimize transportation costs and delivery time. In addition, the Office of Federal Supply and Services has implemented a national commodity assignment program, which assigns classes and groups to each regional inventory management area and segments of the central office in order to develop a better degree of commodity expertise. Specific regions as well as the central office are responsible for centrally procuring the commodities that are assigned to them. Requisitions requiring procurement action are then automatically referred to the appropriate procurement office.

b. Distribution of supplies in the stores program to all Government agencies is accomplished through a nationwide network of 10 wholesale supply distribution

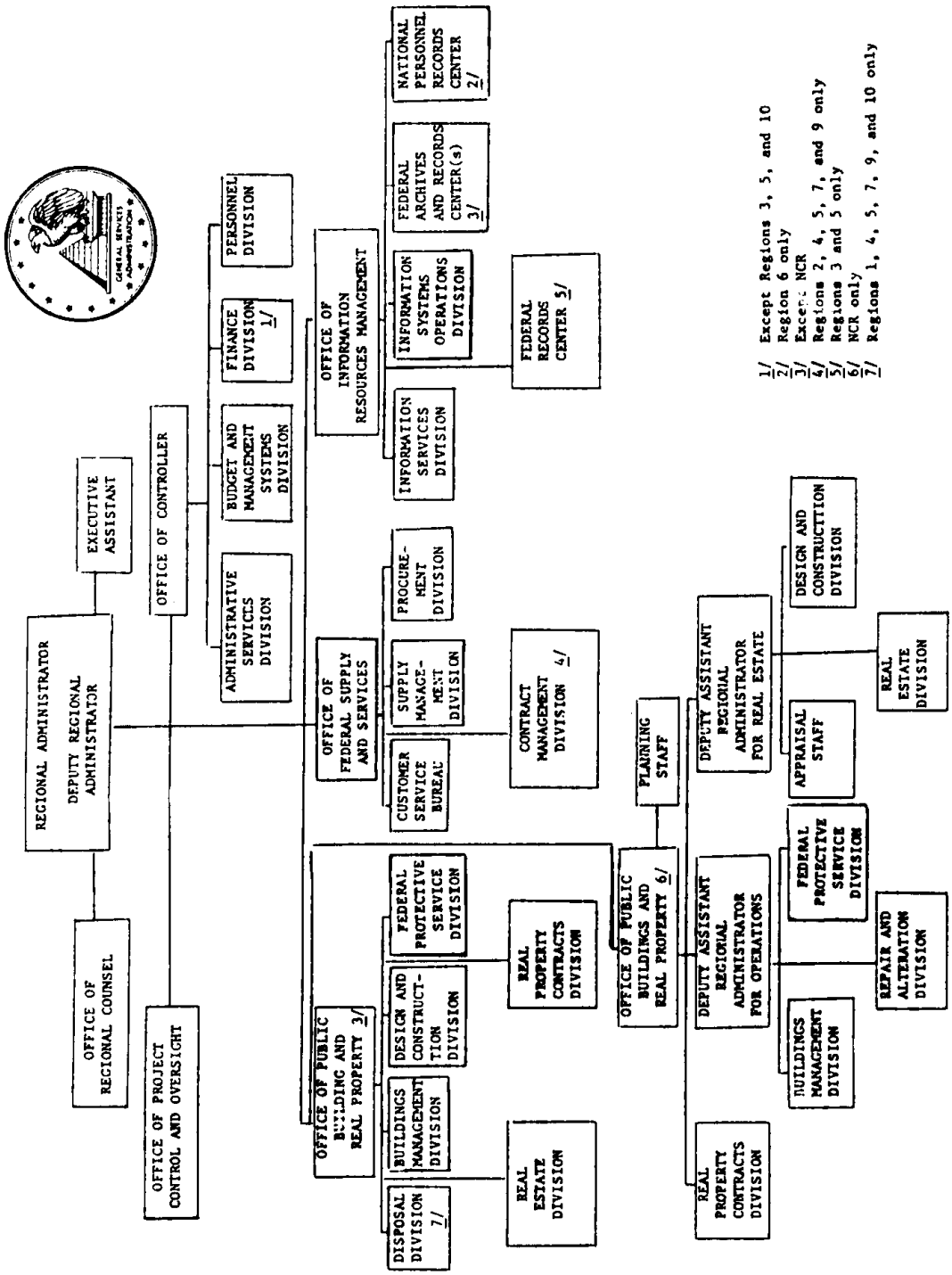

Figure 8-2. General Services Administration regional offices organization chart

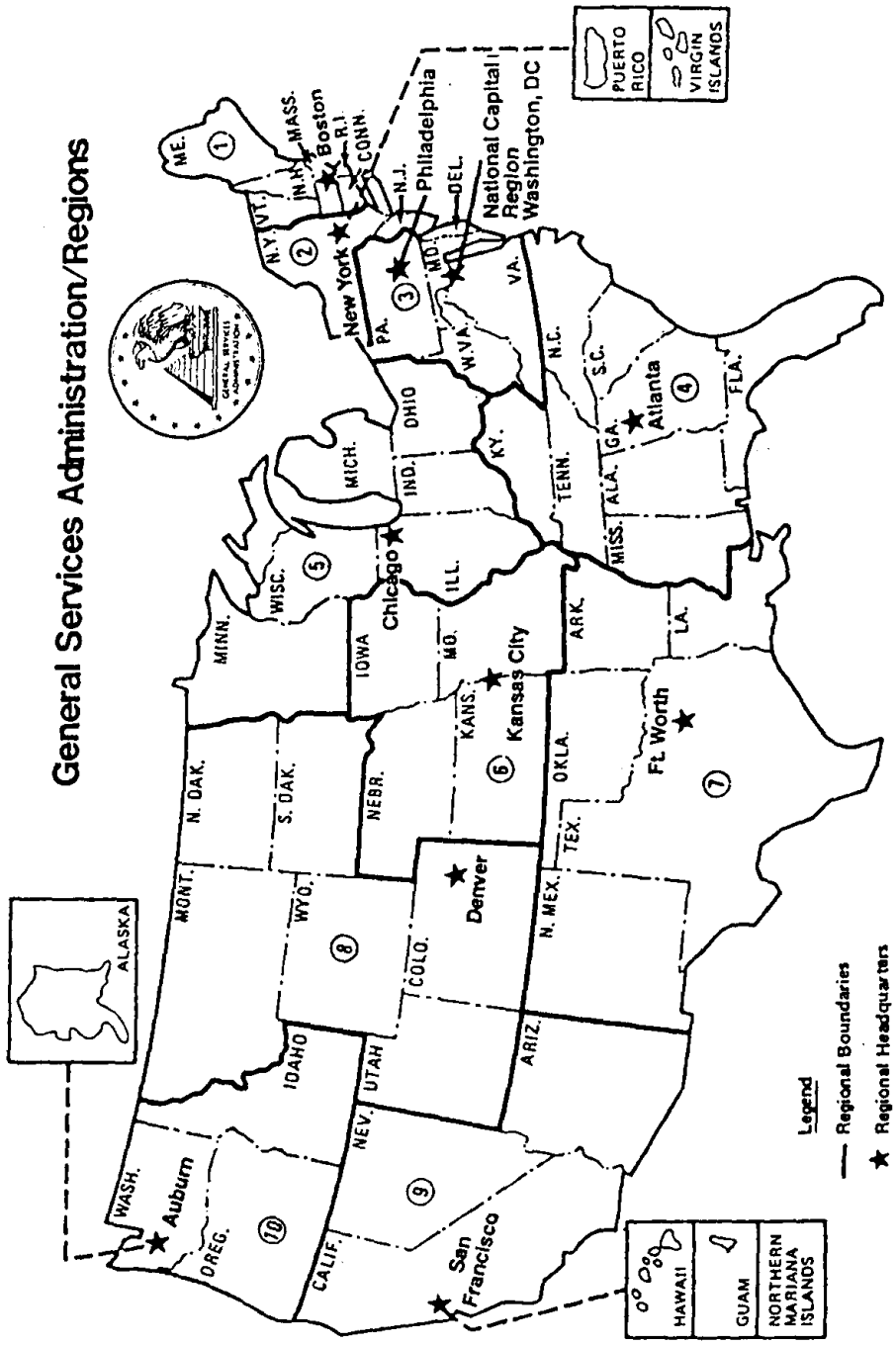

Figure 8-3. General Services Administration regional offices map

facilities, 11 customer supply centers, and 52 self-service stores, located within the 11 regions. The regions also have an export mission, and export packing and shipment is performed within select facilities. The number of self-service stores is subject to expansion as justified by the concentration of military/civil agency activities having a need for self-service store items and support. The Office of Federal Supply and Services currently stocks about 17,000 common-use items valued at $245 million in its distribution system. Total dollar value of goods and services provided to customer agencies in Fiscal Year 1983 amounted to nearly $5.1 billion consisting of $1.1 billion-Stores Sales, $442 million-Special Orders, $1.8 billion-Schedules Sales, $440 million-Vehicle Purchases, $343 million-Travel/Transportation Services, and $1 billion-Property Management Services.

c. The Federal Supply Service System is capable of reacting to a variety of requisitioning channels in support of oversea military activities. The Defense Transportation System is used for movement of materiel to oversea military activities. For the Air Force, which does not maintain oversea depots, requisitions are accepted directly from each oversea base. Navy oversea requisitions generally are processed through the Naval Supply Centers at Oakland, California, and Norfolk, Virginia, then passed to the Office of Federal Supply and Services if stocks are not available at the naval centers. The bulk of Navy requirements are requisitioned in large quantities by the major tidewater supply centers and used for replenishment of their stockage levels. The Office of Federal Supply and Services participates in the Army's Direct Support System. While the largest volume of exports is for military service requirements, considerable support is also provided to the Department of State, the Agency for International Development, and other Federal civilian agencies.

d. A vital field liaison service is furnished to both military and civilian agencies through the Customer Service Officer Program. Customer service officers are located throughout the United States, in Europe, and the Pacific. They serve the customer through publicized seminars and personal visits. The seminars are arranged to reach the maximum number of customer elements. They provide a concentration of supply expertise, from both Federal Supply and Services and customer participants, concerning current, new, and proposed systems or problem areas. These seminars are reinforced by periodic visits to customer agency logistics elements where the customer service office determines requirements and provides guidance on the availability and use of services. He is also a troubleshooter, correcting any reported shortcomings in support and, at the customer's request, developing special programs to meet special needs. Customer service officers are assigned to each regional office stateside. In Europe, two representatives are stationed at Rhein-Main Air Base, Germany. In the Pacific, representatives are located in Hawaii and Okinawa.

e. Area Utilization Officers of the Federal Supply and Services visit Government and contractor installations to screen, select, and freeze usable nonreportable excess Federal property for further utilization. Information on such property is made available to known users and to regional offices for circularization, direct referral, or other utilization action. These officers assist in obtaining release of property and in packing, pickup, or shipment. They assist agencies in resolving local problems of reporting and transferring excess personal property.

8-7. Methods of supply

The following methods of supply are used by GSA in carrying out supply and service support responsibilities:

a. Excess property program. This program constitutes the first source of supply to fulfill personal property requirements. Excess items which are similar to those required, or which can be substituted or adapted, are acquired for existing needs. Property management and procurement planning take into consideration the availability of excess materiel. To the extent practicable, proposed purchases are screened against this excess materiel, which is or can be made available.

b. Stock program. This program includes common-use type items procured and stocked in distribution facilities and self-service stores. These supply sources are strategically located to efficiently satisfy the requirements of Government agencies in all geographic areas. The items brought into the distribution system are those which are subject to repetitive demand and, hence, to requirements forecasting. Agency requirements of unusual magnitude which meet direct delivery criteria are converted to direct delivery from the supplier when this method is feasible. Only items physically suited to storage are stocked at distribution points.

c. Federal supply schedule (FSS) programs. Many items purchased by GSA cannot be stored economically in its depots for redistribution. These usually have a wide range of variable characteristics requiring selectivity in procurement, or are available at reasonable costs directly from the nationwide distribution system of the manufacturer. Requirements contracts are established with suppliers covering a given period of time, for supplies and services at fixed prices. These contracts are summarized in the FSSs which provide Federal agencies and certain authorized cost-reimbursable contractors with established sources for over 700,000 nonstocked standard commercial end items and for a wide variety of commercial-type services. The total dollar

value of items shipped and services rendered to ordering agencies reported under FSS contracts in Fiscal Year 1983 amounted to nearly $1.8 billion. FSSs are distributed, upon request, to military and civilian agencies and also to authorized contractors. The suppliers make direct delivery of the items or perform the services, and bill the ordering activities directly. This method of supply is the largest and most frequently used.

d. Information resources management schedules. These nonmandatory schedules provide a supply source for Federal users of automated data processing equipment. These schedules, which are similar to the FSSs, accounted for sales totaling $427 million during Fiscal Year 1983.

e. Special order program. Certain items which have a substantial recurring demand are sometimes not suitable for inclusion in stock or on the FSS. Requirements for certain items are consolidated and contracts executed which provide for direct shipment from the supplier to the requiring activity.

f. Local purchase/decentralized purchase. This method includes items which Federal Supply and Services has authorized for local purchase as a regular means of support. However, procurement support will be furnished if the requisitioning activity is unable to procure locally or does not possess suitable procurement capability. This is accomplished by agreement for all Army and Air Force oversea activities.

8-8. Cataloging, Standardization, and Quality Control Within the Federal Supply and Services

Cataloging, standardization, quality control, and field contract administration activities provide essential support to DOD.

a. Cataloging. GSA is a partner with DOD in the administration of the Federal catalog system. The administrator has delegated the authority for the central maintenance of the system to the Secretary of Defense. This mission is fulfilled by the Defense Logistics Services Center (DLSC) in Battle Creek, Michigan. The administrator retains the responsibility, however, for the cataloging of all civil agency items. Special arrangements have been made with the Federal Aviation Administration, the United States Coast Guard, and the Veterans' Administration, whereby they describe their items and forward descriptions to DLSC for stock numbering. Although these items are processed directly, GSA receives notification of all actions taken.

b. Specifications. Specifications are clear and accurate descriptions of the technical requirements for materials, products, or services. They specify the minimum requirements for quality, design, and construction, or performance necessary for an item to be acceptable. Generally, they are in the form of written descriptions with drawings, prints, commercial designations, and references to industry standards and other descriptive materials. Specifications are an integral part of invitations for bid and become a part of the contract. Currently, there are 4,243 Federal specifications. GSA maintains approximately 3,125 of these; the remainder are maintained by agreement with other Federal agencies and military activities having a major interest in the commodities covered. In addition, 53,720 purchase descriptions are used in the procurement of items supplied to other agencies. During Fiscal Year 1983, there were over 1,428 revisions to these documents. These revisions consist of changes in the technical requirements, test methods, standard pack information, and packaging and marking requirements. Approximately 547 new purchase descriptions were added during Fiscal Year 1983.

c. Commercial item description program. Commercial item descriptions are being developed to replace detailed, complex Federal specifications for common-use commercial items as well as for common-use items selected from our multiple awards schedules which demonstrate high demand and dollar volume for functionally similar items.

d. Standards. There are 211 Federal standards with 1,417 associated test methods. Limitation of procurement to only standard items creates savings by reducing capital investment in inventory, storage space, and management costs. Test methods standards are used to provide assurance as to the quality of a product by establishing uniform test methods. Engineering standards require the use of standard engineering practices dealing with design, construction, maintenance, use, and related product characteristics. Materiel standards specify the chemical and physical characteristics of the basic materials. Procedural standards provide specific methods for obtaining desired results.

8-9. Quality control and field contract administration

GSA operates a quality control and field contract administration program through its regional offices to insure compliance with contract requirements. This program prevents the delivery of substandard or defective materiel to Government agencies and, in so doing, it maintains the integrity of the competitive bid system.

a. Testing. Acceptance testing is performed in the Region 9 laboratory which is equipped and staffed to handle specialized testing for handtools, paints, chemicals, and similar commodities. Heavy reliance is placed on outside private testing facilities to insure the quality of GSA-provided commodities.

b. Pre-award evaluations. Emphasis is placed on pre-award engineering evaluations of bidders, facilities to insure that contracts are awarded only to suppliers

capable of meeting all contractual requirements.

c. Quality-approved manufacturer program. This program is designed to insure at minimum cost to the Government and the supplier, that the supplies purchased conform to the requirements established by the procurement documents. It recognizes the manufacturers who have excellent control over the quality of their products as evidenced by past performance, and as determined by a Government evaluation of their quality control system. Reliable suppliers whose quality control systems result in the consistent and timely delivery of specified quality are given the authority to ship without Government inspection of every order. This program does not waive inspection; it merely permits reduced inspection in the form of unannounced periodic surveillance by a quality assurance representative from GSA. This is a major cost avoidance program of the Contract Management Program.

d. Federal supply schedules. To render quality control support to civil and military agencies in the appropriate degree, items supplied by FSS are subjected to varying quality control and field contract administration procedures. The criteria place schedule-type items into one of three classifications:

(1) Safety and firefighting equipment.

(2) Items mandatory for use by all agencies.

(3) Items having repetitive quality or delivery problems. Schedules are being evaluated continually in the light of these criteria and the procedures changed as necessary. Inspection of material from any schedule will be made at destination by the consignee except: where the schedule provides for GSA source inspection prior to shipment (in this case, the schedule will indicate that source inspection is mandatory); or where a schedule is covered by specifications or technical descriptions and an agency determines that GSA inspection assistance is needed. Reasons may be the volume of procurement, complexity of the item, past performance of the supplier, etc. In either case, ordering activities must request this service in accordance with current procedures.

e. Quality complaints. All quality complaints concerning GSA stock and nonstock items which are purchased by Federal Supply and Services are investigated by regional Contract Management Division. For items provided under the FSS Program, GSA investigates only quality deficiencies involving items for which it performed origin inspection. As indicated above, it is the responsibility of the ordering agency to inspect and resolve quality deficiencies or other discrepancies on items procured from Federal Supply and Services specifying inspection at destination.

f. Field contract administration and the contract management division. This division has continuing contact with suppliers. It must obtain a complete understanding of the manufacturing operations and perform field contract administration for all contracts requiring origin inspection. Quality assurance specialists administer each contract to insure compliance by the manufacturer with all contract provisions and terms. Before the matriel are manufactured, they discuss all terms and conditions of the contract with the supplier and review the referenced technical specifications; the supplier’s policies and procedures for production planning and scheduling; procurement of materiel; and quality control of raw material, inprocess parts, final assemblies, end product, and packaging, marking, and shipping to insure full compliance with all contract terms. Throughout the life of the contract, the contract management division is responsible for insuring the supplier’s continued compliance with all contract provisions.

g. Facility surveillance. To guard against the issuance of substandard materiel, surveillance actions are conducted on stocked items. This is a program of periodic inspection of items subject to deterioration. They are removed from the stocks if they are found to have deteriorated. If they are found to be issuable, the shelf-life is extended and the outer container labeled to indicate the extended period. The item is then rescheduled for inspection at one-half the original shelf-life period. Continuing surveillance is conducted to evaluate conditions of storage or stocking so optimum usability will be maintained. Surveillance is also conducted when substandard materiel are discovered in the investigation of a quality complaint.

8-10. Organization

The implementation and control of these responsibilities is administered by the Assistant Administrator for Federal Supply and Services, through seven principal offices and four commodity management centers. Figure 8-4 portrays the Federal Supply and Services organization.

a. Office of Management. This office is responsible for budget administration, resources management training, management review, program operations review, management information systems, forecasting, and data systems management.

b. Office of Policy and Agency Assistance. This office is responsible for development and/or coordinating the development of Government-wide and internal supply management policy consistent with uniform national supply program objectives and maintains customer agency liaison.

c. Office of Contract Management. This office is responsible for insuring that the materials and services procured by the Federal Supply and Services comply with specified quality, performance, packaging, and marking requirements. Related responsibilities include inspection and testing of materials and overseeing im-

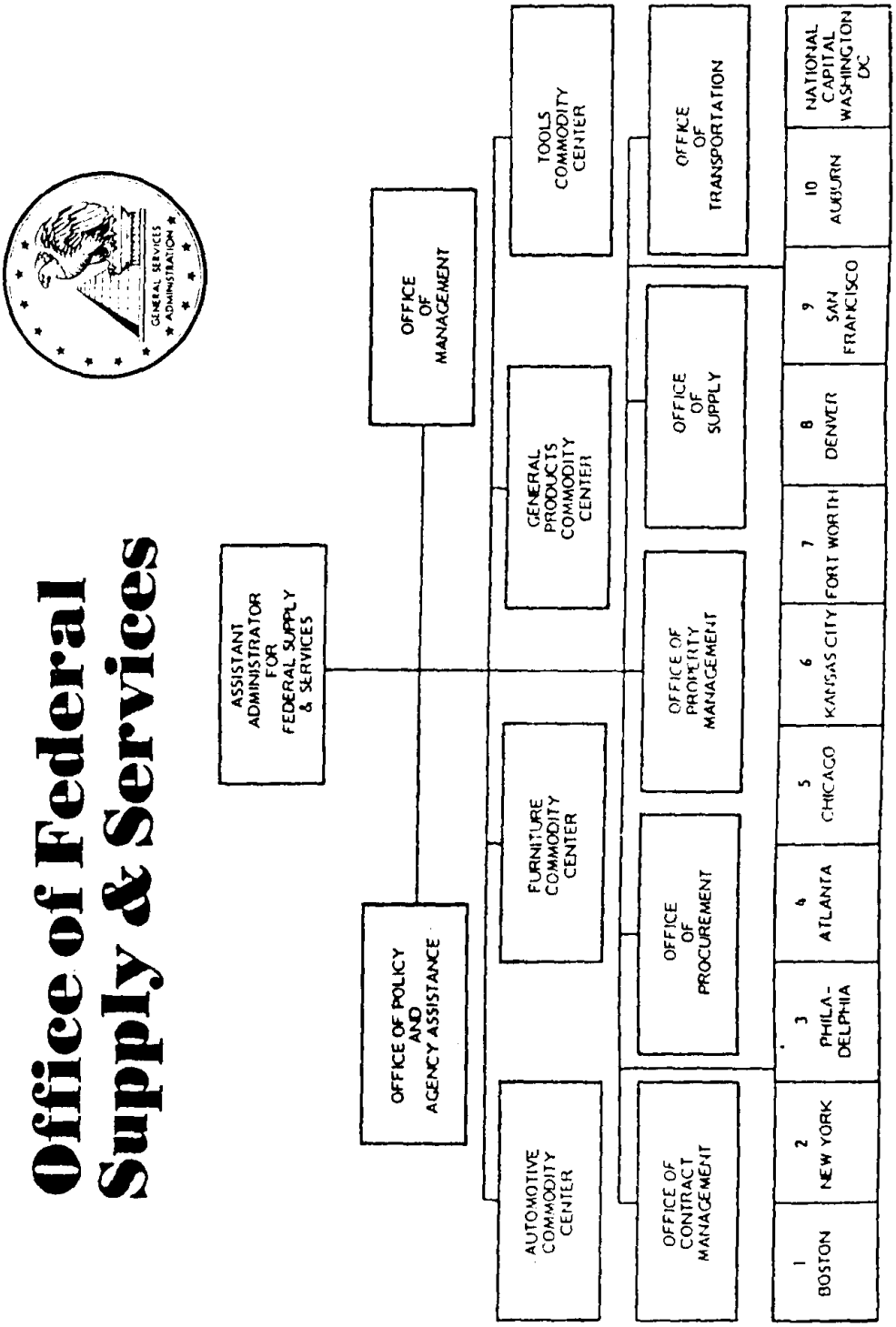
Office of Federal Supply & Services
GENERAL SERVICES ADMINISTRATION
ASSISTANT ADMINISTRATOR FOR FEDERAL SUPPLY & SERVICES
OFFICE OF MANAGEMENT
OFFICE OF POLICY AND AGENCY ASSISTANCE
AUTOMOTIVE COMMODITY CENTER
FURNITURE COMMODITY CENTER
GENERAL PRODUCTS COMMODITY CENTER
TOOLS COMMODITY CENTER
OFFICE OF CONTRACT MANAGEMENT
OFFICE OF PROCUREMENT
OFFICE OF PROPERTY MANAGEMENT
OFFICE OF SUPPLY
OFFICE OF TRANSPORTATION
1 BOSTON
2 NEW YORK
3 PHILA-DELPHIA
4 ATLANTA
5 CHICAGO
6 KANSAS CITY
7 FORT WORTH
8 DENVER
9 SAN FRANCISCO
10 AUBURN
NATIONAL CAPITAL WASHINGTON DC

Figure 8–4.

3-A

plementation of mandated product standards such as those involving safety, health, and protection of the environment. Insures the effective administration of FSS contracts.

d. Office of Property Management. This office is responsible for the worldwide management of excess personal property for all agencies (except automatic data processing equipment) to include reutilization within the Federal Government donation of surplus to eligible activities, or the sale of surplus property to the public.

e. Office of Transportation. This office plans, directs, and manages GSA Government-wide transportation, traffic management, travel, fleet management, and employee relocation programs. Provides oversight and administrative management of the Government-wide US National Credit Card and the Federal Travel Card Systems.

f. Office of Procurement. This office buys the goods and services necessary for Federal Supply and Services operations. Responsibilities include planning, review, and approval of procurements; developing procurement policy as it relates to internal Federal Supply and Services; executing contract authority; performing commodity management; and developing new and improved procurement techniques. Also manages the civil agency portion of the Federal Catalog System.

g. Office of Supply. This office distributes the goods procured by the Federal Supply and Services. Responsibilities include: order processing and control; management of inventory; wholesale and retail operations; and distribution management.

h. Commodity management centers. Four commodity management centers are responsible for nationwide commodity management to include the contracting and engineering for assigned commodities. These centers and their commodities are: the General Products Commodities Center. Office and Scientific Equipment; the Automotive Commodity Center, Automotive/Equipment Support; The Furniture Commodity Center, Furniture and Furnishings; and the Tools Commodity Center, Tools.

Section *III*
Federal Supply and Services

8-11. History

a. One of the earliest steps toward centralized procurement in the Federal Government was taken with the establishment of the General Supply Committee under the Treasury Department in 1910.

b. Its principal function was to enter into indefinite quantity contracts published as General Schedules of Supply for use by agencies in ordering supplies. This type of contracting is still maintained and the publications are known as Federal Supply Schedules. In 1920, Congress established a General Supply Fund of $300,000 and in 1930 the Federal Warehouse was opened in Washington, DC. In 1933, the Procurement Division in the Treasury Department was created by Executive order and the General Supply Committee abolished. All functions and resources, including the General Supply Fund and the Federal Warehouse were transferred to the Procurement Division. During 194345, regional warehouses and supply centers were established in Boston, New York, Atlanta, Cleveland, Kansas City, Fort Worth, Denver, San Francisco, and Seattle, and a subwarehouse in Philadelphia, largely through consolidation of existing facilities created under the various emergency relief programs following the depression. The Procurement Division was redesignated the Bureau of Federal Supply in 1947, and later became the Federal Supply Service under GSA. Today, this vital arm of GSA is the Office of Federal Supply and Services.

Section IV
Basic Federal Supply and Services Support to the Department of Defense

8-12. Development

a. Prior to 1963, GSA provided support on an elective basis to military activities on office and housekeeping supplies and equipment. GSA was also considered a source of military decentralized items, or those authorized for local procurement. In 1963, a Memorandum of Understanding provided for GSA to assume responsibility for the procurement and management of the bulk of the paint and handtool commodities previously managed by the Defense Logistics Agency (DLA). Subsequent actions emanating from an overall joint agreement in 1964 between GSA and DOD governing supply management relationships resulted in the transfer for GSA management of 68 Federal Supply Classes from the DLA. During 1968, the procurement of administrative/general-purpose vehicles previously assigned to the Army for DOD support was assigned to GSA. In 1967, the Office of the Secretary of Defense directed that a selected number of functions performed by DLA in the GSA range of classes be assigned to GSA. These functions included war reserve determination; industrial mobilization planning; standardization; provisioning; cataloging and procurement of ovesea Army and Air Force decentralized items.

b. Because the services and defense agencies were now relying more heavily upon GSA for supply support and were, at the same time, procuring, storing, and distributing the same or similar items for which GSA provided support to civil agencies, added emphasis was

placed on the development of a national supply system.

Section V
The National Supply System

8-13. Definition

a. Through a series of progressive actions, the Office of Federal Procurement Policy, Office of Management and Budget (OMB), in concert with appropriate officials of major departments and agencies, including GSA and DOD, has developed a preliminary definition and description of the proposed National Supply System for the Federal Establishment.

b. The preliminary approved definition for a National Supply System is a uniform integrated Federal-wide system for the acquisition, supply, and distribution of personal property and related services, with authority to establish, enforce, and monitor policies and procedures, worldwide in scope and application.

c. As proposed, it will consist of uniform policies and procedures applied on a Government-wide basis to the supply process including acquisition, cataloging, storage, distribution, and so forth. Its aim is to encompass all executive branch departments and agencies.

d. Benefits to be realized are principally those of reducing the administrative and support costs of Government by eliminating overlap and duplication in supply operations.

e. In the past, the primary parties involved in the development and implementation of a national supply system concept have been the Office of Federal Supply and Services, GSA working closely with DLA, and DOD. The objective is that there would be one manager for each supply item; avoidable duplication and overlap between the respective supply systems would be eliminated and integrated materiel management would be provided to all Government agencies for commonly used commercial commodities.

f. A series of agreements and understandings was reached with DOD formalizing supply management relationships under this concept. GSA and DOD are currently operating under an agreement of February 1971 governing supply management relationships under the National Supply System.

g. Through negotiations with DOD, dual management of common-use commercial items which existed between DLA and the Federal Supply and Services has been virtually eliminated. Many standard processes have been developed. Both GSA and DOD, and to some extent the Veterans Administration, provide support to all agencies of the Government, both military and civilian. Major actions completed as a result at the agreements provide that:

(1) GSA is assigned 70 Federal Supply Classes for national management, responsibility for the procurement of commercial vehicles and trucks, and management of over 8,000 commercial items in classes assigned to DLA. GSA serves as the Commodity Integrated Materiel Manager for DOD activities for these assigned classes.

(2) DLA is assigned national management responsibility for 143 Federal Supply Classes, including worldwide support for electronic items, fuel, packaged petroleum products, and clothing and textiles.

(3) Publication by DLA of a civil agency catalog permitting direct requisitioning on the appropriate defense supply center. It provides guidance to the civil agency user in locating and interpreting the information on supply availability. The catalog contains items which have at least one Federal civil agency recorded as a user in the records of DLSC in those classes for which DLA is the primary source of supply.

(4) Agreement between GSA and DOD which provides Federal civil agencies with supply support by the military services for items peculiar to the programs of the services and not normally available to civil agencies from regularly established sources of supply.

(5) At the direction of the Office of Federal Procurement Policy, OMB, an interagency committee is developing a single system to manage medical items and nonperishable subsistence for support of all Federal agencies within the concept of the National Supply System. Committee membership consists of representatives from GSA, DOD, Veterans' Administration, and the Department of Health and Human Services (Food and Drug Administration). Agreement has been reached between DOD and the Veterans' Administration by which the central purchase of all medical and nonperishable subsistence items will be divided between their agencies without duplication. GSA has transferred its supply support responsibilities in nonperishable subsistence to DOD and the Veterans Administration. The Department of Agriculture is assigned the management of food specifications and the inspection and acceptance of food products. The Food and Drug Administration is responsible for the quality assurance of federally procured medical items. In 1981, GSA began to divest itself of management responsibility for medical items by reassignment of the responsibility for medical FSS is being conducted on a phased basis as directed by the interagency committee.

(6) Interface of supply agreements and procedures with defense activities. In addition to directly supporting military activities for the commodities in the Federal Supply Classes for which GSA is the commodity manager, numerous agreements and working relationships have been established with DOD to provide re-

lated military supply and service support. Key areas include:

(a) Federal catalog program. GSA is a full-time participant in the program, performing all functions of a Commodity Integrated Materiel Manager for those Federal Supply Classes assigned and serving as the cataloging organization for civilian agencies. Dissemination of data and publications related to these items takes place in the same way as for those items managed by the services or defense agencies. In addition, GSA publishes hard-copy supply publications of general interest: the GSA Supply Catalog, the Customer Assistance and FSS.

(b) Initial provisioning. GSA is responsible for providing provisioning support to defense activities for the Federal Supply Classes assigned.

(c) Memorandum of understanding between GSA and DLA. This memorandum covered an agreement for procurement support of Army and Air Force oversea requisitioners for decentralized items managed by GSA, which assumed this responsibility for stock numbered and nonstock numbered items falling within the commodity classes managed by GSA.

(d) Agreement between GSA and the Defense Department governing procurement of commercial vehicles and trucks. Transfers the coordinated procurement responsibilities from the Department of the Army (DA) to GSA for commercial passenger-carrying vehicles and trucks up to 10,000 pounds gross vehicle weight, with minor exceptions.

(e) Memorandum of understanding between DLA and the Federal supply service. This memorandum covered the responsibility for general mobilization reserve functions for items assigned to and managed by GSA in support of DOD, to include industrial mobilization planning.

(f) Agreement between DOD and CSA on interagency cross-servicing in storage activities. It provides for the military services and civilian agen@cies of the Government to make available to each other, on a reimbursable basis, storage and warehousing services which they may require from time to time. This agreement provides that charges for services performed will be based on standard rates established by the agency for its own use.

(g) Materiel returns program. GSA and DOD have implemented a new standard Materiel Returns Program which replaces the GSA Credit Returns Program and the DOD Returns Program. Under this program, the appropriate managing agency is responsible for "buying back" quantities of items normally stocked by the agency when the items are excess to the civilian or military user. An automated program screens all offers for returns. Quantities which fall within the acceptance criteria are directed for shipment to the appropriate materiel return activity. Following physical receipt, transaction identification and materiel classification are accomplished, and those items in an acceptable condition are recorded on accountable records, with credit being applied to the shipper’s account.

(h) Communications.

1 Automated digital network (AUTODIN). GSA communications facilities (Federal Telecommunications System Network) are interconnected with the AUTODIN, the military data transmission system. All military requisitions and related communications, originated worldwide, are transmitted by way of the defense network and enter communications facilities of GSA by way of its switching centers and the Federal network, which automatically distribute traffic to the appropriate activity.

2 Defense Automatic Addressing System. GSA is a full participant in this system which receives, processes, and forwards logistics traffic to or from the appropriate source of supply.

Chapter 9
Department of Transportation

Section I
Introduction

9-1. History

a. The Department of Transportation (DOT), a cabinet-level department, was established by the Department of Transportation Act of 1966, Public Law (PL) 89-670. It came into formal existence on 1 April 1967. Many months of extensive planning preceded the creation of this new department which brought together into one overall organization 35 different programs. The new department has nearly 100,000 employees and annual budget of more than $6 billion.

b. In formally opening the department for business in 1967, the President emphasized the following tasks for this new department:

(1) To modernize and unify our national transportation policy.

(2) To bring greater safety in travel to all Americans.

(3) To apply the best of an expanding technology to every mode of transportation.

(4) To strengthen our partnership with private enterprise and State and local governments in meeting urgent transportation needs.

(5) To improve our transportation links with the rest of the world.

c. The Secretary of Transportation described the functions, powers, and duties of the department's top-ranking officers in a notice in the Federal Register. It was made part of the Code of Federal Regulations with the title of Part 1-Functions, Powers, and Duties in the Department of Transportation. The overall structure of this new department is displayed by the organizational chart shown as figure 9-1.

d. The structure of the Office of the Secretary of Transportation through the level of functional offices is:

(1) *Secretary.* The Secretary and Under Secretary are assisted by the Deputy Under Secretary and his Offices of Planning and Program Review and Budget, the Executive Secretariat, the Contract Appeals Board, and the Departmental Director of Civil Rights, all of which report to the Secretary. The Assistant Secretaries and the General Council report directly to the Secretary.

(2) *Office of The Assistant Secretary for Policy and International Affairs.* This office is composed of the Offices or Systems Requirements, Plans, and Information; Policy and Review Coordination; Economic Studies and Projects; International Transportation Policy and Programs; International Cooperation; and Facilitation.

(3) *Office of the Assistant Secretary for Environment and Urban Systems.* This office is composed of the Offices of Program Coordination; Environmental and Urban Research; Special Projects; and Community Relations.

(4) *Office of the Assistant Secretary for Research and Technology.* This office is composed of the Offices of Systems Engineering, Physical Sciences, Life/Medical Sciences, Noise Abatement, Hazardous Materials, Pipeline Safety; and Telecommunications.

(5) *Office of the Assistant Secretary for Public Affairs.* This office is composed of the Offices of Congressional Relations, Public Information, Government Liaison, and Industry and Labor Liaison.

(6) *Office of the General Counsel.* This office is composed of the Offices of Operations and Legal Counsel, Regulation, Litigation, and Legislation.

(7) *Office of the Assistant Secretary for Administration.* This office is composed of the Offices of Personnel and Training, Management Systems, Administrative Operations, Investigations and Security, Audit, Emergency Transportation, and Logistics and Procurement Management.

e. In addition to the Office of the Secretary of Transportation described above, the department is composed of the US Coast Guard, the Federal Aviation Administration, the Federal Highway Administration, the Federal Railroad Administration, the Urban Mass Transportation Administration, the St. Lawrence Seaway Development Corporation, the heads of which report directly to the Secretary, and the National Transportation Safety Board, which performs its functions independently of the Secretary.

f. The two DOT activities having supply systems of interest to the Department of Defense (DOD) are the US Coast Guard and the Federal Aviation Administration.

Section II
United States Coast Guard Supply System

9-2. Introduction

a. The Coast Guard represents in its historical development since 1790 the amalgamation into one integral service of the former Revenue Cutter Service, the Lifesaving Service, the Lighthouse Service, and the Bureau of Marine Inspection and Navigation.

b. The Coast Guard was transferred from the Treasury Department to the DOT in 1967. The functions of the Coast Guard in general terms, are:

(1) Enforcement or assistance in the enforcement of Federal laws upon the high seas and waters subject

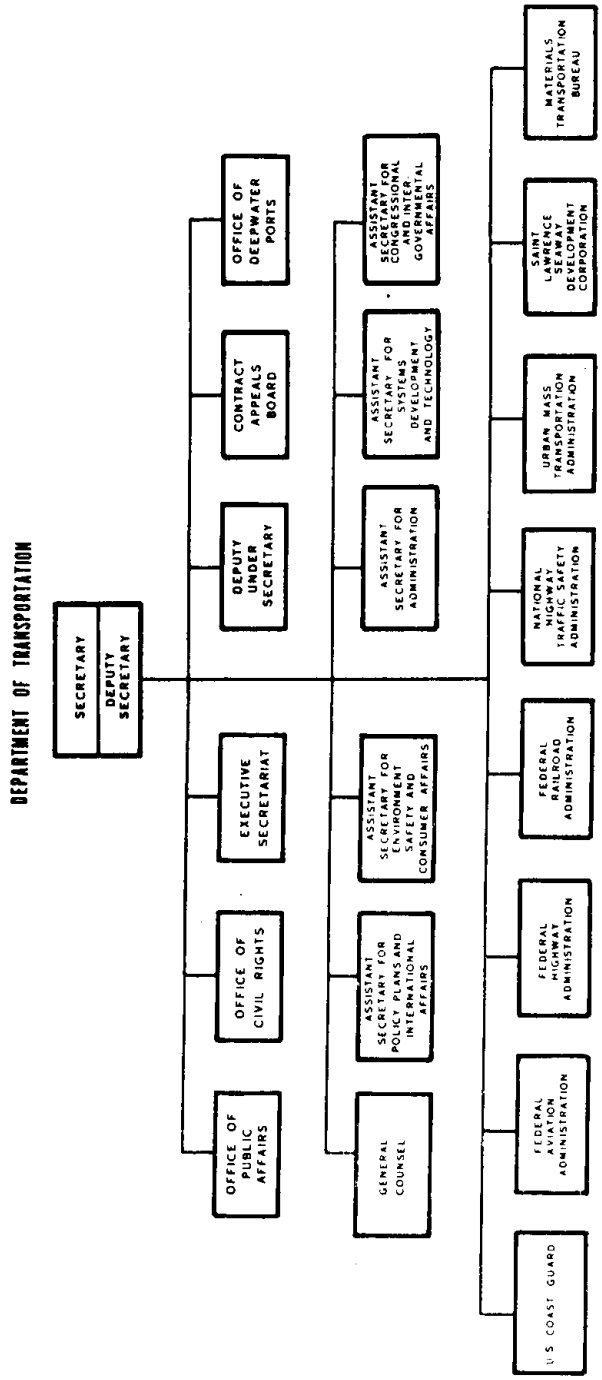

Figure 9-1. Organizational chart, Department of Transportation

to the jurisdiction of the United States.

(2) Administration of laws and promulgation and enforcement of regulations for the promotion of safety of life and property on the high seas and waters subject to the jurisdiction of the United States.

(3) Development, establishment, maintenance, operation, and conduct, with due regard to the requirements of national defense, of aids to maritime navigation, icebreaking facilities, oceanographic research, and rescue facilities for the promotion of safety on and over the high seas and waters subject to the jurisdiction of the United States.

(4) Maintenance of a state of readiness to function as a specialized service in the Navy in time of war.

9-3. Coast Guard logistics

The logistics program of the Coast Guard is structured to function in three interrelated areas:

a. The Washington headquarters organization

b. The 12 geographic district operating organizations plus a European command

c. A group of special-purpose field activities located within the geographical boundaries of the districts, but independently supervised from the Washington head quarters.

9-4. Washington headquarters

The Commandant is supported by a staff organized along functional lines. In this organization, the logistics support is divided between the Office of Engineering (which controls the design, construction, repair, maintenance, outfitting, and alteration of vessels, aircraft, aids to navigation, shore establishment, machinery, electronics equipment, and utilities), and, the Office of the Comptroller (which controls the maintenance of accounts, disbursement of funds, audit, and the supply program including procurement, storage, and distribution of equipment, supplies, and services). Under the Comptroller, the Chief of the Supply Division manages a Procurement Branch, Transportation Branch, Materiel Management Branch, Real Property Management Branch, and a Supply Procedures Branch.

9-5. District organization

The district commander is supported by a staff organized along the same functional lines as the headquarters organization. There are an Engineering Division and a Comptroller Division which provide the same logistics support functions but with a somewhat simplified structure. Under the district commander in a number of districts, there are supply depots for local materiel support. The districts also operate industrial bases for support of district facilities such as aids to navigation, vessels, and shore facilities.

9-6. Special-purpose activities (headquarters units)

The principal field activities under direct supervision of headquarters which perform substantial logistics support functions are the Coast Guard Yard, Curtis Bay, MD; the Aircraft Repair and Supply Center, Elizabeth City, NC; and the Supply Center, Brooklyn, NY.

9-7. Coast Guard Yard

The Coast Guard Yard is a small industrial shipyard capable of constructing complex vessels up to about 260 feet in length. Its principal functions are shipbuilding and repair; construction of boats, aids to navigation equipment, and special equipment not readily obtainable commercially; preserving, storing, and maintaining decommissioned Coast Guard vessels; storing and issuing repair parts for ships and boats, aids to navigation items, and special materials under headquarters' control; and performing prototype installations and alterations.

9-8. Aircraft Repair and Supply Center

The Aircraft Repair and Supply Center is a combination industrial, supply, and training facility. It performs maintenance, overhaul, repair, modification, prototyping, and preserving of aircraft and aircraft components and associated equipment. It procures, repairs, stores, and issues materials for aircraft and aviation electronic support, performing the inventory management and supply control functions for these stocks. It conducts training programs for various aviation specialty ratings.

9-9. Supply Center

The Supply Center is the principal warehousing and supply support activity for the Coast Guard. It procures, stores, and issues materials and equipment peculiar to the Coast Guard or requiring supply support not available from DOD or the General Services Administration (GSA). It provides storage and issues services for materiel controlled at headquarters and provides fullrange inventory management and supply control functions for materiel assigned to its management.

Section *III*
The Federal Aviation Administration Supply System

9-10. Introduction

The Federal Aviation Administration was created pursuant to the Federal Aviation Act of 1958 which brought together functions previously performed by the Civil Aeronautics Administration and the Airways Modern-

ization Board. It also assumed the safety regulatory authority formerly exercised by the Civil Aeronautics Board. In 1967, the Federal Aviation Administration became and operating administration of DOT.

9-11. Federal Aviation Administration logistics

The Logistics Program of the Federal Aviation Administration is structured to function in three interrelated areas:

a. Washington headquarters

b. Central Materiel Depot at the Aeronautical Center in Oklahoma City

c. Regional or field support operations under the direction of the agency's eight regional offices. There are also representatives in approximately 25 foreign countries and they, to some extent, are involved in the agency logistics system.

9-12. Federal Aviation Administration logistics service

a. The Director, Logistics Service, under executive direction of the Associate Administrator for Development, is responsible to the Administrator of the Federal Aviation Administration for agency wide management of the logistics program. This program encompasses the responsibility for planning, monitoring, and controlling the scheduling, the construction, and the installation of air navigation, air traffic control, and aeronautical communications facilities for the National Airspace System (except for en route automation programs at air route traffic control center and terminal automation programs at air traffic control facilities), and for international programs and foreign governments; and provides for the procurement and management of real and personal property, transportation, and materiel support of agency programs.

b. The Logistics Service is composed of an executive staff, one staff division, and two operating divisions. The functional responsibilities of these organizations are:

(1) *Executive staff.* Furnishes administrative management support for the Logistics Service. Develops the materiel budget and the financial management program. Administers the logistics management information system and the defense and mobilization preparedness program.

(2) *Logistics policy and systems division.* Provides agency logistics policy, standards, systems, and procedures and monitors the implementation and execution thereof.

(3) *Procurement operations division.* Provides contractual services, including related contract management, quality assurance, and materiel inspection in support of the agency research and development, and facility installation and modification programs.

(4) *Facilities establishment division.* Provides national planning and program management for the installation or modification of air navigation, air traffic control, and aeronautical communication facilities for the National Airspace System (except for en route automation programs at air route traffic control centers and terminal automation programs at air traffic control facilities), including assistance and support to other Government agencies and foreign governments for similar facilities.

9-13. Federal Aviation Administration Depot

a. The Federal Aviation Administration Depot is responsible for the management of the central materiel inventories and the distribution system. This mission includes cataloging, initial provisioning, inventory control, traffic management, and shops and engineering services required in support of agency air navigation, air traffic control, and aircraft operations, both foreign and domestic.

b. To provide materiel support for agency programs, the depot manages approximately 126,000 line items valued at $60 million. In an average year, the depot will process some 500,000 materiel requisitions from approximately 2,000 requisitioning offices in support of 8,500 facilities.

c. The inventory management and financial accountability programs of the depot are computerized. This mechanization provides inventory posting actions, issue and return documents, financial transfer documents, and budget and inventory management information.

d. The depot participates in the DOD central mechanized screening of assets and requirements, and uses Federal Standard Requisitioning and Issue Procedures and support agreements with the Defense Logistics Agency (DLA) and the military services.

e. The depot also requisitions for the agency those common-use items managed by GSA. Federal Aviation Administration requisitions, submitted under the Operating Materiel Management System described below are mechanically converted to conform with the Federal Standard Requisitioning and Issue Procedures and are then forwarded to the GSA regional depot supporting the requisitioning office. Centralized accounting simplifies materiel support operations for Federal Aviation Administration field activities.

9-14. Basic materiel subsystems

The materiel management function is done through the use of two compatible subsystems:

a. The Project Materiel Management System, which provides centralized control, from project planning through completion, for major equipments, components, and parts required for use in the agency installation or modification programs.

b. The Operating Materiel Management System, which provides control of exchange and repair, and expendable items required for initial and continuing operational support.

9-15. Project materiel

a. The Facilities Establishment Division of the Logistics Service manages the Project Materiel Management System and is responsible for overall program and project planning for the establishment or modification of agency navigation and traffic control facilities. This division plays a major role in project approval and insures that the required management information pertaining to both the program and materiel areas are provided to the Aeronautical Center for inclusion in their data bank. Based on this computerized information, periodic reports are prepared and forwarded to the Washington program managers, the depot materiel manager, and the regional project officer. The common data bank provides information necessary to compare materiel requirements with assets and to develop reports on materiel deficiencies, delivery problems, and the impact of materiel shortages. Division program managers develop specific program and procurement plans for meeting materiel requirements and order deliveries from the contractor’s plant to the point of installation or to interim storage locations for transshipment or storage pending initiation of projects. Program managers exercise control over all materiel items throughout the various stages of project completion.

b. Items that are shipped to the depot for interim storage are placed in a project materiel inventory account for later shipment to the point of installation when requisitioned by the regional office responsible for installation and construction of the facility. If in inventory at the depot, the materiel remains under control of the program manager who reserves it for specific projects.

9-16. Operating materiel

a. The operating Materiel Support System is managed by the Federal Aviation Administration depot. The program is unique in that the requisitioners do not have to determine reorder points or replenishment quantities on items with recurring demand. This is done by computer at the depot. The principal processes in the operating materiel system are designed around the use of a mechanized requisition card, a stock selection card which serves the dual purpose of stock selection and packing control for the depot and provides reorder data for the ordering office, and a mechanically prepared equipment return document, which is used for the field return of reparable assets.

b. Following is a summary of the Operating Materiel Management System:

(1) Concurrent with the purpose of equipment for a new facility, the depot provides initial provisioning for operating repair parts. These repair parts may be positioned onsite, placed in depot stock, or a combination of the two. For those initial support items placed onsite, the depot prepares and includes in the shipment a prepunched requisition card for each item. These cards contain transaction data, both constant and variable, such as annual demand, and date and quantity of last shipment. Also included are "stub" cards which reflect the reorder point, and are placed with the materiel at the facility storage site.

(2) When the facility stock level reaches the reorder point, the stub card is matched with the requisition card, the demand data are verified, and the card is forwarded to the depot. The stub is retained as the onorder record.

(3) At the depot, the requisition data are input to the computer. In the issue process, the annual demand is updated, using data relating to the previous replenishments. Through the application of an "economic order quantity" formula to these data, a new replenishment quantity and reorder point is computed.

(4) The issue process provides a shipping invoice and a prepunched and interpreted reorder requisition card, which reflects all data necessary to reorder items subject to recurring demand. In addition, an equipment return document is provided for use in returning reparables designated for depot repair. This form provides data needed to match the reparable receipt with the serviceable issue transaction for better asset control by the depot.

(5) Upon receipt of the materiel, field personnel file the reorder card and place the stub with the item in the materiel location. Copies of the shipping order are forwarded to the regional accounting office for record purposes. Thus, the cycle is completed until the reorder point is again reached.

c. In addition to items supplied by the depot from its central inventory, approximately 100,000 requisitions a year are filled on a direct-ship basis. Each non-stocked, direct shipment is recorded in a mechanized history file. If recurring demand develops for a specific item, it is considered for stockage by the depot.

Chapter 10
Integrated Materiel Management

Section I
General

10-1. Introduction

a. Single-manager agencies were established within the military departments at the direction of the Secretary of Defense, starting in 1955. This action reduced supply inventories and operating costs, while maintaining effective support of the Army, Navy, Air Force, and Marine Corps. After a survey of the possible extension of integrated management into other areas, the Secretary of Defense announced on 31 August 1961 that the Defense Supply Agency (now the Defense Logistics Agency (DLA)) would be established to manage the procurement and distribution of common supplies at the wholesale level.

b. The conversion of the military departments' single manager activities to the DLA field activities began on 1 January 1962, proceeding without major problems. The relatively smooth transition was made possible, in large part, because DLA assumed management of the assigned personnel, funds, equipment, facilities, and inventories. DLA was then and is still staffed with military personnel from all the Armed Services along with civilian personnel.

c. One immediate benefit of the new organization was a shorter logistics chain of command and communication. Formerly, the single managers reported through either the Army technical services or the Navy bureaus, then to the chief of military logistics of his service (the Assistant Secretary), then the Secretary of the military department, and finally, the Secretary of Defense. Under the new arrangement, the supply or service center commander reports to the Director of DLA who, in turn, reports directly to the Assistant Secretary of Defense (Manpower, Installations, and Logistics) (ASD(MI&L)).

d. DLA is the wholesale manager of assigned items of supply. It distributes these items from depots in the United States to Armed Forces installations worldwide.

e. Materiel assignments are made to DLA by the Office of the ASD(MI&L) based on Federal Supply Classification within defined commodity groupings. These commodity groupings are medical, subsistence, clothing, electronics, construction, industrial, chemical, general supplies, and bulk and packaged petroleum products. In the medical, subsistence, and clothing commodities, all items are automatically assigned to DLA. In the remaining commodities, items are assigned for integrated management to DLA through a process known as item management coding.

f. Item management coding is a process in which all stock number items in Federal supply classes assigned to DLA for management are reviewed against criteria established by the Office of ASD(MI&L) to determine if the items will be retained for management by the military service introducing them or transferred to DLA. From 1962 to 1964, item management coding was performed under rather general criteria which resulted in a high percentage of items in the supply classes assigned to DLA remaining under military service management. Item management coding is described in more detail in chapter 11.

g. In March 1964, the Office of the Assistant Secretary of Defense (Installations and Logistics) now (Manpower and Logistics) initiated a study to identify problems associated with interpretation and application of existing criteria, and to develop more definitive rules capable of uniform application by all Department of Defense (DOD) coding activities. This study was completed in November 1964 and new criteria were approved by the Defense Materiel Council in April 1965. The revised criteria provided that all items in the Federal supply classes assigned to DLA, except major end items, depot reparables, design/engineering/source controlled items, and noncommercial consumable items, be managed by DLA.

h. Upon promulgation of the new criteria, the Office of the ASD(MI&L) directed their application to all items which have been previously coded for service management, as well as to all new items entering the DOD system in those Federal supply classes assigned to DLA.

i. A 30-month review program was completed in December 1967, resulting in 535,000 items being coded for management by DLA. At the close of fiscal year 1969, the DLA integrated management package totaled 1.7 million items, which was approximately 80 percent of the total items in the 225 Federal supply classifications assigned to DLA at that time. Since that time, there has been an average of 60,000 new items per year introduced into the DOD system by the military services and coded for DLA management, plus approximately 60,000 new items introduced annually as a result of initial provisioning. This is considered normal item growth under present conditions.

j. In 1971, Deputy Secretary of Defense Packard assigned 31 additional commodity-oriented Federal supply classes to DLA for management. These classes were screened to determine those items to be retained for service management. At the same time, item management duplication of consumable items was eliminated by assigning one service the responsibility of providing supply support to other users for those items in classes not assigned to DLA; and DLA the responsibility for common-used items in classes assigned to it.

10-2. DOD objectives for integrated materiel management

a. Integrated management and standardized data systems and procedures contribute toward accomplishing many broad goals of DOD as discussed below.

b. One of these objectives is to eliminate item management duplication. There will be only one inventory control point (ICP) for any item used in DOD to the extent practical. In general, a single military service should manage each weapon system, including ammunition, major end items of equipment, depot-level reparables, and items of a developmental nature, regardless of the number of user services. Items repaired below depot level, consumables, and repair parts should be considered for transition to integrated materiel management using the approved item management coding criteria to classify the items for such management.

c. Another objective deals with the many different items being stocked or being designed into new equipment for the forces. The military services and DLA will operate their materiel management systems with the minimum number of items essential to support military operations. Unnecessary variety of kinds, types, and sizes will be eliminated through upgraded item entry control and item standardization efforts. Inactive and slow-moving items and items having marginal significance will be reviewed continually on the basis of total system and program analysis for removal from defense inventories.

d. Still another objective addresses the numbers and functions of ICPs. The military services and DLA will operate the minimum number of ICPs consistent with their assigned weapons system support functions, supply management, and technical responsibilities. The assignment of items to each ICP will provide for the maximum number of items it can manage efficiently, with due allowance for a surge capability to meet contingency/emergency conditions. ICPs will establish the necessary flexibility in their systems to be fully responsive to the requirements of weapon systems managers of the military services; conversely, weapon systems managers must place maximum reliance on the existing standard defense supply systems and item ranges, and minimize the establishment of duplicative systems and inventories. ICPs will identify and describe new items entering the supply system and will insure, in conjunction with appropriate program managers, that pertinent technical data are acquired and provided at the time of introduction of items into the supply system.

e. Standardization of integrated materiel management systems must be effected in such a way that compatibility exists between systems, and that they remain operational under emergency conditions. Transportation systems in the Continental United States (CONUS) and overseas operate aerial ports, water ports, movement control centers, and intransit control activities. They must be compatible and interface with supply systems. Effective use will be made of telecommunications systems. The military services and DOD agencies will develop an improved contingency reaction capability through systems designed for rapid and orderly expansion. Individual military service supply systems must be tailored to provide responsive support to the operating forces. Such systems must rely on integrated data banks (i.e., that of the Defense Logistics Services Center (DLSC) to the maximum extent practicable for commonly used supply management data and information. Design efforts for major supply systems will be centrally reviewed by the military departments, defense agencies, and the Office of the Secretary of Defense, as appropriate, to insure consistency of approach and to insure these have an interservice communications capability. Military service and defense agencies will develop and operate logistics management systems which will minimize reporting requirements, eliminate duplicative reporting, and progressively establish integrated management information systems.

f. Defense materiel managers will minimize the expenditure of new procurement dollars in stock replenishment and will maximize the use of existing defense inventories by expanding and using cost-effective standard interservice procedures. All DOD components will minimize retail supply levels of integrated items and place maximum reliance on direct support from the wholesale supply systems. Military services will insure that operating expenses are minimized through improving supply discipline by such actions as:

(1) eliminating the improper use of high-priority requisitions;

(2) ordering minimum essential quantities of materiel; and

(3) accurately and promptly recording and reporting all inventory transactions.

10-3. Management techniques of the integrated materiel management system

a. Through the integrated materiel management system, logistics management improvements are constantly being made in management techniques. Improvements to the data records were necessary when Congress passed the Defense Cataloging and Standardization Act (Public Law 436). Improvements in the system of cataloging and/or assigning national stock numbers through a standardization process and agency enhanced the use of automatic data processing in the management process.

b. The development of the military standard systems has also enhanced the implementation of integrated materiel management through the standardization of procedures between all services.

Section II
Defense Integrated Materiel Management of Weapon System-Oriented Consumable Items

10-4. Management concepts of the integrated materiel management system

a. A Deputy Under Secretary of Defense Memorandum dated 16 June 1971 is the basis for the management concept of integrated management of consumable items, sometimes referred to as the "one-item, one-manager" concept. This memorandum resulted in the revision of DOD Directive 4140.26, Integrated Materiel Management of Consumable Items, and development of volumes I and II of DOD Manual 4140.26-M. The intent of these volumes is to eliminate duplication of item management at the wholesale level. Volume I covers the assignment for management of each commodity-oriented item to DLA, General Services Administration (GSA), and the US Army Tank-Automotive Commend (TACOM) (for items peculiar to combat vehicles or Army design). Integration of commodityoriented items is fully covered in the General section of this chapter. Volume II provides guidance and procedures for assignment of each weapon system-oriented consumable item to a single military service for management with the assigned item manager being responsible for providing wholesale supply support to all users. It is no longer necessary for the military services to negotiate individual wholesale interservice supply support agreements when support is required for consumable items of supply. The user merely requisitions directly from the integrated manager who provides full support to all users on an equal basis without regard to service lines.

b. Integrated assignments were made for over 1,300,000 weapon systemoriented consumable items at the completion of the program. Therefore, the "one-item, one-manager" concept is currently in effect for all consumable items. In compliance with a major DOD objective mentioned earlier in this chapter, a similar program was developed which eliminated item management duplication for other than consumable items.

10-5. Wholesale inventory management concept

The joint logistics commanders directed their joint policy coordinating group for defense integrated materiel management to eliminate unnecessary duplication in the management and logistics support of multiused consumable and nonconsumable items. This action resulted in:

a. Primary inventory control activity. All reparable (nonconsumable) items used by two or more services have been identified and reviewed to determine which service should be the materiel managers of the item. Assignment of materiel management responsibilities is weighted heavily in favor of the service having the largest technical and depot maintenance capability. There are two phases for the primary inventory control activity.

(1) *Phase I.* The primary inventory control activity will be identified for each national stock number and the responsibilities for single submitted cataloger, acquisition, disposal, authority, and depot-level maintenance authority, where appropriate, in support of all other military users identified as secondary inventory control activities.

(2) *Phase II.* Additional responsibilities which will result in a single wholesale manager for depot reparable components and a single wholesale stock for all users.

b. Commodity integrated materiel management. Consumable items that are not mission essential to a weapon system are managed by the GSA, DLA, TACOM. TACOM has three Federal Supply Classifications, 2610, 2630, and 2640, that deal with tires and tubes. Commodity integrated materiel management has the responsibilities for cataloging, requirements determination, acquisition storage, and disposal.

c. Weapons integrated materiel management. Weapons integrated materiel management includes consumable items which have a fundamental importance in their technical and/or program relationship with their parent weapon systems/ equipment or higher assembly. The service ICP will normally be the managing activity for those items associated with a weapon system.

d. Service item control center (SICC). The service materiel manager which formerly performed the wholesale materiel management functions has become the SICC. The SICC has the responsibility for various types of program data for each end/program article application of the consumable that is managed by the weapons integrated materiel manager or commodity integrated materiel manager.

Chapter 11
Military Standard Logistics Systems/Programs Management

Section I
The Military Standard Requisitioning and Issue Procedures

11-1. General

a. In addition to its supply and services responsibilities, the Defense Logistics Agency (DLA) acts for the Secretary of Defense as administrator of certain Department of Defense (DOD) systems and programs. These programs pertain to the performance of certain central services. The DLA primary responsibility as administrator is to coordinate functions performed by all elements of DOD in connection with a particular program. A discussion of these programs follows.

b. On 1 July 1962, one of the most significant steps in overall logistics management was taken by DOD. It remains significant today because it was the first successful attempt to untangle the maze of complex and incompatible communications, procedures, policies, priorities, and conflicting concepts in supply management. The procedures provided, on a DOD-wide basis, a standardized language of codes and coding techniques, and a standard set of forms for requisitioning and issue transactions, and for supply documentations.

c. Immediately following the implementation of the Military Standard Requisitioning and Issue Procedures (MILSTRIP), the Federal Supply Service of the General Services Administration (GSA) developed a compatible civilian counterpart known as the Federal Standard Requisitioning and Issue Procedures (FEDSTRIP) which were implemented by GSA Circular, 16 July 1963. The compatibility of both procedures made it feasible for GSA and DLA to serve both civilian and military activities from their respective depot systems.

d. The concept of the single manager, while it improved supply management generally, did have certain inherent problems. Fundamental to these problems was the total lack of an effective communications system common to all participants. In day-to-day materiel transactions, the military supply manager had to do business, not only with his own service's supply sources, but also with the numerous single managers of the other military services. Many crossservicing agreements existed between Army, Navy, Marine Corps, and Air Force supply activities, and with GSA, for nonsingle-manager commodities. When another service conducted business with the Army, individual contacts with one or more of the seven separate technical services of the Army were often required. In addition, the services "bought" rather than requisitioned from GSA.

e. The degree of communication compatibility ranged from none at all to a limited degree of acceptability. Each military service tried to keep its own supply systems as compatible as possible in the matter of forms, formats, priorities, status reports, and depot shipping and receiving processes. To accommodate any given special condition or situation within the total system, a degree of variance was exercised within certain codings and actions. In transactions with some of the single managers, individual military service punchcard requisitioning was acceptable. Having received the requisitions, the single managers performed other actions. For example, in reporting status information, the single managers would use the system of the parent service rather than that of the customer's parent service. When the materiel were shipped, the shipping documents used differed from those that might have been used had the requisitioning military service processed the entire support transaction internally. In addition to establishing a separate criterion for requisitions, each individual service system required its own unique type of data which was entered in its own unique manner. Some systems prescribed the frequency of requisitioning, while others would accept a requisition on an "as-required" basis-without regard to a cyclical requisitioning schedule.

11-2. Processing standards

a. The time standards prescribed for the processing of requisitions apply to supply operations for items designated as "stocked" in the Federal Supply Catalog/Military Service Stock List publications. The standards are based on the assumption that stock is available for issue, and thus does not reflect acquisition leadtime. Requisitions for nonstocked items obviously require additional time for procurement. The time standards are equally applicable to both interservice and intraservice requisitions, as well as those from foreign country requisitions.

b. Under this complex operational situation, supply personnel had to constantly determine-for every line item obtained or from every source of supply-whether there was a requisitioning schedule, what forms were required (and the proper number of copies), which codes and coding language must be used, and-last but certainly not least-which communications media could be used for transmission of the requests. Other situations developed to further complicate matters. Supply personnel often received supply status information that had to be decoded according to various meanings and the system in use, translated, and then recoded to conform to the practices of the particular service for posting to the due-in records. When followup actions were necessary, the various criteria, forms, communication media, etc., of the individual systems had to be applied.

Upon eventual receipt of materiel, the requisitioner accepted and processed the diverse shipping documentation in their own way (many of which had peculiar requirements for distribution of copies). Again, the identification and deciphering of the individual codes, according to the particular supply system which had been used, had to be recoded to individual military services practices, posted to the accountable records, and processed to the permanent files.

c. A review of the supply difficulties of that time disclosed that they were not limited to any one military service. Supply personnel in the Army, Navy, Air Force, and Marine Corps were confronted with equal degrees of systems complexity. Thus, the problem of multiple requisitioning systems and transaction processing practices was universal. Logisticians concluded that the systems were extremely difficult to accommodate by nonmechanized bases (those bases employing a manual system of property accounting). Likewise, it was almost impossible to program computers and mechanical devices to accept all the various procedures. If each supply system were to be accommodated, each would require an element of specialization that it could ill afford in terms of manpower and versatility. It was obvious that a successful singlemanager system must also be a universal system to provide compatible requisitioning procedures.

d. Project 60-11 was established to review the entire single-manager concept. A specific subgroup, the 60-11B Committee, was charged with designing and obtaining acceptance of a requisitioning system to accommodate all of the single managers and designating a uniform issue priority system for use by all the services. The Army and the Air Force, however, did not necessarily concur in the need for the establishment of still another system for requisitioning to accommodate the single-manager transactions only. They felt that with 16 different support systems already in use in the Military Establishment, the introduction of a special one for the single-manager system alone would only add a new system, number 17, to those in being. Further, a system to satisfy the single managers would not necessarily improve the complexities existing within the individual services.

e. The Army and Air Force, therefore, proposed that any new system designed to accommodate single managers should rightfully also accommodate interservice transactions. Also, by adding the single-manager transactions to the interservice nonsingle-manager transactions, the total would account for 50 to 70 percent of all transactions within any system. To project a bit, it would seem logical that any system so designed could and should accommodate each service's transactions, regardless of supply source. On those foundations, the 60-11B Committee conceived a standard system to accommodate all military requisitions and issues.

f. From the beginning of the new system, DLA was assigned responsibility for the overall program, and is currently charged to insure its continuous operation in a uniform manner by all of the military departments and GSA. Assistant Secretary of Defense (Manpower, Installations, and Logistics) (ASD(MI&L)) has established the Defense Logistics Standard Systems Office (DLSSO) to administer this system under the provisions of DOD Directive 4000.25. The office's specific responsibilities are to:

(1) Perform systems analysis and systems design functions necessary to incorporate into the procedures the policy guidance provided by the ASD(MI&L).

(2) Coordinate, publish, and distribute all revisions to the procedures manual.

(3) Insure compatibility between MILSTRIP and referenced procedural regulations, and make recommendations to the administering component where compatibility with other related systems is deemed necessary.

(4) Maintain surveillance over the system through review of implementing plans and procedures and joint DLA/military services onsite observations to insure compliance with DOD policies and procedures, achieve uniform implementation, and determine effectiveness.

(5) Develop programs for refinement and improvement.

(6) Monitor related training programs within DOD and make recommendations for improvement.

g. An integral corollary to MILSTRIP was the design and acceptance of what has come to be known as the Uniform Materiel Movement and Issue Priority System (UMMIPS), which will be described in later paragraphs.

11-3. Principles and concepts

a. MILSTRIP and UMMIPS are designed to accommodate all military services and not any service individually. To attain standardization within which all elements of the Defense Establishment might function with a reasonable degree of compatibility and efficiency, numerous compromises were embodied.

b. With few exceptions, MILSTRIP-as prescribed by DOD 4140.17-M-is inviolate in nature, codes, forms, usage, etc. The philosophy and instructions, including each element of data; its format, location, use, and perpetuation, together with each form, its size, construction, color, configuration, etc., have been scrutinized, evaluated, and adjusted by representatives of

all military services prior to acceptance.

c. Refinements, amendments, additional codes, etc., will continue to be necessary as new and changing conditions warrant. Actions are continuing within DOD to design and standardize other elements of data, concepts, and systems, some of which will have direct applicability to MILSTRIP.

d. It must be recognized by all participants that the system, as its name implies, is a requisitioning and issue procedure. It does NOT provide management, authorization, or reporting data beyond those elements essential to fulfillment of its basic intent.

11-4. Scope

a. The procedures, forms, and formats are mandatory upon all military services. They apply to all requisitioners authorized to request supply support from any supply distribution system, including requisitions to GSA. They are, therefore, equally applicable to all military service requisitioning and issue transactions, except for those specifically excluded.

b. The system is also used by defense contractors, when authorized by the terms of a contract, to requisition or move Government materiel. The Federal Acquisition Regulation (FAR) provides policies, procedures, forms, and instructions for use by contractors in the requisitioning and return of Government furnished materiel.

c. Military department implementation encompasses the total uniform system using the forms and procedures specified by the DOD Procedures Manual in both base and depot operations. Certain specifically identified codes have been assigned for intraservice use only; however, they should never appear on transactions that are communicated outside the confines of the particular service.

d. Application is not mandatory to internal transactions at posts, camps, stations, bases, or their equivalents for support of local organizations and activities satellited thereon. All military departments, however, have adopted most of the data elements and codes as well as some of the forms for use at this retail/user level. MILSTRIP also is not applicable to:

(1) Certain nonstocked commodities; e.g., bulk petroleum, coal, and coke.

(2) Forms and publications (requirements for these items from GSA and the Navy will be in MILSTRIP format).

(3) Interdepartmental and intradepartmental purchasing operations.

(4) Communications security equipment, components, or parts, which are designed and classified "crypto" or which normally are handled through crypto channels.

Section II
The Uniform Materiel Movement and Issue Priority System

11-5. General information

a. In the requisitioning, movement, and issue of materiel, it is necessary that competing demands be identified according to relative importance. This insures the most effective management of logistics system resources, including communications, supply source processing, materiel selection and packaging, transportation, etc. DOD Directive 4410.6 established UMMIPS for use in the requisitioning and issue of materiel from DOD and GSA distribution systems and in the movement of materiel in the Defense Transportation System (DTS). This system is used in peacetime and wartime and:

(1) Sets forth maximum uniform requisition processing and materiel movement time standards.

(2) Provides a basis for managing the movement of materiel throughout the distribution systems.

(3) Insures the processing of materiel issue requirements in accordance with the mission of the requiring activity, the urgency of need, and specific materiel management considerations.

b. Priority designator numbers are derived from a matrix based upon the assigned Force/ Activity Designator (FAD) and the Urgency of Need Designator (UND). The FAD is related to the mission essentiality of a defense force, activity, or project. The UND is assigned by the requisitioner and reflects the immediate importance of the equipment or the situation requiring submission of the request. Performance time frames are promulgated for the various priority designators; however, the times are dependent upon and assume the physical availability of the necessary resources in the defense supply systems at the time a request is submitted and processed.

11-6. Force/Activity Designators

a. The term FAD may be applied to a:

(1) Unit, organization, or installation performing a function or mission.

(2) Body of troops, ships, or aerospace vehicles, or a combination thereof.

(3) Function, mission, project, or program, in-

cluding those under the Security Assistance Program.

b. FADs, identified by the Roman numerals I, II, *III*, IV, and V are assigned by the Secretary of Defense, the Joint Chiefs of Staff (JCS), or by each DOD component as authorized. The JCS may delegate to their components and other agencies the authority to assign FADs II through V to their respective US forces units.

11-7. Urgency of Need Designators

Urgency of Need Designators (UNDs), identified by the letters A, B, and C, are used to express varying degrees of urgency when operational mission capability is jeopardized due to materiel nonavailability. The UNDs must be related to the appropriate FAD in order to determine the issue priority for entry into requisition and issue documents. Selecting the designator which will most accurately express the urgency of each supply requirement is an important duty performed by the requesting activity. Care must be exercised in selecting the designator applicable to materiel deficiencies because, at all supply levels, those demands which have the most serious impact on mission capability receive priority processing and handling throughout the entire supply cycle. Since the UMMIPS is designed for the selective use of priorities based upon predetermined basic factors, the automatic assignment of a given issue priority is not condoned.

11-8. Issue priorities

a. The UMMIPS provides a ready basis for expressing the relative importance of requisitions and materiel movement transactions through the use of two-digit numeric codes, ranging from "01" through "15," and referred to as issue priorities. The entry prescribed for requisitions and related documentation is based upon a combination of factors which signify the mission of the requisitioner or the intended recipient (FAD), and the urgency of need (UND).

b. Neither the FAD nor the UND actually appears on documents of the MILSTRIP. The FAD, assigned to the unit or activity, and the UND, determined by the activity and base, post, camp, or station supply, are used to determine the issue priority, the two-digit numerical code which does appear on documents. The proper determination is of paramount importance since misuse tends to degrade the entire priority system. This importance is brought into sharp focus in the assignment of these designators. Decision logic table 11-1 illustrates the relationship of the FAD, the UND, and the issue priority, which controls standard delivery date. This date for each group varies between 7 and 84 days, depending upon the requesting unit's location and/or other variables.

c. Commanding officers of requisitioning activities are responsible for the accurate

Table 11-1. Decision Logic Table for MILSTRIP Requisitions

DERIVATION OF PRIORITY DESIGNATORS
(Relating Force/Activity Designators to Urgency of Need)

FORCE/ACTIVITY DESIGNATOR	URGENCY OF NEED DESIGNATOR		
	A	B	C
I	01	04	11
II	02	05	12
III	03	06	13
IV	07	09	14
V	08	10	15

assignment of issue priority consistent with FADs assigned by higher authority and with the existing urgency of need. When requisitions are based upon UND A, the commanders will personally review all requirements to certify an inability to perform the mission. Commanders will designate in writing specific personnel who will personally review all requirements based on UND B to certify the reality of the urgency.

d. Commanders of bases, posts, camps, stations, or comparable operating activities develop and publish local directives which indicate the FAD assigned to each organization, project, contractor, or other tenant units authorized support through the base, post, camp, and station supply organizations. These local directives include instructions and guidance to insure that using activities relate materiel needs to urgency of need criteria established by DOD. The necessity to provide supply management personnel with realistic quantitative data and reasonable required delivery dates is also emphasized.

e. Commanders or senior officials at the using activities are required to establish management controls over priority utilization, to insure efficient planning and forecasting of requirements; to properly apply FADs and UNDs; to requisition only that quantity of materiel actually required; and to establish realistic required delivery dates.

f. The prescribed processing time standards constitute maximum allowable time limitations. By Defense Department definition, all wholesale-level stocks located at all storage sites are considered to be available. Passing actions (a general term used to identify supply transactions forwarded from one supply source to another for supply action) generated by inventory control

point (ICP) materiel managers to satisfy original requests are processed with dispatch, in order to reduce the required overall processing time to the absolute minimum.

Section III
The Military Standard Transaction Reporting and Accounting Procedures

11-9. General

a. The Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP) provide policies, procedures, and instructions for recording inventory management data passed among elements of a single military service, the DLA distribution system, or between various distribution systems of DOD. They extend the idea of uniform communicating procedures, and are applied to those elements of data or information that an ICP must send to, or receive from, a stock control activity, or a storage location in the exercise of supply and financial management. These procedures uniformly classify inventory records as to ownership, purpose, and condition. They classify transactions affecting the inventory as to type of receipt, issue, and adjustments and provide the basis for financial accounting of wholesale distribution system assets.

b. Throughout DOD, inventory control systems must be able to provide information needed for supply and financial management accounting. However, the system cannot be encumbered with data elements peculiar to different types of materiel. A standard system so designed not only imparts uniformity, but provides ICPs with the latitude needed for developing internal procedures appropriate to the kinds of inventory managed.

11-10. Procedure

a. MILSTRAP affords flexibility in obtaining management information at the ICP level. Information conveyed by transactions, supplemented by a data base and the data already available from requisitioning and issue documents may be programed in an infinite variety of combinations for management reports and studies. Some conspicuous features of these procedures are:

(1) An effective coding structure which conveys the required information, but with fewer data groupings than previously used. The amount of detail available for inventory management purposes is actually increased.

(2) Standardized data elements, related codes, documents, and card formats which establish uniformity in the interchange of inventory accounting information within and among the military services and DLA. Thus, the ability to provide supply services across departmental lines is enhanced.

(3) A system of item accounting which is integrated with financial accounting. Updating the inventory control record automatically accumulates related financial data. Hence, financial data may represent the aggregation of quantitative data previously compiled for supply management purposes.

(4) A flexible transaction reporting capability which accommodates any combination or variation of centralized, decentralized, or regional processing of requisitions.

b. In design, MILSTRIP recognizes that applied supply policy may prevent the use of a prescribed code or may demand service-oriented codes. Accordingly, the procedure allows selectivity in the application of codes and permits intraservice or intra-agency assignment and usage of certain supplemental codes within the confines of an activity. However, the codes established under this option cannot duplicate or circumvent the intent of the standard codes, nor can the use of the intra-activity codes exceed the confines of the separate distribution system.

c. The uniform codes, forms, formats, and procedures facilitate the transmission of item data and financial data among the inventory management, stock control, and storage elements of the military services or DLA. The standardized data elements that are interchanged among the military services and DLA have universal application for intrasupply system transactions.

d. The more important codes (ownership, purpose, condition, management) and the basic documents (receipt, issue, adjustment, physical inventory) are:

(1) MILSTRAP code sets.

(a) Ownership codes. These codes are one-position, numeric characters which provide a means of segmenting inventory balances accounted for on inventory control records of a military service/DLA but which are owned by others.

(b) Purpose codes. These codes are one-position, alphabetic characters which provide the owner of materiel with a means of identifying the purpose for which an inventory balance is reserved. They are only for intraservice use.

(c) Condition codes. These codes are one-position alphabetic characters used to classify materiel to identify the degree of serviceability, condition, and completeness in terms of readiness for issue and use or to identify actions underway to change the status of materiel.

(d) Management codes. These codes are one-position, alphabetic or numeric characters which are used to provide supplemental data not indicated through the transaction coding structure. When a situation exists which is not covered by an assigned man-

agement code, management data are entered in narrative in the remarks block of the applicable document.

(2) Basic documents.

(a) DOD Single Line Item Requisition System Document (Mechanical) (DD Form 1348M). This form is used for reporting decentralized issue transactions to the ICP.

(b) DOD Physical Inventory Document (DD Form 1485). This document is designed to accommodate elements of data required for physical inventory processing by ICPs, stock control activities, and storage points. It provides a standard method for requesting, recording, and reporting results of inventories. In addition, this document is designed for mailing or transmission by transceiver or other high-speed method. It is adaptable for use with automatic data processing (ADP) systems and electrical accounting machines and has been overprinted to provide for manual usage.

*(c) DOD Materiel Receipt Document (DD Form 1486). T*his document is designed primarily for transmission by transceiver and other high-speed methods, with single-line interpretation; however, a third-line interpretation capability has been included to provide flexibility. Design of the document accommodates two different formats, one to be used when a materiel issue and receipt document is the source document and one to be used when a procurement instrument is the source document.

(d) DOD Materiel Adjustment Document (DD Form 1487). This document is designed to accommodate elements of data required for supply management and inventory control by inventory managers, accountable supply distribution activities, and storage points. It provides a standard method for processing adjustments. It is designed for mailing or transmission by transceiver or other high-speed method.

e. The range of codes and procedures is designed to accommodate the variations in logistics organizations within and among the military services and DLA, and to cope with the variety of data processing equipment in use. Consideration is also given to differences in organizational and operational structuring, such as centralized inventory control and stock control with decentralized storage; a centralized inventory control with decentralized stock control and storage; automated procedures (ADP capability); mechanized procedures (electrical accounting machine capability); or manual procedures.

f. MILSTRAP is optional for supply transactions at base or organization level (below the ICP stock control activities) and for financial transactions generated independently from inventory control record maintenance. Other exclusions (similar to those of MILSTRIP) apply to perishable subsistence items and brand name resale subsistence items; bulk petroleum and packaged fuel products; forms and publications; industrial plant equipment; communications/ security and signal intelligence equipment; communications security aids (keying material); and those spare parts which are normally obtained through cryptochannels; aircraft and missile propulsion units; and nuclear ordnance items designated by the Defense Nuclear Agency for item serial number control.

g. ASD(MI&L) has established the DLSSO to administer this system under the provisions of DOD Directive 4000.25. This office is charged with insuring implementation and uniformity of operation by all activities associated with the procedures. Specifically, DLA is obligated to insure adherence to systems, principles, rules, coding structures, forms and formats; to effect systems changes and improvements as environmental and operational situations warrant; and to review requests for waivers or deviations, making appropriate recommendations to the Office of the ASD(MI&L).

Section IV
The Military Standard Transportation and Movement Procedures

11-11. General

a. Careful planning is essential in controlling movement of materiel. For example, transportation requirements must be determined, the capacity of all means of transport analyzed, priorities established, and a movement program prepared.

b. These procedures use the products of MILSTRIP and other systems to create and exchange standard shipping data in order to control materiel movements in the DTS and to record and report their status. System administrator responsibility was assigned in 1972 to the Secretary of the Army, Headquarters, Military Traffic Management Command (MTMC). On 1 April 1977, the responsibility for this was transferred to DLA. ASD(MI&L) has established DLSSO to administer this system under the provisions of DOD Directive 4000.25.

c. To implement the functions and services of transportation in the DTS, a group of activities (including the Military Airlift Command (MAC), the Military Sealift Command (MSC), the MTMC (all are transportation operating agencies (TOA)); shipper services; HQ, DLA and GSA; oversee commands; and local authorities) are all engaged in some form or degree of transportation actions. The various organizations are responsible for bringing materiel from the source to the user.

d. Prior to 1963, none of these components of the loosely structured DTS used any uniform methods, pro-

cedures, or documentation. Procedures and documentation that were used by each of the separate elements generally were designed to implement transportation response only within a limited fraction of the overall logistics system for which that organization had an interest or jurisdiction. Analysis indicated that there were at least 90 separate transportation documents in use, each of which was designed at the separate organizational levels to meet the specific needs of that level. This wide range of documentation and differences in procedures resulted in inefficient movement of materiel through the distribution pipeline.

(1) Concurrent planning by warehousing, packaging, and transportation activities is a prerequisite for responsive and economical support. Such concurrent, coordinated actions assume significant importance in the total military logistics system. Early US military logistics systems never developed a set of standard procedures to implement general shipment planning. Recognition of this unsatisfactory condition was emphasized when military planners sought to improve transportation management through the potential of ADP. The inherent differences among the various aspects of the transportation system effectively blocked, or at least, severely slowed down the application of ADP to the problems of transportation management. The fundamental difficulty was the lack of a uniform communication system and the designation of a priority system that could be applied individually or as a composite total.

(2) In the continued search for a modern viable plan, transportation managers decided that any system adopted must furnish current and comprehensive information with which to measure responsiveness. Acquisition of this information was not generally pursued by the military element, and a reliable and meaningful measuring system was not, at that time, in existence.

(3) The implementation of MILSTRIP magnified the problem of ineffective communication. These procedures, as implemented through management decisions, caused a marked increase in the number of small shipments. The transportation documentation increased proportionately. Furthermore, materiel movements of the small shipments were being accomplished by less economical means.

(4) Unbearable workloads were created by the increased number of shipments computed by extensive and elaborate clearance procedures in use at terminals and transshipment points.

e. To solve the problems of transportation management, the Joint Military Working Groups, under the leadership of ASD(MI&L), performed an extensive study of the procedures used by all elements of DTS. The outcome of the study was a joint Military Standard Transportation and Movement Procedures (MILSTAMP) Regulation on 1 October 1963. As a result of a complete worldwide evaluation, the procedures were republished in 1967 as a DOD Regulation (4500.32R) which provides guidance directly to operating levels without the need of service implementing directives.

f. MILSTAMP applies in whole or in part to shipments of materiel and personal property (including code 5, J, and T shipments) moving in support of military forces and shipments of nondefense agencies sponsored by military services. MILSTAMP also applies to foreign military sales (FMS) and Military Assistance Program (MAP) grant aid shipments moving through military terminal facilities and/or on MAC/MSC arranged transportation resources either for the account of the US Government or foreign country.

g. MILSTAMP provides policies and procedures required to manage and control the movement of materiel through DTS. MILSTAMP:

(1) Complements the policies and movement criteria of UMMIPS.

(2) Establishes responsibilities of shipping, clearance, terminal, and receiving activities.

(3) Establishes standard documentation procedures, data elements, and codes.

(4) Provides advance information to optimize utilization of transportation resources.

(5) Provides intransit data to evaluate transit time standards.

(6) Interfaces with other systems and procedures.

h. Exclusions applicable to MILSTAMP are:

(1) Materiel shipped in support of Government contractors on a commercial bill of lading (CBL) from, to, or between contractor plants.

(2) First destination shipments from contractor plants to service/agency customers or for depot stock or storage, resulting from MILSTRIP requisitions (Continental United States (CONUS) and FMS direct delivery), when the complete movement is by commercial transportation and does not enter DTS.

(3) Shipments of personal property originating and terminating within CONUS (including house trailers) where complete movement is by commercial carrier under a Government bill of lading (GBL), through Government bill of lading (TGBL) shipments not entering DTS, and shipments of accompanied baggage.

(4) Bulk petroleum products.

(5) Special assignment airlift missions (SAAM).

(6) Unit movements, except when movement is by way of MAC channel airlift, when sealift is obtained from the MSC, or when cargo transits common user ocean terminals.

(7) Marine Corps tactical unit movements by exclusive-use surface transportation under special arrangements between the MTMC and the Marine Corps.

(8) Annual resupply projects not entering DTS.

(9) Passenger movements.

11-12. Basic documents

The basic documents prescribed by MILSTAMP constitute a family of documents required for movement of cargo into and through DTS. Following is a brief description of each form.

a. DD Form 1384, Transportation Control and Movement Document. A multipurpose document which is used as a basic movement and control document, terminal handling document (e.g., dock receipt), cargo manifest, or tracing document. This form may also be used as a document for cargo accountability or for proof of delivery, and in support of contractor billings for services rendered.

b. DD Form 1385, Cargo Manifest. A multipurpose manual or mechanized form for use in listing air or surface manifest data.

c. DD Form 1386, Ocean Cargo Manifest Recapitulation or Summary. When prepared as a summary, it is the official document used by the MSC to render billings for the ocean movement segment of the DTS. When prepared as a recapitulation, it contains the vessel master's receipt for cargo and serves as a source of operational information.

d. DD Form 1387, Military Shipment Label. The shipping address label to be used for transportation marking in accordance with Military Standard 129.

e. DD Form 1387-1, Military Shipping Tag. The shipping address tag to be used for transportation marking in accordance with Military Standard 129.

f. DD Form 1387-2, Special Handling Data/ Certification. A document prepared by the shipper for all shipments to be routed by way of military air transportation or commercial air augmentation which require special handling and/or certification.

g. DD Form 1384-1, Intransit Data Card. A multipurpose document which may be used to record and report intransit data.

11-13. Major elements

MILSTAMP is primarily concerned with three major areas within its system.

a. The planning and coordination of military movements is required by the shipment and transshipment activities. This prevents saturation of the transportation capacity, relieves congestion at transshipment activities, and makes it possible to schedule materiel and documentation within the time frames of UMMIPS. Shipment activities are required, wherever feasible, to consolidate shipments of the same issue group moving to one ultimate addressee or consignee. Under MILSTAMP, each shipping activity establishes a shipment planning unit to perform concurrent planning, warehousing, and transportation actions. Ultimately, the objective is to establish a standard ADP system to be used by all transportation planning and processing.

b. Movement control is exercised over all shipments entering into, and moving through, the DTS. Air and surface clearance authorities use advance transportation control and movement documents to provide advance notice of shipments, preplan for receipt of cargo, and provide input for mechanically prepared cargo manifests. These are also used to challenge shipments, divert, reconsign, and/or cancel shipments, as required.

c. The performance measurement system is as described in the Military Supply and Transportation Evaluation Procedures (MILSTEP). Such information is made available to all military transportation agencies and activities that use the data for analysis and corrective actions if necessary.

Section V
The Military Supply and Transportation Evaluation Procedures

11-14. General

MILSTEP provides a standard method for measuring supply system performance and transportation effectiveness through DOD. This data system was designed and developed by a joint service/agency task group and its products are for use at the ICP level, the headquarters level of the military services, and the Office of the Secretary of Defense. ASD (MI&L) has established the DLSSO to administer this system under the provisions of DOD Directive 4000.25. Details of the system are contained in DOD Manual 4000.23-M and by reference to accommodating provisions incorporated in MILSTRIP and MILSTAMP. This system uses the issue and shipping documents of MILSTRIP and MILSTAMP to measure supply and transportation performance in terms of ontime shipments, ontime deliveries, stock availability, volume, age of back orders, and other key measurement indexes.

11-15. Objectives

The objectives of MILSTEP include the:

a. Measurement of supply and transportation performance against the time standards of UMMIPS.

b. Validation and maintenance of the time standards of the UMMIPS.

c. Analysis of the actual application of issue priorities and issue priority groups.

d. Evaluation of each segment of the transportation pipeline by point-topoint carrier performance.

e. Determination of supply systems workload and materiel availability.

11-16. Specifications

a. The following system specifications for MILSTEP have been established by the DASD (MI&L):

(1) One-hundred percent reporting of completed actions through the intransit segment of the pipeline.

(2) Determination between stocked and nonstocked item transactions.

(3) Performance analysis classified by time segments, priority groups, distribution systems, and requisitioning activities.

(4) Providing a uniform basis for analysis by all levels of management.

(5) Maximum practical use of ADP equipment.

b. The seven major cycle segments to be measured in terms of elapsed time between the initiation of a requisition and the receipt of the materiel include:

(1) Requisition submission time which is that time from the date of the requisition to the date the requisition is received by the initial wholesale source.

(2) Passing action which is that time from the date the requisition is received by the initial wholesale source to the date the requisition is received by the ultimate wholesale supply source.

(3) ICP availability time which is that time from the date the requisition is received by the ultimate wholesale supply source to the date a materiel release order is transmitted to the depot storage site.

(4) Depot/storage site processing time which is that time from the date of transmission of the materiel release order to the date the materiel are made available to the transportation officer.

(5) Transportation consolidation and CONUS intransit time which is that time from the date the materiel are made available to the transportation officer to the date the materiel are received by CONUS requisitioning installation or port of embarkation in the case of oversea shipments.

(6) Oversea shipment time which is that time from the date the materiel are received by the port of embarkation to the date the shipment is delivered to the oversee consignee.

(7) Receipt takeup time by the requisitioner which is that time from date of receipt of the materiel at destination until the date that the materiel are recorded on the requisitioner’s inventory records. This final segment of the materiel pipeline is currently not being measured by all DOD elements. *c.* The transportation document for capturing MILSTEP data is the intransit data card. The validity of MILSTEP output data requires the timely and accurate submission by transshipment activities and consignee of intransit data cards. Assurance that these cards will be returned is enhanced when the work effort on the part of the consignee is kept at a minimum. The consignees are required to keypunch rubber stamp, or otherwise mark, the date received on the intransit data card and forward to the DOD Central Data Collection Point, Defense Depot Tracy, CA, which collects, processes, and distributes intransit data for all military services and DOD agencies in the system. All activities receiving and processing intransit data cards are required to use automatic digital network (AUTODIN) facilities, when available, for transmitting intransit data cards to the central data collection point. Otherwise, mail is permitted under strict procedures to insure intransit data cards are not damaged intransit.

d. Each military service and DLA maintain a central processing point for the preparation of reports. The central processing point matches the intransit data records received from the central data collection point with the supply and shipment records received from the ICPs to prepare reports.

11-17. Reports

Some of the more significant reports prepared under MILSTEP include:

a. The Pipeline Performance Analysis Report (Format 1A) is intended to compare performance against the time standards for requisition submission and supply source processing. The report reflects the number of line items processed for shipment for each segment of the requisition submission and supply source processing cycle as these lines relate to the three issue priority groups and the elapsed time to process.

b. The Pipeline Performance Analysis Report (Format 1B) is intended to measure the transportation time and total order shipping time against the uniform time standards. The report reflects the number of line items delivered for each segment of the total logistics cycle as these lines relate to the priority groups and the elapsed time needed to process and deliver.

c. The Supply Availability and Workload Analysis Report (Format 2) is intended to measure the supply "fill rate" and provide various workload statistics. Workloads for stocked and nonstocked items are reported separately. Some reported elements include:

(1) The numbers of delayed supply actions in terms of priority and age groupings.

(2) The number of supply demands received and percent of stock availability.

(3) Selected workload indexes, such as followup documents received, cancellations, demands rejected for corrections and reprocessed, etc.

d. The Response Rate Analysis Report (Format 3) reflects the responsiveness and the timeliness of consignees in returning the intransit data cards after shipments have been delivered. The purpose of the report is to permit followup on nonresponding activities and to analyze the reliability of performance.

e. The Intransit Time Analysis Report (Format 4) is

intended to provide transportation officers with point-to-point carrier performance and a basis for future mode and carrier selections.

Section VI
Military Standard Contract Administration Procedures

11-18. General

a. These procedures standardize the flow of purchase information among purchasing offices, contract administration offices, and inventory managers.

b. During the early 1960s, the Secretary of Defense "Project 60 Study" substantiated the findings of a universal lack of reliable, timely, and accurate contract administration data, or automation of such data. Subsequently, the "Report on the Application of Automatic Data Processing Systems to Defense Contract Administration" dated August 1964 established the feasibility of standardizing and mechanizing the flow of contract administration information. The outgrowth of that report, Military Standard Contract Administration Procedures (MILSCAP), is known as an "external" system since it prescribes the external flow of contract administration data. The input/output requirements must be interchanged between contract administration points, purchasing offices, consignees, funding activities, and to some extent, contractors. Development of internal procedures is a responsibility of the above activities and is not prescribed by MILSCAP.

c. ASD (MI&L) has established the DLSSO to administer this system under the provisions of DOD Directive 4000.25. Certain policy provisions published in the FAR and standard data elements published in the Data Standards Manual facilitate MILSCAP.

d. The basic manual (DOD 4105.63-M) was first published on 1 December 1966. It was designed and developed by a task group under the chairmanship of the DOD Systems Administrator. This task group was composed of personnel from the military departments/ agencies and the Offices of the ASD (MI&L) and ASD (Comptroller). The manual was revised serveral times, and subsequently republished in December 1977. DLSSO is responsible for the development, publication, and maintenance of the MILSCAP manual.

11-19. Procedure

a. It is a primary objective of these procedures that, simultaneously with the preparation of the contractual document, key elements of data will be captured on magnetic tape, punched paper tape, or punched cards and displayed in a data representation of the contract known as the "abstract." The FAR Committee has standardized the contract forms as well as many of the data elements to be used on these forms. These standardization efforts are continuing and greatly enhance both mechanical and manual processing of contractual data. The fixed location of data on the contract forms and the use of standard coding and procedures are prerequisites to the success of the abstracting operation of MILSCAP.

b. The following records comprise the contract abstract:

(1) *Administrative Data Records (two per contract).* Contain procurement instrument identification number, various address codes, dates, discount terms, total amount of contract, and alerts for various contract provisions.

(2) *Accounting Classification Record.* Two records for each different accounting classification in the contract.

(3) *Supplies Line Item Data Record (two for each supply line item).* Contains line item number, stock number, quantity, unit price, item account, noun, part number, etc.

(4) *Supplies Schedule Data Record (one per each ship to/each date).* Contains ship to, mark for, schedule date, quantity scheduled, MILSTRIP data, and accounting classification reference.

(5) *Service Line Item Record (one per line item).* Contains line item number, description of service, accounting classification reference, completion date, and line item amount.

(6) *Controlled Item Serial Number Record (one per each serial number).* Contains the line item number, ship to, mark for, schedule date, and the serial number.

c. The machine processable abstract may be used at the Purchasing Office, ICP, and field contract administration office for many purposes. Some of them are: history of buy, due-in assets status, commitment and obligation records, MAP control, supply status, statistics and analysis, contract control and recordkeeping, production status, disbursement status, administrative actions, administrative statistics, and workload planning.

d. Follow-on to the abstracting operation involves communications pertaining to the contract, which are interchanged between the purchasing office and the contract administration office to:

(1) obtain missing data,
(2) correct erroneous data,
(3) request various supplementary actions on contracts, or
(4) modify or amend existing contract data.

The follow-on actions are accomplished through the records of MILSCAP.

e. A key document used in the delivery phase of contract administration is the Materiel Inspection and Receiving Report (DD Form 250). The FAIR includes a published standard form to be used for all shipments. This eliminated over 200 nonstandard varieties of this report. Further, it eliminated nonessential information

already available on companion documents, prohibited the use of modifications to the form and, upon implementation of MILSCAP, reduced the number of copies distributed for each shipment. The only significant change in utilization is the encouragement of contractor usage of the form as an invoice and intracompany work document. Upon receipt of a report which indicates inspection or acceptance at destination, the contract administration office generates an Inspection/Acceptance Alert Record and transmits it to the consignee. A punched or handscribed Inspection/Acceptance Report, which indicates acceptance or rejection, is returned to the contract administration office for contractor payment purposes. A Shipment/Performance Notice is forwarded by the contract administration office to either the purchasing office or the item/ project manager, in response to all Materiel Inspection and Receiving Reports.

f. In the event the contract administration office anticipates or knows of a slippage or deviation from the contract delivery schedule, a revised Delivery Forecast Record will be electrically transmitted from the contract administration office to the purchasing officer or the item/project manager. The revised delivery forecast provides the information required for the preparation of supply status, which is furnished to requisitioners under MILSTRIP. If the latest status of a contract line item is not available in the records of the purchasing office, the contract administration office may be queried for these data.

g. The contract administration office can effect payment to the contractor by Treasury check as soon as a contractor's invoice and the necessary inspection/acceptance documents are received and validated. The purchasing office or the financial managers are advised of the expenditures made against funds originally cited on the contractual instrument. A set of records known as the Contract Payment Notice conveys the necessary information. Three or more of the following records are forwarded based on the circumstances of the payment.

(1) *Accounting classification header.* Cites the fund (accounting classification) against which payment is made. This record is included in every payment notice.

(2) *Expenditure record*. Cites the gross amount of the invoice and net amount of payment. This record is included in every payment notice.

(3) *Deduction record.* Cites the amounts, if any, of such deductions as discounts, recoupments of advance payments, etc.

(4) *Variance record*. Indicates differences, if any, between gross amounts paid and amounts obligated, amounts due to quantity overrun/underrun, etc.

(5) *Line item report.* Indicates contractor shipment number and the gross amount of payment for each contract line item.

(6) *Final payment record.* Prepares a summary, at time of last payment against an accounting classification, of the amounts obligated, expended, and unliquidated.

h. The final phase involves contract completion or completion status. While all deliveries and payments have been made for a contract, it may still remain open for various reasons, such as litigation, accounting for Government furnished property, etc. A Contract Completion Status Record advising of the above circumstances is provided to the purchasing office by the contract administration office. At the time the contract is closed, a Contract Completion Notice will be furnished to the purchasing office. If the purchasing officer has knowledge of an action which requires the contract to remain open, he will forward a Contract Completion Extension to the contract administration office.

11-20. Summary

a. MILSCAP prescribes data elements, formats, time standards and flow of contract administration information through the phases of:

(1) Preparing the contract (hard copy) and abstracting key data therefrom in machine processable form.

(2) Shipping materiel using the standardized Materiel Inspection and Receiving Report (DD Form 250).

(3) Alerting a consignee when inspection/ acceptance at destination is required and providing a means for the consignee to signify such acceptance or inspection; e.g., a punched card receiving report.

(4) Notifying the purchasing office of the expenditures made against contact-cited funds.

(5) Providing updating information to affected activities:

(a) Furnishing shipping instructions.

(b) Requesting missing data.

(c) Advising of delays through the revised delivery forecast.

(d) Notifying the purchasing office of the closing condition of the contract.

b. MILSCAP provides uniform procedures, mechanized transaction records, standard forms, rapid communications, and standard data elements.

Section VII
Standard Cataloging Programs

11-21. Introduction

a. A principal aspect of supply management is cataloging, an operation that provides positive identification for each and every item of supply. Cataloging provides a common language that is used in identifying,

requisitioning, purchasing, storing, and shipping all items in the DOD supply management system. Adoption of standard item names and descriptions and a uniform numbering system by all DOD components and civil agencies facilitates supply actions and serves as the foundation of other supply management programs directed at controlling influx of new items in the various supply systems. A uniform catalog system is the keystone to automation of supply systems permitting direct computer-to-computer actions without human intervention.

b. Supply management programs that are built on the foundation of a standard catalog system include: elimination of duplication; avoiding entry of duplicate items into the systems; adoption of standard items of supply; preparation of allowance lists; publication of parts lists and crossreference listings; identification of interchangeable or substitute items; purging of inactive items from the supply systems; supply support of all services by a single agency or service; and reutilization, redistribution, or sale of excess stocks. Headquarters and field units use national stock numbers (NSN) for accounting, property reporting, and other purposes.

11-22. The Federal supply catalog

a. In World War II, each military department had its own method of describing and numbering items, and frequently two or more activities of the same military service stocked the same item under different identifications. During that period, technological advances introduced many new items into the various supply systems and the problems of duplication became acute. After World War II, prominent members of the Government, to include members of the Hoover Commission, pointed out the benefits to be gained from a uniform supply catalog system. Congressional committees also showed keen interest in the matter. In recognition of the problem, a catalog agency was established by the Munitions Board.

b. Certain members of Congress voiced dissatisfaction with the lack of progress that had been made in the field of cataloging. They further criticized the standardization program for its failure to eliminate duplicate specifications for common items.1 Congressional hearings on cataloging, standardization, and waste in military buying led to the enactment in 1952 of Public Law (PL) 436 (included in a 1956 revision of chapter 145, title 10, United States Code) which directed DOD to establish a single catalog system. Congress subsequently Office, 1952) established the Defense Supply Management Agency in July 1952. Within a few months, the Defense Supply Management Agency finished work on a complete subsistence catalog listing 1,131 items of food which the military department could purchase, stock, and issue. This was a reduction of 42 percent in the number of food items originally cataloged by the three departments.

c. The Defense Supply Management Agency was abolished in 1953 and its functions were transferred to the Secretary of Defense. Cataloging has since been under the supervision of the ASD(MI&L).

d. The Federal Catalog System, which is based upon the 1952 legislation, provides the Government with one of its most significant tools for improving supply management. Up to that point, there was no common language of supply. Within DOD, 21 different numbering systems and 8 different supply classification systems precluded any useful communication between the military departments. The Federal Catalog System provides a common identification language, eliminates different identification of like items, reveals interchangeability among items, aids in standardization, facilitates interdepartmental and intradepartmental support, assists industrial mobilization planning, and strengthens Government-industry relationships.

e. The Federal Catalog System applies to all items which are repetitively procured, stocked controlled, and subjected to central inventory management, reporting, distribution, or redistribution by any of the armed services. Excluded are items procured on a onetime basis for immediate use in research and development; items furnished by contractors under service contracts for consumption during overhaul and repair; certain forms, charts, manuals, and books; major end items for which management and control are exercised through oversea procurement and intended solely for oversea use; items procured only with nonappropriated funds; and subsistence items procured solely for resale.2 In addition, if an end item or assembly has 1, separate parts of which only 300 are repair parts for supply support, only those 300 items will be identified under the Federal Catalog System. The other components/parts are identified with the end item or system.

f. Each item included in the catalog is identified by an NSN consisting of a four-digit Federal supply classification and a nine-digit national item identification number. The descriptions of stock numbered items consist of the minimum data necessary to establish the essential and unique characteristics of each item, which not only make it what it is, but differentiate it from every other item of supply used by the Federal Gov

1 United States Congress, House Committee on Armed Services. Waste in Defense Procurement Including Testimony on H.R. 7405, Hearings Before the Special Subcommittee on Procurement, 82d Congress, pp. 3141-3711; and Supplemental Report on Hearings on H.R. 7405, 82d Congress, p. 1 (Washington: US Government Printing

2 DOD Directive 4130.2-M dated 31 March 1975, Federal Catalog System Policy Manual

ernment. DOD directs that each item of supply shall have applicable to it one, and only one, NSN.

g. The ASD(MI&L) is responsible for the overall administration of the system and for final approval of cataloging plans, policies, and programs, including policies and programs to obtain maximum use of the catalog system in logistics management. The Director of DLA administers the operations. The Secretaries of the military departments advise and assist on all elements of the system to insure its practical value, and participate in the development, establishment, and maintenance of the system.

11-23. The role of GSA

GSA is a partner with DOD in the administration of the Federal Catalog System. The Administrator of GSA has delegated authority for the central maintenance of the system to the Secretary of Defense. This mission is fulfilled by the Defense Logistics Services Center (DLSC). GSA has the responsibility, however, for the cataloging of all civil agency items. Special arrangements have been made with the Federal Aviation Administration and the US Coast Guard whereby they describe their items and forward them to the DLSC for stock numbering. Although these items are processed directly to DLSC, GSA receives immediate notification of all actions taken.

11-24. Defense standardization program

a. This program is administered by DLA. Its goal is to minimize the number of different items needed in the supply system, thereby achieving the optimum degree of interchangeability in repair parts and components. The program fosters development of uniform engineering practices, common specifications, and military standards, to be used both in design and in procurement. Standardized terminology and codes facilitate program applications, which are coordinated with the military services. Each defense supply center decides on and schedules those standardization projects to be accomplished and monitors the resulting progress.

b. To promote even more standardization, DOD established the Defense Materiel Specifications and Standards Board in 1973. The board’s responsibilities include authority to establish commodity-oriented study panels, recommend improvements in the standardization organization, develop changes to the Defense Standardization Manual, establish rules of procedure for the Standards Board, and, recommend resolution of problems which may arise.

c. The ASD(MI&L) is charged with the administration of the program. The military departments and DLA are assigned responsibility for those portions that are consistent with their capacity, supply interest, and mission. The responsible activity develops a program analysis which outlines detailed plans and schedules for achieving and maintaining standardization in assigned areas.

d. Initial efforts are directed toward item reduction; i.e., the elimination of unneeded items which are currently in the supply system. The next step is to further eliminate items by analyzing the varieties, types, kinds, and sizes. Such analysis is based on engineering criteria, needs, uses, military characteristics, and other fundamental factors. Consideration of industrial practices or coordination with the appropriate segments of industry are sometimes necessary.

e. The responsible standardization assignee, in coordination with the other departments, determines the feasibility and priorities for standardization of items. This determination is based on increased military effectiveness, improved computation of requirements, and improved logistics support and other benefits. Dollar savings accrue through improved interdepartmental servicing of interchangeable equipment; reduced distribution and maintenance costs; conservation of critical materials; increased availability during mobilization; and simplification of procurement. These advantages are realized by consolidating purchase requirements, increasing sources of supply to achieve an adequate production base, establishing appropriate levels of performance, improving design and producibility, and simplifying demands on industry.

f. In this regard. the Defense Standardization Program extends beyond the area of supply management and its related function of procurement. It encompasses the effective management of engineering data such as specifications, standards, drawings, standardization handbooks, qualified products lists, and engineering records. In all areas, its objectives are to improve readiness, conserve resources, minimize the variety of processes and practices, and in so doing, enhance interchangeability, reliability, and maintainability of military equipment.

11-25. The Role of DLA

a. DLA has the responsibility for administering a portion of the Defense Standardization Program under title 10, United States Code. DLA bears three types of responsibility: acting as standardization assignee, acting as preparing activity for item reduction studies, and, to a limited extent, acting as preparing activity for specifications and standards. The agency has redelegated certain of these responsibilities to applicable defense supply centers. As such, they monitor the preparation and revision of specifications and standards, schedule item reduction studies, monitor Standardization Status Codes assigned to new items upon entry into the supply

systems, and report to higher authority the accomplishments of the total program.

b. Through item reduction studies, DLA attempts to reduce to the greatest degree practicable, the number of sizes and kinds of similar items in the supply system. The aim is to save money and, at the same time, give effective support to the Armed Forces. It involves the assignment or revision of Standardization Status Codes based on technical review of an item's characteristics. Decisions to eliminate items are always coordinated with the using military services. All supply centers prepare item reduction studies. Automated procedures at four defense supply centers facilitate production of the studies.

c. DLA operates only two official specifications and standards preparing activities. The Defense Personnel Support Center, Medical Directorate, prepares specifications and standards covering medical materiel, and the Defense Industrial Plant Equipment Center prepares specifications and standards covering plant equipment in the industrial inventory. The using military activity prepares specifications for plant equipment used in fixed applications and by operating forces. It is true that the Defense Electronics Supply Center prepares specifications and standards for electronic parts. However, this center is not an official preparing activity, but acts as agent for the military services. Other supply centers frequently prepare draft specifications to cover recommended changes, and submit them to the responsible military service preparing activity. They also comment on proposed specifications and standards prepared by military services for items in those supply classes which are managed by DLA.

d. A program for control of nonstandard parts is in operation at the Defense Electronics Supply Center and the Defense Industrial Supply Center. The Parts Control Program encourages items standardization during the system design stage, where Government and industry experts see the greatest potential for reducing acquisition and life-cycle costs.

e. One of DLA's field activities, the DLSC, has the task of accumulating and maintaining the Federal Catalog System data on each item required for supply operations. Initially, the data included in the catalog consisted primarily of a description and an identification number. In most cases, other readily available data such as size, weight, and cubage were also included in the file. With these data, DLSC concentrated at first on the process of item identification, the assignment of stock numbers, and the dissemination of information thereon.

f. It became evident almost from the start, however, that the collection and interchange of other data would enhance the catalog's usefulness. Additional information was subsequently added to the Federal Catalog System: freight classification, cataloging responsibility, inventory management, supply status, procurement status, and standardization status. With these inclusions, the files grew from 1.4 billion characters of information in 1962 to 7 billion characters. As a consequence, the Defense Integrated Data System Program was developed to consolidate the separate files into a single integrated management information bank, and the bank was expanded to a capacity of 13 billion characters of logistics data. Information will be available to all supply management agencies, civil agencies of the US Government, and friendly foreign governments for assistance in their materiel control functions. Furthermore, the information will facilitate many improvement programs.

g. The Defense Logistics Services Center also maintains a bank for worldwide data concerning the Defense Retail Interservice Support Program. Recorded savings, as a result of approximately 5,000 Interservice Support Agreements, were $40.4 million for Fiscal Years 1975 through 1978. Military services and defense agencies report the necessary data in accordance with DOD Manual 4000.19-M.

h. The ASD(MI&L) has long recognized the need for a common supply data information system for all elements of DOD, and has taken the lead in sponsoring such a system and modifying it as more sophisticated supply management techniques have been developed. Without this aggressive sponsorship, many of the advances m supply management would not have been possible.

11-26. Item Entry Control Program

Controlling the entry of items into the various supply systems has long been a troublesome problem. In 1961, ICPs were directed to screen all new procurements against items already stocked. The program was further strengthened by establishment of the DOD Item Entry Control Office in DLA during Fiscal Year 1964. Initially, the program was applied to 76 selected high growth Federal supply classification classes at 10 designated defense technical review activities. Upon implementation of the Defense Integrated Data System at DLSC, the defense technical review activities were deactivated. Policy with regard to the program is in DOD 4130.2-M, Federal Catalog System Policy Manual. It directs all originators/submitters of catalog data to establish effective controls to prevent unessential new items from entering the supply system. The program involves the technical review of items against items already in the system. This review is by manufacturer's part numbers and technical characteristics, and is applied against items being retained for military service management. For items managed by DLA, the technical review is accomplished prior to the assignment

of a new stock number and is applied to all Federal supply classification classes. Service-managed items in DLA-assigned classes flow directly to DLSC.

11-27. Item management coding

a. Management of a single item by more than one manager is inefficient for obvious reasons. When DLA was initially established, DOD sought to preclude duplication in management by setting forth specific criteria for guidance in determining whether or not a specific item should be assigned or coded to DLA for integrated management. Prior to 1 July 1965, tailored sets of criteria were developed for each broad commodity area to be subjected to integrated management on a selected basis. On 1 July 1965, DOD placed in effect revised policies and criteria, developed at the request of the military services, which would be used for the item management coding for every stock numbered item in classes assigned for integrated management. Excluded from such procedures are complete commodity assignments such as clothing, medical, and subsistence items. In effect, these criteria direct the transfer from service management of every active item in those classes assigned to DLA for integrated management unless the item is:

(1) A major end item of equipment.

(2) A reparable item.

(3) An item that is already managed on an integrated basis by a single agency other than DLA.

(4) An item requiring issue approval because of design/engineering reasons.

(5) An item supporting a nationally vital program.

(6) An item unstable in design.

(7) A source-controlled item.

(8) An item not normally replenished through wholesale supply channels.

(9) An item directly related to weapons systems and not covered by specifications or commercial standards.

(10) An item vital to the performance of an essential mission.

b. A service desiring to retain management of items under criteria 5 and 10 must obtain specific approval of the ASD(MI&L) on a case-by-case basis. Prior to assignment of an item management code, the managing service reviews requirements for the item. If it is found to be inactive, coding is not necessary, but the service must then advise DLSC that it is no longer interested in retaining the item’s NSN in the active files.

c. Item identifications are described in accordance with the appropriate Federal Item Identification Guide (FIIG) and transmitted to DLSC by AUTODIN.

11-28. The Federal Item Identification Guides

The FIIG Improvement Program was initiated to provide improved logistics support. Designed to give more and better data on individual items of supply, it represents a major overhaul of the descriptive patterns previously used in cataloging items. The improved guide was selected because it was the best system for the orderly determination, collection, and transfer of item characteristics and interchangeability and substitutability criteria to a mechanized item intelligence bank. In machine-sensible coded form, the data are readily available for retention, conversion, and dissemination to users as required. The FIIGs include those data requirements specified by engineers and specialists in procurement, standardization, and supply to satisfy particular technical or managerial needs. These guides insure the preparation of a more comprehensive logistics data record package for each item of supply and, most important, make it possible to process the data entirely by machine.

11-29. North Atlantic Treaty Organization (NATO) codification

a. In March 1966, DLSC established an International Codification Division to perform or monitor the cataloging services rendered by the US Government to NATO nations and other friendly foreign governments. One of the main functions of this division is the preparation of item identifications for items procured by foreign governments from manufacturers in the United States, which have not previously been identified or assigned stock numbers in the Federal Catalog System. This division also acts as a central collaborating activity for revisions or cancellations of item identifications on which a foreign government is recorded as a user.

b. As of 31 December 1977, the DLSC file has recorded over three million management registrations to 12 NATO countries, seven other friendly foreign governments, and four NATO agencies. The quantity of management registrations by country or agency is shown in table 11-2.

11-30. Defense Integrated Data System

The Defense Integrated Data System, which was implemented in March 1975, exploits the latest technological developments in ADP and communications, and embraces most of the functional missions currently assigned to DLSC. The objective of the system is to provide maximum support to defense activities, civil agencies, and foreign governments with a wide selection of tailored logistics data products and services necessary to their supply support missions. Data products and services emanate from a large ADP complex which uses and maintains a massive, integrated bank of logistics data. Among the supported functions are item identification, interchangeability and substitutability, traffic

Table 11-2. Participation in the US Cataloging System

NATO COUNTRIES			
Belgium	230,701	Italy	69,381
Canada	353,580	Netherlands	312,754
Denmark	213,266	Norway	280,404
France	318,450	Portugal	36,930
Germany	773,341	Turkey	5,538
Greece	210,588	United Kingdom	273,287
OTHER FOREIGN GOVERNMENTS			
Australia	536,572	Philippines	21*
Brazil*	60	South Korea	671*
Israel	24,881	Spain	293*
Egypt*	7,436	Saudi Arabia	22,033*
Kuwait	66,074	Singapore	90,509
New Zealand	139,602	Sudan*	1,314
NATO AGENCIES			
Logistics Working Group			107,220
NATO Supply Center			134,545
NATO International Commission Supply Management Agency			1,438
SHAPE			93

*Catalog services are not furnished these foreign countries. User registration in the central files was recorded by the US military services under the FMS Program.

management, and supply management. By agreement, DLSC furnished to the Defense Property Disposal Service the ADP resources which support the reutilization and marketing functions.

11-31. Interchangeability and substitutability

a. The basic test of interchangeability and substitutability is the determination of item similarity or identicality. Functional and physical characteristics may reveal equivalency in performance, reliability, and maintainability. Items of similar or identical characteristics can then be interchanged without alteration to themselves or to adjoining items, except for adjustment.

b. Section II of the FIIG provides criteria for the determination of item interchangeability. These criteria consist of data ranges, conversion formulas, and decision rules. For purposes of NSN assignment, items deemed interchangeable are considered duplicates to which the same number should apply; those items revealed to be duplicates result in "cancel duplication" action. Substitutability and preferability criteria will not be used in NSN assignment, but will be available for use by other logistics functional areas.

11-32. Defense Inactive Item Program

Another facet of the overall effort to accelerate reduction of the total number of items carried in the Federal Supply Catalog is the Inactive Item Program. The program was initially instituted by DLA to monitor and purge its supply system of obsolete, nonstandard, and low or nondemand items. Such phenomenal results were produced over a relatively short period that DOD Directive 4140.32 was issued in February 1968 establishing a Defense Inactive Item Program. This directive, in effect, paralleled the DLA program and required all items of supply (including service-managed items) carried in military inventories to be subjected to review for inactivity on a progressive and systematic basis. Essentially, the Inactive Item Program provides for continuing examination of items carried in inventory. Items are programed for selection for review based on no demands being experienced during a 24-month period after becoming mature (7 years after system entry date). Each item selected for review is subjected to a thorough analysis to determine reasons for inactivity, and coded for retention or deletion, as appropriate. Inventory managers are authorized to cite items for retention by application of retention reason codes which insure continuous stockage required to support current weaponry or other mission objectives. Examples of retention reason codes are newly provisioned items, insurance items, mobilization reserve items, and MAP items required to support friendly foreign governments. Items coded for review at 12-month intervals after the initial review are based on continued inactivity until a delete decision is registered.

Section VIII
Defense Automatic Addressing System

11-33. General

In 1965, the ASD(MI&L) approved the Defense Automatic Addressing System (DAAS) as a permanent part of the logistics pipeline. The system automatically routes MILSTRIP and MILSTRAP documents with direct online connections to AUTODIN of the Defense Communications System. In 1976, DOD Directive 4000.25 established DAAS and directed its use in all logistics systems.

11-34. Principles and concepts

a. Today the DAAS functions at two locations (the Defense Electronic Supply Center, Gentile Air Force Station, Dayton, OH; and the Defense Depot, Tracy, CA). It functions as a real time random access multiple processing system with direct computer connections to all of CONUS AUTODINs and provides the "electrical pulse" input and output required to handle a high volume of documents. The system operates on a 24-hour 7-day week basis processing over a million documents

per day.

b. DLA administers this system under the provisions of DOD Directive 4000.25. The DAAS Office is a management support activity of DLA and operates within the parameters of the other Military Standard Logistics Systems. A system administrator works with the designated military services/ agencies to provide procedural and operational guidance.

c. The system's strong point is its capability to "address" and "communicate" rapidly. Based upon this capability, and its position in the logistics pipeline, additional functions related to "addressing" and "communicating" have been progressively assigned to the office over the past years to be operated in conjunction with the DAAS. The following functions have been assigned:

(1) *Automatic mail system.* The DAAS has the capability of receiving transmissions from the military services/agencies by way of AUTODIN and retransmitting by way of the US Postal Service, to DOD elements who do not have electronic communications service.

(2) *DOD activity address directory system.* The DAAS Office has the responsibility for automation and maintenance of this system, under the operational guidance of a system administrator.

(3) *MAP address directory system*. The DAAS Office has the responsibility for automation and maintenance of this system, under the operational guidance of a system administrator.

(4) *Defense European and Pacific redistribution activity*. This activity operates as a division of the DAAS Office, under the operational guidance of the MILSTRIP system administrator.

(5) *Military Routing Identifiers.* The Military Routing Identifiers are mechanically maintained and published by the DAAS Of flee as supplement 1 to MILSTRIP, under the DOD MILSTRIP system administrator.

(6) *MILSTEP DOD central data collection point*. At the Tracy element of the DAAS Office, transportation data are accumulated for preparation of the supply and transportation reports. Operation guidance for the collection point is provided by the MILSTEP system administrator.

(7) *Other functional assignments*.

(a) NSN editing of requisitions.

(b) Return of requisitions for local procurement. This is used primarily by the Navy.

(c) Conversion of part number requisitions to NSN requisitions.

(d) Processing interfund billing documents.

(e) Editing notice of availability documents for FMS.

(f) Furnishing images of all Army logistics documents flowing through the system to the Logistics Control Agency for the Army Logistics Information Files.

d. The DAAS performs many services for the customers, but always the prime mission is getting the logistics documents to the right source of supply with the least practical delay in time. The military services and agencies have recognized the system capability and are using the system to the maximum. In addition, there is a continuing effort being made to open new markets for the effective utilization of available materiel and to uncover additional sources of such materiel which might be effectively screened against existing requirements.

11-35. DOD activity address directory

The DOD Activity Address Directory System provides identification codes, clear-text addresses, and selected data characteristics of organizational activities needed for materiel requisitioning, marking, shipping document preparation, billing, and similar applications. The master activity address file is maintained by DLA and contains data for each organizational activity identified for logistics purposes, activities of other Federal agencies with which DOD maintains logistics support arrangement, and each commercial organization which enters into supplies/ services contract with DOD. Each Government organization is identified by a code which is assigned by the DOD component having jurisdiction over the organizational entity. Identification codes for commercial organizations are assigned by that component which enters into materiel/services contracts with the commercial organization. The directory, DOD 4000.25-D, is comprised of three parts and is published on microfiche. Part I, Code to Name, and part II, Zip Code Sequence, are issued in one publication. Part *III*, Civil Agency Addresses, is issued as a separate publication.

11-36. MAP address directory

a. This system provides for the establishment, maintenance, publication, and rapid dissemination of addresses required for FMS and Security Assistance Program grant aid shipments and addresses for distribution of related documentation.

b. The MAP Address Directory, DOD Directive 5105.38-D, contains the addresses of country representatives, freight forwarders, and customers within country required for releasing FMS and Security Assistance Program grant aid shipments, and addresses required for distribution of related documentation. The addresses in the directory are furnished by representatives of foreign governments for use in receipt of materiel purchased under the FMS Program and by US Military Assistance Advisory Groups for receipt of materiel under the MAP Grant Aid Program.

Section IX
The Defense Retail Interservice Support Program

11-37. Scope

a. The Defense Retail Interservice Support Program is designed to promote and encourage Interservice support involving materiels services, and sometimes manpower between retail activities primarily at: bases, posts, camps, stations, and installations of DOD and participating non-DOD elements. The primary purpose of the program is to either provide or obtain various kinds of support from such activities in order to achieve efficiency and economy in their operations. The scope includes administrative and logistical support services such as legal, personnel, utilities, mortuary, and stevedoring, to name but a few. Also included are supply and/or maintenance support services such as aircraft, vehicles, missiles, and parachutes among others.

b. DOD Directive 4000.19, dated 27 March 1972, Interservice, Interdepartmental, and Interagency Support, established the Defense Retail Interservice Support Program. DOD 4000.19-M (Defense Retail Interservice Support Manual) implements the program, which is coordinated by DLA. Each service manages its own program.

c. The basic objective of this program is to provide local commanders with a means of improving their operations by maximizing the effective use of support services available in geographic areas worldwide where more than one different military or defense agency operates. Changes to the program in 1982 make participation in area studies conducted by the joint Interservice resources study groups (JIRSG) mandatory. JIRSGs report through assigned major commands to their service departmental headquarters.

d. The numerous diversified type of retail level support services recorded substantiate the fact that the Defense Retail Interservice Support Program has no relative boundaries and is unlimited with respect to affecting direct/indirect savings of defense dollars.

e. The Defense Retail Interservice Support Program is an ongoing DOD program which encourages and supports maximum use of support services. As constituted, the program provides visibility of existing support services and identifies potential duplication of functions and facilities within and among DOD and the Federal agencies. Total dedication to the objectives of the program will result in the elimination of duplications that would enhance administration efforts to shrink the overall Government budget and protect the DOD capability of maintaining a sound defense posture.

Section X
Military Standard Billing System

11-38. General

The Military Standard Billing System (MILBILLS) provides standard mechanized procedures and formats to be used by DOD components for billing, collecting, and related accounting for sales of materiel from supply system stock, including direct deliveries. These standard procedures also provide a mechanized means for processing, billing, collecting, and accounting actions for GSA sales to DOD components. DLA has established the DLSSO to administer this system under the provisions of DOD Directive 4000.25. Details of the system are contained in DOD 4000.25-7-M which was implemented in July 1973. The ASD(Comptroller) provides policy guidance through DOD Instruction 7420.12, "Billing, Collection, and Accounting for Sales of Materiel From Supply System Stock," and DOD 7290.3-M, "Foreign Military Sales Financial Management Manual" and directs the implementation and compliance throughout DOD.

11-39. Applicability

a. The mechanized billing, collecting, and related accounting procedures apply to DOD sales from inventory of stock funds and appropriation financed materiel within DOD, including transfers to MAP, Grant Aid Program, and FMS with certain modifications as outlined in DOD Instruction 7420.12.

b. The procedures do not apply to sales to individuals, nonappropriated fund activities, State and local governments, commercial firms, and FMS (except as indicated in the detailed procedures), and sales of major end items (complete aircraft, ships, tanks, space vehicles, and missiles), and orders handled by military interdepartmental purchase requests. In cases where only limited materiel sales occur between DOD activities, it may be more expedient to process billings through use of SF 1080, Voucher for Transfer Between Appropriations and/or Funds.

11-40. Procedures

MILSBILLS provides procedures for: Billing for Sales of Materiel-Interfund; Billing for Sales of Materiel-Noninterfund, Billing for Accessorial/Services Charges; Billing Credits for Materiel Returns; Retail Loss Allowance; Billing Adjustment Requests and Responses; and Billing-Office-Transportation Handling and Marking Surcharges for Oversea Shipments (GSA only).

11-41. The Defense Precious Metals Recovery Program

The Defense Precious Metals Recovery Program was assigned to DLA 1 October 1974. The program assimilates three previous existing programs: The Navy Silver Reclamation Program, the DLA Gold Recovery Program, and the GSA Platinum Recovery Program. It proposes to improve and expand the prior programs by item identification, industrial surveys, acquisition and placement of collection and recovery equipment, and recovery of gold, silver, platinum, and the platinum family of precious metals. Its goal is to maximize the use of refined precious metals for authorized internal use or as Government-furnished materiel in defense contracts to reduce procurement costs. It is a totally self-sufficient program, identifying all costs of recovery and recovering those costs from the sale of the refined products.

11-42. The Defense Materiel Utilization Program

This program acts as the central clearinghouse of information to improve the use of excess assets throughout DOD and other Federal agencies.

11-43. The Coordinated Procurement Program

This program assigns procurement of similar items used by defense components and civil agencies of the Federal Government, DLA, GSA, or the military department. This integrated program precludes duplication of procurement of similar items in the Federal Government.

Chapter 12
Assignment of Supply Responsibilities

12-1. Assigning supply responsibilities in the Army

a. Overall policy governing Army supply management is developed in the offices of the Secretary of the Army and Army General Staff. These offices also control expenditures and exercise selective management over critical items of materiel. Operating policy and additional controls over the flow of supplies are applied by Headquarters, US Army Materiel Command (AMC); Headquarters, US Army Information Systems Command; Office of the Chief of Engineers; Office of the Surgeon General; and Headquarters, US Army Intelligence and Security Command. The principal inventory management activities that perform the functions of cataloging, requirements determination, procurement direction, distribution planning, maintenance management, and materiel utilization and disposal are the materiel readiness commands of the US Army, the Defense Logistics Agency (DLA), US Army Information Systems Command, and the General Services Administration (GSA). Worldwide inventory management focuses at these points.

b. The Office of Federal Supply and Services and the defense supply centers perform inventory management functions for GSA and DLA, respectively. Service item control centers are the information exchange points between the Army and DLA or GSA for those items managed by them.

c. At the installation level, inventory management is concerned with establishing a requisitioning objective for each item, the flow of documents, stock replenishment, authorized local procurement direction, and distribution to supported organizations.

d. In oversea theaters, policy direction comes from unified command headquarters (under the directive authority of unified commanders) and theater Army headquarters. The organization for supply management depends on the theater and the mission. There usually is a reasonably secure rear area where a theater materiel management center and general support units can be located. The theater Army materiel management center provides theaterwide inventory management for those items designated by the theater Army for intensive management and allocation which includes determination of requisitioning objectives, managing requisitions, replenishing theater stocks, directing off-shore procurement, and managing the distribution of these selected supplies. Rebuild and overhaul is coordinated with applicable materiel readiness commands in the Continental United States (CONUS). Similar functions may also be accomplished by corps support commands and their materiel management centers. Forward of this point, supply management functions are usually limited to maintaining authorized stock lists (lists of items authorized to be stocked at each supply point), establishing stock reorder points, and managing requisitions.

12-2. Commodity organization

The operating commands of AMC are commodity-oriented organizations charged with the management of items peculiar to their respective missions. These operating commands, commonly known as materiel readiness commands, have within their organization commodity management centers commonly referred to as national inventory control points (NICPs). The NICPs are responsible for the national level management of inventories of assigned commodities. The inventory managers at the NICPs are responsible for the management of those items which are assigned to them. The NICPs perform the following functions.

a. Cataloging direction.
b. Requirements determination.
c. Procurement direction.
d. Distribution planning.
e. Maintenance direction.
f. Materiel reutilization and disposal.

12-3. Cataloging direction

The inventory managers in the Army NICPs are responsible for insuring that items are properly cataloged and recorded in the appropriate working file sections of the Army Central Logistics Data Bank so that the worldwide customers will know what the item is, what the item does, what stock number to use, what the unit cost is, and where to submit requests for the item. Although OLA has responsibility for maintaining the Federal Catalog System files at the Defense Logistics Services Center (DLSC), located at Battle Creek, Michigan, the individual inventory managers have responsibility for initiation of cataloging actions for items they manage and for changes to the catalog data.

12-4. Requirements determination

The inventory managers at the Army NICPs are responsible for insuring that all peacetime and mobilization requirements are funded for and are available to meet projected demands. The authority vested in inventory managers and the degree of review by higher authority are related closely to the criticality of items involved, category of funds to be expended, and the dollar value of projected procurements.

12-5. Procurement direction

Army inventory managers have the authority to direct procurement to be accomplished, subject to limitations

of approved programs and direction from higher authority.

12-6. Distribution planning

Army inventory managers control CONUS depot stocks and, for selected secondary items, they exercise some control of stocks located in CONUS posts, camps, and stations, and oversea depots, subject to parameters established by the Department of the Army (DA). This function involves the control of inventories to insure they are adequate, but not excessive, and that they are strategically located so as to be most responsive to customer demands.

12-7. Maintenance direction

Army inventory managers forecast the quantity of items which will need overhaul. In computing supply requirements, all assets (serviceable and economically reparable) are considered. Close coordination between inventory managers and maintenance managers is necessary because the supply of serviceable items may depend upon overhaul capacities and timely programs.

12-8. Materiel reutilization and disposal

Army inventory managers are required to insure that excess or obsolete stocks are removed from the system. They are responsible for the declaration of excesses and, when the materiel have been declared excess to DOD, taking further action to effect disposal. The inventory managers participate in the DOD Materiel Reutilization Program to insure proper utilization of excess stocks prior to disposal.

12-9. Project management

The project manager is responsible for coordinating actions among those inventory managers whose assigned items are used in support of the projectmanaged system.

12-10. Assigning supply responsibilities in the Navy

a. Central item management control of Navy material is performed by the inventory control points (ICP). They are under the management control of the Naval Supply Systems Command and the other bureaus, systems commands, or offices. Their principal functions are provisioning and inventory control. In performing these functions, a number of other actions must be taken beginning with identification of items required, the collection of technical data, item selection, the development and maintenance of allowance and load lists, the determination of system support requirements, cataloging, packaging and preservation, pricing, procurement, distribution, accumulation of usage, demand and maintenance data, the adjustment of replacement factors, and determinations with regard to retention and disposal. Thus, information flows to the ICP from many sources. The bureaus, systems command, or offices relay and augment information received from the Chief of Naval Operations and Commandant of the Marine Corps relative to the composition and deployment of the operating forces. In addition to the bureaus, systems commands or offices provide engineering and technical information. The stock points provide input at specified intervals regarding demand data and future local requirements. The fleet provides information on usage and allowance and load lists. Finally, it is the evaluation of these data that forms the basis of the many decisions required of a inventory manager.

b. From provisioning through disposal, there is a merging of relationships within the ICP that includes the Chief of Naval Operations, the Chief of Naval Material, the Fleet Commands, and the bureaus, systems commands, or offices. For the purpose of carrying out responsibilities of the many parties involved in the effective support of the equipment making up naval weapons systems, the Navy has developed and implemented the program support/ supply support concepts.

c. Program support signifies that a single ICP will insure that the Navy, DLA, or other integrated inventory managers accept the responsibilities for furnishing all repair parts that are required for the operation and maintenance of an equipment assigned to that ICP. Supply support, in relation to program support, signifies that an ICP assigned or accepting responsibility for an item will stock the item in its segment of the supply system or make sure that it is available from commercial sources or from other Government agencies.

d. Within the Navy, program support assignment usually is made to the ICP having principal cognizance over the material area involved; e.g., Aviation Supply Office for aviation; Ships Parts Control Center for ships, ordnance, electronics, and submarines. These ICPs are primarily responsible for peculiar repair parts support of assigned major equipment. Certain common commodities which are required for support of programs of the various military services are assigned, on a Federal supply class basis, for integrated management by defense supply centers or other integrated managers. The Navy program ICP may retain management responsibility for reparables, end items, and repair parts essential for support of assigned equipment installed in critical weapon systems, even though they fall within classes assigned to DLA for integrated management. The selection of these retained items is done in accordance with item management coding criteria established by the Department of Defense (DOD). The

program support ICP also submits supply support re-quests to the other Navy ICP or to ICPs in the other services for items which they manage. In the latter case, the other service manager is designated as the weapons integrated material manager/primary inventory control activity which furnishes supply support to all users of the item. Likewise, the Navy ICPs may serve as weapons integrated material managers/ primary inventory control activity for specific items, thereby providing support to other service users, as well as to Navy customers. The assignment of items to a particular service ICP for integrated management is also accomplished in accordance with DOD-approved criteria.

e. The material under the control of the Navy, DLA, or other inventory manager is identified by a cognizance symbol. For example, symbol 1H identifies certain shipboard type items under the control of the Ships Parts Control Center; symbol 2R identifies certain items controlled by the Aviation Supply Office; symbol 9N identifies Navy retail stocks of electronics items under management of the Defense Electronics Supply Center, a DLA activity; symbol 9A identifies Navy retail stock of tactical/transport vehicle items under management of the US Army Tank-Automotive Command (TACOM). The numerical portion of the cognizant symbol indicated that particular store’s account in which the item is carried (odd numbers for Naval Stock Fund Account and even numbers for Appropriation Purchase Account).

f. Under the program support concept, a bureau, systems command, or office looks to the program support ICP for repair parts support of an item of equipment. When program support for an item of equipment is assigned to an ICP, it acts as the agent for the cognizant bureau, systems command, or office and Naval Supply Systems Command to perform the function. Having program support, the ICP generally retains inventory management responsibility for repair parts peculiar to the equipment; other items are assigned to the other Navy ICP, or integrated managers for supply support on the basis of their material cognizance.

g. To enhance the effectiveness of the supply system in supporting specific equipment of the operating forces, the other bureaus, system commands, or offices and Naval Supply Systems Command enter into agreements for providing timely information on equipment programs and technical data to ICPs assigned program support responsibilities. These agreements provide for furnishing in the following areas:

(1) Equipment population and deployment.

(2) Type of support required (including allowance and load list responsibilities),

(3) Equipment programs indicating new procurement and planned requirements.

(4) Equipment provisioning policies (including design changes and afloat and ashore maintenance/repair capabilities).

h. "Provisioning" or the development of the initial supply support for new weapon systems or equipment is under the administrative management of the program support ICP, which is responsible for integrating the basic technical documentation provided by the contractor; the technical decisions such as failure rates, maintenance levels, and equipment/part essentiality; program data such as planned operating schedules and end item population; and basic logistics support policies to arrive at the range and quantity of spare and repair parts required for each echelon to meet the readiness goals established by the Chief of Naval Operations. The ICP gives operational meaning to the ranges and quantities determined in the provisioning process bit generating allowance lists and supply aids needed by operating units (ships and shore stations) to identify and requisition storeroom stock, and statements of material requirements. The material requirements statements are expressed in the form of orders placed directly on industry for the items to be managed by the program support ICP and supply support requests directed to the appropriate inventory manager for those items identified for integrated material management.

12-11. Assigning supply responsibilities in the Air Force

a. Overall supervision and coordination of supply matters is achieved at Headquarters, US Air Force where every phase of activity is represented.

b. The Air Force Logistics Command has been assigned the responsibility for wholesale logistics support for Air Force commands and units. This includes specialized logistics training, technical guidance, control, and supply support in all its aspects.

c. The depot system of the Air Force Logistics Command is the heart of the Air Force supply system. At major command level, the director of logistics (in some major commands the Deputy Chief of Staff for Logistics (DCSLOG)), as a member of the headquarters staff is charged with planning for and supervising the logistics support for the entire command. If the command is divided into numbered Air Forces, the director of logistics at each Air Force headquarters has similar responsibilities. The pattern applies through all echelons down to, and including the wing. Each Air Force base within a major command has its own supply organization to serve the units stationed at that base. Oversea bases have precisely the same responsibility its their counter-parts in CONUS. Supply responsibilities are, in other words, an integral part of the operation of every level of command.

d. At the same time, the many supply organizations in the Air Force, from the depots of the Air Force

Logistics Command through supply activities, are closely dependent upon each other. The Logistics Command, for example, relies or, its customers for information on issue experience, on the status of onhand inventories, and on unsatisfactory performance of equipment.

12-12. Headquarters, United States Air Force

a. The responsibility that Headquarters, US Air Force has for supervising and planning for supply management is centered in the Deputy Chief of Staff for Logistics and Engineering and the directorates under his control. This group is essentially a planning and policymaking agency, charged with establishing broad guidance and plans in the supply field for the Air Force as a whole.

b. The Directorate of Maintenance and Supply, which operates under the Deputy Chief of Staff for Logistics and Engineering, has the following major supply responsibilities: issuing policy directives for supply and service functions and insuring that implementing action is taken; and participating in the review of quantitative materiel requirements submitted by units in their budgets.

12-13. Air Force Logistics Command

a. In relation to the Office of the Deputy Chief of Staff for Logistics and Engineering, at Headquarters, US Air Force, which does broad planning and establishes the policy for materiel activities, the Air Force Logistics Command is charged with the task of providing technical supervision, to materiel activities.

b. In general, the Air Force Logistics Command is the central repair parts procurement, supply, and maintenance agency. It might be called the materiel "wholesaler" for the Air Force, as it actually stores, distributes, and repairs almost all aerospace and ground equipment and supplies for which other commands are "retailers" or "consumers". This responsibility includes such tasks as computing materiel requirements, preparing and defending budgets, letting contracts, and performing or contracting for major maintenance.

c. For Air Force-used items which qualify for item management assignment to a Defense Supply Center the Air Force Logistics Command has several responsibilities. It represents the Air Force in, implementing the DOD item management coding program by insuring that coding criteria are followed, regardless of whether the item is already in the inventory or is entering as a new item through provisioning. For those items coded for transfer to a defense supply center from an Air Force Logistics Command wholesale manager, the command arranges transfer details and asset decapitalization and attrition. Further, Air Force Logistics Command provices the gaining DLA manager with required technical and procurement history data, engineering support, and other special requirements. The Air Force Logistics Command is responsible for submission and receipt of military interdepartmental purchase requests under the guidelines of coordinated procurement assignments. Each major command (e.g., Strategic Air Command, Tactical Air Command, Air Force Logistics Command) is, however, responsible for computing its own materiel requirements and the funds needed to obtain items managed by each defense supply center.

d. The Air Force Logistics Command established policies and procedures for procurement, supply, quality control, maintenance, transportation, and other functions of an integrated materiel system. For this purpose, it publishes a series of manuals and directives like the US Air Force Supply Manual 67-1. It also sends out coordination teams periodically to visit bases and consult on supply procedures and problems.

e. The command currently operates five supply depots in CONUS. These are collocated with the headquarters of the Air Logistics Centers, which control the storage operations and provide logistics assistance to Air Force activities within their areas of responsibility. The Air Logistics Centers are worldwide managers for the commodity classes and weapon systems assigned to them.

f. There are two principal individuals who support the logistics effort of the Air Logistics Centers and Air Force Logistics Command. The first is the system manager and the other is the item manager.

g. A "system" can be defined as a composite of equipment, skills, and techniques that form a combat instrument, usually with an aerospace vehicle as its major operational element. The complete weapon system includes all related facilities, equipment, materiel, service, and personnel required solely for the operation of the aerospace vehicle, so that the instrument of combat becomes a self-sufficient unit of striking power in its intended operational environment. The system management concept was developed to improve materiel distribution and insure the prompt support of the selected vital weapon system.

h. The assignment of system manager responsibilities to an Air Logistics Center is based on many considerations, including characteristics of the new system, the geographical location of the planned using command, optimum use of existing Air Force Logistics Command facilities and capabilities, and compatibility with current and future system assignments. In addition to these factors, others are considered such as the availability of system manager work force skills, the item management and special repair activity relationships, and the recommendation of the Headquarters, Air Force Lo-

gistics Command staff.

i. The title "system manager" identifies the individual appointed by the Air Logistics Center commander to insure that the actions necessary to carry out the support responsibilities are in consonance with the program objectives, Air Force Logistics Command policies, and the needs of the using commands. The using commands experiencing difficulties in obtaining satisfactory support for a specific system refer their problems to the appropriate system manager as the single focal point for all system support. The system manager evaluates and analyzes the problem areas and, in turn, initiates appropriate actions with the item managers, other Air Logistics Center activities, or any other source to correct the deficiency.

j. The specific province of the system manager is to operate through the existing Air Force Logistics Command functional organizational framework rather than having all of the logistics support resources (e.g., facilities, finances, and personnel) under their direct control. System manager responsibilities include the scheduling and chairmanship of the source coding and provisioning repair parts conferences for the system, determining the range of items to be accumulated in the weapon system’s storage site, providing guidance to the item manager for developing and subsequently implementing follow-on support plans, and developing and determining modification and repair schedules for the system. The system manager also budgets for, and initiates, any fleet modernization program that may be required after the system has been delivered to the using command.

k. The other keystone in the logistics effort of the Air Logistics Center is the item manager. His activities are largely influenced by those of the system manager. To understand the importance of this relationship is to understand the numerous involvements and exchanges that exist between these two management elements.

l. The direct system functions at the Air Logistics Centers are divided between those relating to the management of systems as total entities and those concerned with the management of individual items of hardware air supply required in support of the system as well as try handle other Air Force materiel needs. The item manager concept was developed by the Air Force Logistics Command to apply single-point control to hardware management.

m. The principle that guides the concept is to gather together under a single point all of the functions that relate the management and control of hardware material. The item manager’s functions include the distribution and redistribution of worldwide inventories, determining quantitative materiel requirements, and estimating the defending budgets. Additionally, the item manager responsibilities include provisioning, cataloging, repair programs, redistribution, storage, and related functions.

n. The functions of an item manager are the same regardless of which items are assigned or how the items are identified. Item manager responsibilities are assigned by Headquarters, Air Force Logistics Command on the basis of Federal supply classes, Federal supply groups, or individual items.

o. Each Air Logistics Center gives certain kinds of assistance to units within the area. These services include providing technical surveillance over base supply functions, sending technical assistance teams to bases, and monitoring the logistics phases of activation or inactivation of bases within the area.

12-14. Air Force bases

a. At a wing base, the Deputy Commander for Resource Management, as a member of the headquarters staff, plans for and supervises the logistics support for the wing. When an entire combat or training wing is stationed at one base, actual supply activities-as distinct from planning, supervisory, and staff responsibility-generally are centered in a single supply organization. This organization is standard at those bases which the Air Force converted to the Standard Base Supply System. The Chief of Supply heads up the standard organization and also serves as commander of the supply squadron on base. Under him there are the following branches: management and procedures; supply systems; customer support; materiel management; materiel storage and distribution; and fuels management. This organization does not change its basic form regardless of the size of the activity or base it supports. The standard system is cellular and has five basic configurations; however, the six basic branches and the squadron section are found at each base.

b. The Chief of Supply provides computer support to the base munitions account. Depending on the organizational structure of the base, he may also be the munitions accountable officer.

c. While the Chief of Supply provides the major part of the materiel support required on the base, there are other logistics organizations which provide logistics support to base activities. Among these are the commissary, base exchange, and mortuary service.

12-15. Assigning supply responsibilities in the Marine Corps

a. The flow of fundamental supply management policy is from the Office of the Secretary of the Navy (Shipbuilding and Logistics) to the Commandant of the Marine Corps.

b. The Commandant of the Marine Corps is responsible for the operation of the Marine Corps materiel

support system. The Chief of Naval Material, under the Chief of Naval Operations, is responsible to the Commandant of the Marine Corps. Medical and dental supplies are also provided by the Navy. For Marine Corps units in an expeditionary status, the Navy provides substantial subsistence and petroleum, oils, and lubricants support to the Marine Corps supply system. All other items are provided by the appropriate integrated materiel manager.

c. The Commandant has on his immediate staff the Deputy Chief of Staff for Installations and Logistics who establishes allowances of major end items, provides logistics policy guidance, and is responsible for the operation of the supply system; and the Fiscal Director of the Marine Corps who provides financial and budgetary policy and guidance.

d. Within Marine Corps headquarters, uniform policies and procedures are developed and promulgated directly to all field commands. For major items, Marine Corps headquarters has retained responsibility for programing, budgeting, requirements determination, procurement, and depot maintenance scheduling.

e. The Commanding General, Marine Corps Logistics Base (MCLB), Albany, Georgia, is responsible for operation of the Marine Corps single, centralized, ICP. He is also assigned responsibility for technical direction of the two Marine Corps remote storage activities (RSAs), located at MCLB, Albany, GA, and MCLB, Barstow, CA. In this capacity, he manages the Marine Corps Unified Materiel Management System, a depot-level or "in-stores" level of supply, having cognizance over all "in-stores" assets of the Marine Corps. The ICP performs the entire range of functions inherent in that type activity for all Marine Corps items, such as cataloging, item management coding, provisioning, accounting, distributing, managing supply, computing requirements, controlling reparables, disposing, and reporting.

f. The MCLB, in addition to their roles as RSAs, store and issue materiel, and operate depot-level rebuild facilities for overhaul or rebuild of Marine Corps equipment.

g. Marine Corps doctrine holds that supply is a function of command; therefore, accountability is inherent in command. Thus, although the "instores" portion of the supply system pushes supplies as far toward the point of consumption as is prudent, it is the responsibility of the commanding officer of each organization under uniform Marine Corps procedures, to perform his internal supply management, account for his materiel, requisition his needs, perform or seek maintenance, and dispose of his excesses.

h. Those assets held by the Fleet Marine Forces, whether by the combat, combat support, or combat service support units, are the responsibility of the respective organizational commanders and are not subject to redistribution by the central ICP. Fleet Marine Force organizations are responsible for entering into local interservice support agreements whenever this is operationally feasible and economical.

i. The normal sources of supply for a Marine Corps organization not part of the Fleet Marine Forces includes cross-servicing, mandatory procurement from GSA, Federal Prison Industries, or through coordinated procurement channels. It is the base commander’s responsibility to maintain a capability to secure supplies and materiel through these sources.

Chapter 13
Equipment Authorization and Control Systems

Section I
Equipment Authorization and Control Systems, US Army

13-1. The Army Authorization Documents System

a. The Army Authorization Documents System (TAADS) provides an automated system for developing and documenting organizational structure requirements and authorizations for personnel and equipment necessary to support the assigned missions of Army units. The system expresses organizational data required in all planning for Army organization, missions, personnel, and equipment in terms that are compatible with other Army management systems. TAADS provides a standard format for authorization documents, and provides a single channel for all troop and installation authorizations.

b. The basic documents involved are described in the following paragraphs.

(1) *Tables of organization and equipment (TOE).* These are planning documents which prescribe the normal wartime mission, organizational structure, and personnel and equipment requirements for type military units. TOEs are the bases for authorization documents (modification tables of organization and equipment (MTOE)). They normally contain documentation for three strength and equipment levels of 100 percent, 90 percent, or 80 percent, in consonance with the readiness system prescribed in Army Regulation (AR) 220-1. Each level represents a balanced organizational structure. Level 1 (100 percent) represents full requirements for sustained combat. Levels 2 (90 percent) and 3 (80 percent) provide balanced organizational structures of reduced capabilities from level 1 in terms of staying power in combat or ability to perform quantitative workloads.

(2) *Modification tables of organization and equipment.* These are authorization documents which modify the basic TOEs to meet the particular needs of a specific unit or type of unit. An MTOE is processed through one channel to simplify and facilitate control of requirements and authorizations at all command levels.

(3) *Tables of distribution and allowances (TDA).* These documents prescribe the mission, organizational structure, personnel and equipment authorizations, and requirements for which there are no appropriate TOEs. A unit may also be established under a TDA augmentation document to authorize additional personnel and/or equipment required for an MTOE unit performing an added non-MTOE mission.

(a) TDAs are manpower management tools used at the installation and other levels of command. They are used by commanders to review the distribution and utilization of manpower and other resources. They relate manpower and supply data to the program and budget which are maintained under the Army Management Structure, and aid in preparation of budget estimates and funding plans.

(b) Application of TDAs to the performance of the manpower and personnel functions in the Army vary according to the needs and operating procedures in specific commands. Requirements and authorization data for equipment and personnel are reflected in a unit's TDA.

(c) When changes in mission, capabilities, organization, personnel, or equipment become necessary a unit or installation organized under a TDA submits a change to the table in accordance with ARs 310-34 and 310-49.

(4) *Common tables of allowance (CTA).* CLAs provide an approved basis of issue for common items of expendable, durable, and nonexpendable equipment. The tables serve as authorization documents for items of materiel required for common usage by individuals and/or TOEs, TDAs, or joint tables of allowances units and activities Army-wide. A list of Pitas is contained in appendix C of AR 310-34.

(5) *Telecommunications requirement.* A telecommunications requirement is a statement of a requirement on which planning, programing, budgeting justification, and management evaluation is based for all nontactical telecommunications services, facilities, systems, equipment, and engineering and technical assistance. It is considered an authorization document until the equipment required for the project is operational, assigned standard line item numbers, and included in appropriate TDA. See ARs 105-22 and 310-49.

13-2. Types of property, property books, and reporting high-and low-dollar value Items

The provision of adequate quantities of supplies and equipment to the user is a command responsibility. To obtain these supplies and equipment, units and individuals must make their requirements known through the requisition process. To insure that units and individuals receive their authorized allowances and that the proper controls are exercised, supplies and equipment are divided into types. Additionally, various degrees of accountability are established. These controls reduce the administrative workload at the use and installation levels.

13-3. Types of property

Property under the control of installations, activities, and units, for the purpose of accountability, is classified as:

a. Real property. This classification includes land and interests therein, including buildings, piers, docks, warehouses, rights-of-way and easements, utilities systems, and all other improvements permanently attached and ordinarily considered to be real estate. It does not include machinery, equipment, or fixed signal communications systems which may be removed without impairing the usefulness of the structure. Real property is primarily an engineer responsibility.

b. Supplies and equipment. This classification includes all raw materials, commodities, manufactured articles, means of transportation, unit assemblies, and units of equipment procured, stored, or issued for the Army which have not become real property. They are further classified as:

(1) *Expendable items ("X").* Items regardless of type classification or unit price which are consumed in use. This includes all class IX repair parts; and items not consumed in use with a unit price of $50 or less, and are not otherwise coded "N" or "D" in the Army Master Data File.

(2) *Nonexpendable items ("N").* Items which are not consumed in use, retain their original identity during the period of use, and require that accountability be maintained throughout the life of the item. These include all nonconsumable end items authorized by MTOEs, joint table of allowance, TDAs, CTAs (except CTAs 50-970/8-100 and The Ammunition Management System authorization documents) or other authorization documents listed in paragraph 2-1, AR 310-34. These items are coded "N" in the Army Master Data File. Commercial and fabricated items similar to items coded "N" in the Army Master Data File are considered nonexpendable.

c. Organizational and unit level. Supplies at the organizational and unit level are broken down into six separate types for accounting purposes as follows:

(1) *Organization property.* Any property issued under authority of MTOE, deployable TDAs, and CTA items of equipment that are mission related. This class of property will normally accompany the organization during deployment and should not be confused with other installation property that will not accompany a deploying unit.

(2) *Installation property.* Equipment and supplies, except organization property, authorized in Army published authorization media for use by units, organizations, and personnel while stationed at an installation.

(3) *Expendable property.* See b(1) above.

(4) *Personal clothing.* This is the clothing initially provided to every enlisted man as a free issue or which is purchased by an individual. Policies regarding the issue and sale of personal clothing are contained in AR 700-84.

(5) *(Durable "D").* Items which are not consumed in use retain their original identity but are not categorized as nonexpendable or expendable. These are coded "D" in the Army Master Data File, and include nonconsumable components of sets, kits, outfits, and assemblages; all tools (Federal Supply Classes 5110, 5120, 5130, 5133, 5136, 5140, 5180, 5210, 5220, and 5280); and any other nonconsumable item with a unit price in excess of $50 not otherwise coded nonexpendable. Commercial and fabricated items similar to items coded "D" in the Army Master File are considered durable.

(6) *Capital property (fixed assets).* Capital property consists of real property, installed building equipment, and nonexpendable supplies (capital (plant) equipment and other equipment) which is classified nonexpendable in any Army supply manual or has the value of $200 or more per item and are not issued to TOE/TDA units to be accounted for on an organization's property book in accordance with AR 710-2.

(a) Capital (plant) equipment. Capital (plant) equipment is personal property of a capital nature consisting of machinery, equipment, furniture, vehicles, machine tools, and other production equipment, used or capable of use in the manufacture of supplies, or in the performance of services, or for any administrative or general plant purposes. See appendix B, Federal Acquisition Regulation (FAR).

(b) Installed building equipment (personal property).

1 Those items of accessory equipment and furnishings, including materials for installations thereof, which are required for operation and affixed as a part of the building or facility, such as fixed overhead crane runways; elevators; lavatories; plumbing, heating, ventilating, cooling, electrical, and sprinkler systems; communications systems less headsets; hot water heaters; garbage disposals; built-in furniture; and window-type airconditioning units installed in such a manner that removal would require reconstruction of the realty. See AR 420-17 and paragraph 3-2c, AR 735-72.

2 Also includes fixed line-protection systems, laboratory counters cabinets, and similar fixed equipment required to make the facility useable and are affixed as a permanent part of the structure.

(c) Equipment in place (personal property). Consists of capital (plant equipment, including supplies which do not meet the criteria of "capital property" but cannot he classified as "expendable" or "durable") of a mobile nature which has been fixed in place of attached to real property but which may he severed or

removed from buildings without destroying the usefulness of the structures. It does not include installed building equipment.

13-4. Property books

Section 401 of Public Law 81-216, requires that property records be maintained on both a quantitative and a monetary basis. The implementation of this section of Public Law has resulted in establishment of formal accountability at the installation level. The installation finance and accounting office maintains monetary accounts by using financial inventory accounting procedures and item accounting (stock record account) records maintained by the installation accountable property officer. These records are maintained on prescribed forms and show, by item, the receipt and disposal of property, the balance on hand, and other identifying or stock control data. The records may be maintained manually or by automatic data processing (ADP) equipment. The units have informal accountability and responsibility, and maintain records of all nonexpendable property on hand by line item. This record is maintained on Department of the Army (DA) Form 3328, Property Record, and Form 3329, Installation Property Record, and is called an organizational or installation property book.

13-5. Reporting requirements

To obtain manageable and meaningful supply data upon which to base decisions, the Army uses various reports with the two methods of reporting (quantitative reporting on a selective item basis and summary dollar reporting by materiel categories) discussed below serving as examples.

a. The Army Unit, Organization, and Activity Equipment Status Reporting System. The Army Unit, Organization, and Activity Equipment Status Reporting System is designed to have available for all echelons of command and logistics management, timely and accurate quantitative equipment status data for selected items on hand in a unit or organization. The items selected for reporting include major end items authorized by MTOEs and TDAs, and selected secondary items for which managerial control is mandatory to insure combat readiness of the field army.

b. Summary dollar reporting. Summary dollar reporting (low-dollar value items) is accomplished through use of financial inventory accounting procedures. Generally, the items reflected on the records of the installation accountable property officer are priced, divided into meaningful groups called "materiel categories" and the dollar value of each materiel category as reported in summary form.

13-6. Army Unit Readiness Reporting System

a. The Army Unit Readiness Reporting System applies to all Active Army and Reserve component units which are organized under TOEs, except those specifically exempted. The system permits DA to:

(1) Determine Army and command readiness conditions and trends.

(2) Identify those readiness problems which require resolution at the department level.

(3) Provide information to assist in making optimum distribution of actual and programed resources.

(4) Provide information to support requests for additional resources from the Secretary of Defense.

b. All organizations under the Army Unit Readiness Reporting System prepare unit readiness reports. The objectives of unit readiness reporting are to insure that in each unit: authorized personnel with the required skills are ready for duty; authorized equipment is on hand and maintained in operational condition; needed supplies are on hand; the state of training will permit accomplishment of the mission stated in the unit’s authorization document.

c. Each commander determines the operational readiness of his unit based upon his knowledge of conditions within his unit. AR 220-1 prescribes the criteria for determining the readiness condition of units. The unit readiness report provides the unit commander and higher commanders and staffs with a means of identifying potential personnel, training, and logistics problems where command emphasis is required and corrective action is indicated.

13-7. Readiness goals

The ultimate goal of a unit is to obtain that degree of readiness needed to perform its unrestricted mission as stated in its TOE. Resource constraints often require units to be organized at levels lower than full strength. This lower level represents a percentage of the full strength authorizations for personnel. Equipment resources are specified by item for each level of organization. This level is known as the unit’s authorized level of organization. The readiness goal which a unit is expected to attain is, therefore, that which matches its authorized level of organization.

13-8. Logistics readiness

For readiness reporting under AR 220-1, logistics readiness is measured in terms of two indicators-equipment on hand and equipment status. Equipment on hand depicts the organization’s logistics readiness with respect to the availability of designated reportable items of equipment required to perform its mission. Equipment status depicts the organization’s logistics readiness

with respect to condition of designated reportable items of equipment. The overall logistics readiness condition of an organization is generally determined by the lower rate of these two indicators.

a. The equipment onhand rating is determined by a three-step procedure. First, the commander identifies from the list of items prescribed for readiness reporting by all units Army-wide those items on which he must report. He then determines the ratio of reportable assets on hand to recognized requirements by lines. A line is several like items of equipment; i.e., all tanks are one line, all rifles are one line, and all radios are one line. The equipment onhand rating is then determined using the criteria specified in AR 220-1 for this purpose. Some units have pacing items; e.g., tanks, helicopters, missiles. Ratings can be no higher than that achieved by pacing item. There are also pacing items in the secondary item area which are those parts or components without which a major piece of equipment will not operate.

b. The equipment status rating is determined in several steps. The commander determines what items are reportable. He then determines the possible days that each reportable category may be in use. A computation is made of the days equipment was available and computes a percent for available days versus possible days. He then determines rating under AR 220-1 guidance.

13-9. Readiness categories

Unit readiness condition is determined by applying prescribed indicators and other criteria against assigned levels and goals as described below:

a. Readiness condition. Readiness condition is the actual degree of readiness of a unit at a particular time. This degree of readiness is submitted in the unit's readiness report. In order that the readiness condition is measured accurately and uniformly throughout the Army, common factors in the areas of personnel, training, and logistics have been prescribed as readiness indicators. AR 220-1 lists the following criteria for determining unit readiness condition:

(1) Readiness condition C1 indicates that a unit is fully ready and capable of performing the complete mission for which organized or designed.

(2) Readiness condition C2 indicates that a unit is substantially ready and capable of performing its mission, but has minor deficiencies which reduce its ability to conduct sustained operations.

(3) Readiness condition C3 indicates that a unit is marginally ready and has deficiencies of such magnitude as to limit severely its performance capability, but is capable nonetheless of conducting limited operations for a limited period.

(4) Readiness condition C4 indicates that a unit is not ready and is not capable of performing the mission for which it is organized or designed.

b. Authorized level of organization. The numbered level (1, 2, 3, or 4) is specified in the general order directing organization of a particular unit and is based on a given percentage of the total quantities listed in the TOE, which is applicable to the unit being organized. HQDA may, in exceptional circumstances, approve an unbalanced organization in which the authorized level of equipment will differ. The lower of the two levels of organization will be the unit readiness level which is considered supportable with a matching readiness condition.

13-10. Logistics readiness conditions

a. The logistics readiness of an organization is expressed in terms of equipment on hand and equipment status. For guided missile units, missile system availability is used to convey the average availability of such equipment during the period covered by the report.

b. Criteria for determining the equipment onhand indicator is based upon 90 percent of the reportable lines, required for mission performance, at or above a specified percentage of fill. Equipment onhand criteria for the four readiness conditions are:

(1) *Readiness condition C1*-Not less than 90 percent of reportable lines at or above a 90-percent fill and pacing items at or above a 90-percent fill.

(2) *Readiness condition C2*-Not less than 90 percent of reportable lines at or above the 80-percent fill and pacing items at or above the 80-percent fill.

(3) *Readiness condition C3*-Not less than 90 percent of reportable lines at or above the 70-percent fill and pacing items at or above the 70-percent fill.

(4) *Readiness condition C4*-Less than 90 percent of reportable lines at less than a 70-percent fill and pacing items at or less than a 70-percent fill.

c. Weighted criteria apply for reportable lines where nine items or less are authorized.

d. Criteria for determining the equipment status indicator is based upon the percentage of reportable items of equipment on hand and classified as READY. Equipment status criteria for the four readiness conditions are:

(1) *Readiness condition C1*-Average operationally ready rate equals or exceeds 90 percent. Pacing items operationally ready rate must be 90 percent.

(2) *Readiness condition C2*-Average operationally ready rate equals or exceeds 80 percent. Pacing items operationally ready rate between 80 and 89 percent.

(3) *Readiness condition C3*-Average operationally ready rate equals or exceeds 70 percent. Pacing items operationally ready rate between 70 and 79 percent.

(4) *Readiness condition C4*-Over 30 percent of

reportable equipment inoperable. Pacing items operationally ready rate less than 70 percent. (The Army goal is for all units to achieve readiness condition C1 regardless of assigned authorized level of organization.)

13-11. Spares and repair parts, special tools, and test equipment selection

Spares and repair parts, special tools, test and support equipment are selected from the provisioning list of all replaceable parts and special tools for the major end items by determining those which are required in the performance of maintenance allocation chart prepared as the result of the maintenance evaluation made of the specific end item and its assemblies and components. The maintenance evaluation includes consideration of:

a. Manufacturer's experience, engineering data, developmental and operational test data, and experience with similar type items.

b. The most efficient form of spares and repair parts to be used for each level of maintenance; e.g., individual pieces, bulk materiel, assemblies, components, and kits of parts for specific repair operations. The Army continuously refines the selection of spares and repair parts, using data from all available sources including user experience, consumption data, failure reports, equipment improvement reports, post provisioning reviews, sample data collected programs, and The Army Maintenance Management System statistical sampling.

13-12. Maintenance allocation

To provide uniformity in maintenance planning and as a basis for selection of spares and repair parts and maintenance coding, a maintenance allocation chart is prepared by the Army activity having the maintenance responsibility. The maintenance allocation chart shows by functional description the maintenance operations assigned to each level of maintenance. Consideration is given to the level of maintenance and supply support provided; the complexity of the repair operation on the specific major end item; the availability of tools, test and support equipment, skills, and facilities; the capability to store and transport authorized spares and repair parts, tools, test and support equipment; and the time required to effect repairs under combat conditions. Repair operations assigned to organizational level generally do not require more than 8 man-hours, including disassembly, assembly, and supplementary repair operations required to be done, normally, at the same time. The direct support category usually receives assignments requiring less than 8 days or 100 man-hours. The general support category normally is limited to operations requiring less than 30 days (including leadtime for spares and repair parts) and less than 400 man-hours labor to return any end item to serviceability.

13-13. Determination of allowances

Spares and repair parts, special tools, and test equipment selected in accordance with the maintenance evaluation criteria are allocated to the appropriate categories of maintenance based on maintenance functions assigned in the detailed maintenance allocation chart. The availability of tools, test and support equipment, skills, facilities, and time is assumed to increase for each higher category of maintenance. The spares and repair parts allocated to each category of maintenance includes those items allocated to all lower categories of maintenance.

13-14. Maintenance factor for spares and repair parts

Maintenance factors for spares and repair parts are based on anticipated replacement rates. Maintenance factors on new items or items having new application, are initially estimated using all available data (e.g., manufacturer's recommendations; results from engineering, developmental, and operational tests; and the reports of failure data on other items having similar application). Maintenance factors are continually being refined by analyzing data collected from all available sources such as failure data reports, supply experience, data developed under the Army Field Stock Control System, user experience, equipment improvement recommendations, feedback data from The Army Maintenance Management System, etc.

13-15. Allowance quantity

Allowance quantities are computed for each spare or repair part allocated for use at each category of maintenance. The computation is in accordance with Department of Defense (DOD) Instruction 4140.42, and is based on the maintenance factor assigned to the spares or repair parts and on the density of the end items. This computed quantity represents the number of repair parts necessary to fill the supply system and to provide adequate support for the specific weapon system or end item over an initial period of service. It is recognized that a maintenance factor is an "average" factor, and that the factor can be used to accurately forecast usage only when end item density is large enough to provide statistical certainty. Therefore, for those categories of maintenance which are supporting relatively few end items, special modeling techniques are used to improve system/end item readiness.

13-16. Repair parts and special tools lists

Repair parts and special tools lists, listing and illustrating all spares and repair parts authorized for use or required to be removed or disassembled during maintenance operations, are prepared for each

weapon system or end item. These lists indicate the range of items authorized for requisition and show the lowest maintenance category where they may be used.

13-17. Revision of repair parts and special tools lists

The range of spares and repair parts, tools, test and support equipment listed in repair parts and special tools list are reviewed on a scheduled basis, and maintained current and adequate to meet the requirements of using and supporting organizations. Changes to the range of spares and repair parts, tools, test and support equipment are based upon all available data, including demand data and The Army Maintenance Management System data. Changes are made when it is determined that a proposed change or revision will increase the supply and maintenance effectiveness and improve the materiel readiness posture.

Section II
Equipment Authorization and Control, US Navy

13-18. Introduction

a. All Navy ships carry material on board in order to be as self-sufficient as possible. The range of these stocks is tailored to the individual ship and is based on the ship's full type, installed equipments, relative military essentiality of the ship's systems, and composition and size of the crew. The categories of material carried include equipment-related spares and repair parts, general-purpose industrial material, consumables, medical and dental material, clothing, personal items, food, fuel, ammunition, and such portable equipment as is necessary for the ship's operation.

b. These items are specified in various individual allowance lists for each ship and type of aircraft. The magnitude of those lists can be presented graphically: The items in them support about 160,000 equipments and components. Moreover, every one of the Navy's 550 ships is, to a varying extent, unique. Each differs from all others in certain installed equipments and repair parts. For example, 26.8 percent of the 160,000 total number of installed components are installed on only one ship. Sixty-five percent is installed on five ships or less, while only 2 percent is installed in all 550 ships of the Navy.

c. The range of quantity of supplies-that is, those specific items and the number of each which should be carried aboard ship-are computed to achieve the average endurance prescribed by the Chief of Naval Operations except in the case of small nonself-sustaining ships. The ship's allowance list provides for low-demand items-spares and repair parts for which demand cannot he accurately predicted, but without which the ship's mission could not be accomplished.

d. Ship's allowances are revised on an equipment basis as experience dictates, but the major revision or updating of the allowance list takes place during the time the ship is undergoing overhaul.

e. For the operating forces, the provisioning cycle results in the preparation of the unit allowance list. Each ship or aircraft squadron is furnished an allowance list of repair parts for each equipment installed or aircraft to be supported, and various categories of operating supplies. Equipment/component allowance lists are built on the basis of filling 90 percent of the demands on board for 90 days and providing selected insurance items vital to the support of the primary mission of ship or unit, or vital to the safety and welfare of personnel on board ship.

f. The allowance lists, called Coordinated Shipboard Allowance Lists and Aviation Consolidated Allowance Lists, are developed by considering how many times and in how many equipments an item is used, applying essentiality and replacement factors, and computing a final reduced requirement to support all applications. The Coordinated Shipboard Allowance Lists and Aviation Consolidated Allowance Lists insure that the support given an operating unit will be adequate for specified endurance periods.

13-19. Initial allowance list

a. Determination of the initial onboard repair parts requirements for new construction or major conversion of ships is one of the primary outputs from the provisioning process. These requirements are expressed in terms of a Coordinated Shipboard Allowance List, which defines by specific item the repair parts required to support both individual components and the ship as a whole; the special tools which will be required; and any additional special test or support equipment required for shipboard maintenance.

b. The logistics support doctrine governing the requirements for onboard repair parts is the responsibility of the Chief of Naval Operations. Current doctrine, in summary, is:

(1) Parts must be within the capability of the ship to install. Trained personnel, special tools and facilities availability, maintenance instructions, and the economics of supplying parts and components are considered.

(2) For demand-based items (items having a predicted usage on board ship of at least one in 90 days), provide a 90-percent probability of filling total demand for an item in a 90-day operating period. Demand is based on combat consumption rates wherever such rates can be ascertained.

(3) For low-demand items (items having a predicted demand of less than one unit in 90 days), include only those items which: Are essential to the support of

a primary mission of a ship or are essential to the safety and welfare of shipboard personnel; and have an expected usage greater than .25 units per annum (exceptions: items with usage less than .25 units/annum will be stocked if required to support an approved planned preventive maintenance schedule). *c.* Qualifying low-demand items will be stocked in minimum onboard quantity (either one or minimum replacement unit).

13-20. Allowance list preparation

a. The inventory control points (ICP), through automated files and procedures, assemble the various data inputs, compute the onboard repair parts requirements, and publish the Coordinated Shipboard Allowance Lists. A Coordinated Shipboard Allowance List consists of three basic parts:

(1) Part I, an index of equipments, components, and equipage tailored to a specific ship.

(2) Part II, allowance parts lists or allowance equipage lists for applicable equipments, components, and equipage.

(3) Part *III*, a stock number sequence list for all onboard repair parts and equipage listed in the allowance parts lists/allowance equipage lists of part II to support the equipment appearing in part I.

b. The allowance parts list is a document prepared for an equipment or component provisioned and maintained as a unit that serves one or both of the following uses, depending on the circumstances:

(1) A national stock number (NSN) finder. The major means available to a technician for relating the reference numbers used by the equipment/ component manufacturers for item identification purposes to the NSNs by which those same or equivalent items are identified in the military supply systems.

(2) A statement of onboard repair parts required friar a single equipment or component. (When furnished as part of an updated Coordinated Shipboard Allowance List, the allowance parts list does not contain allowance quantities; the user is referred instead to the Coordinated Shipboard Allowance stock number sequence list, which contains allowance quantities based on summarized part populations of all equipments/components installed on the ship or at the station).

c. The stock number sequence list defines the quantity of items that are allowed on board.

d. The allowance list index contains a complete list of all installed components with allowance parts list number, the quantity installed, and the shipboard systems or service application in which the component is used.

e. A typical Coordinated Shipboard Allowance List for a nuclear submarine contains approximately 10,000 storeroom items, a guided missile frigate 17,000 storeroom items, and an attack carrier 27,000 storeroom items. The values of these inventories range from $3 million for a submarine to over $7 million for a carrier. Over SG percent of the ADP machine capacity at the ICPs is used to maintain the technical data files and produce allowance documents.

13-21. Allowance list maintenance

a. Once an allowance list has been published, there is a continuing requirement for keeping the list up to date. Allowance lists can change as a result of ship alterations, modifications in installed equipments, equipment design changes, changes in the maintenance plan, analysis of demand or usage data, and stock number changes.

b. The ICP data files from which allowance lists are prepared are progressively maintained by overlaying or adding new data into the record as it is developed. Ship’s allowance lists are completely updated incident to overhaul in conjunction with the Supply Operations Assistance Program.

13-22. Allowance list improvements

There are several initiatives underway for improved allowance lists. Specifically, three programs, the Modified Fleet Logistics Support Improvement Program (MOD-FLSIP), the Maintenance Criticality Oriented (MCO) Coordinated Shipboard Allowance List (COSBAL) Program, and the Operational Availability (Ao) Allowance Computional Model, are currently under development. A brief discussion of each follows.

a. MOD-FLSIP. Essentially, there are two important differences between the MOD-FLSIP and the current FLSIP-first, a more complex essentiality coding system and second, a wider support requirements spread between essential and insurance items. The MOD-FLSIP provides a coding system which differentiates between primary and secondary systems. For primary systems, a usage probability equal to or greater than .10 per annum is used in computing the repair parts/spares requirements. For secondary systems, a usage probability equal to or greater than .25 per annum is used. Although criticality coding of all component applications is not yet complete, implementation of the MOD-FLSIP began in October 1982 with the publication of all COSBALs that would otherwise be FLSIP only.

b. MCO COSAL.The MCO COSAL Program uses a computational model designed to provide a higher range of support for critical support items yet stay within the dollar constraints of the MOD-FLSIP model computation for the same configuration. In addition, the MCO COSAL Program uses unique tailored APLs which provide for a complete replacement of failed as-

semblies and modules instead of bit-and-piece support. Implementation of the MCO COSAL Program begins with publication of the FFG-36 load COSAL. This program is currently confined to FFG-type ships. *c.* Ao. The Ao Program is designed to provide an extra measure of support for critical equipments which would not qualify for such under other standard programs. Special approval by OPNAV is required for each specific application of the Ao model. Also, periodic recertification of the need for the Ao support is required.

13-23. Supply Operations Assistance Program

a. The Navy's Supply Operations Assistance Program was established to increase the self-sufficiency of ships for long periods of deployment by improving their supply readiness. The program is designed to insure that a ship's stock of repair parts and other technical materials are on board in the range, depth, and condition needed to support the ship's equipment.

b. The need for such a program was caused by the growing complexity of shipboard systems and equipments, which escalated problems. A ship's allowance list, identifying the thousands of items to be carried, is changed when the ship is overhauled and refitted with new equipment.

c. The Supply Operations Assistance Program allowance update is accomplished by teams under the direction of COMNAVLOGPAC and COMNAVSURFLANT and augmented by the ship's crew. The process begins prior to overhaul with a validation conducted by the ship's force and/or a special civilian validation team. The validation results, plus projected configuration changes planned by NAVSEA, are used by the ICP to update the ship's file. A new allowance list is published at the start of overhaul. The Supply Operations Assistance Program teams physically process the new allowances during overhaul.

d. During the overhaul period, the ship also receives an overhaul of supply records and stocks; this is the heart of the Supply Operations Assistance Program. A team made of one officer and several highly qualified chief petty officers and civilian technicians assist ship's personnel in the supply overhaul. In general, the following is accomplished during the overhaul period:

(1) The ship's Allowance List Equipment Index is updated to reflect new equipment installations.

(2) The ship's inventory of repair parts is of flooded to a warehouse, identified, counted, repackaged, and represerved, and the physical inventory count recorded on electric accounting machine cards.

(3) The physical inventory is compared to the allowance list by computer; shortages and excesses are computed; requisitions, invoices, and updated stock record boards are provided as an output of the computer.

(4) Storage material is provided and excess material offloaded; the adjusted stocks of material are restowed aboard the ship.

(5) The ship's stocks, upon completion of the supply overhaul, are the proper range and depth to support the ship's new equipment configuration.

e. Approximately 100 ships are overhauled annually. A total of about $50 million of inventory is removed, screened, and neatly restowed on board. Excess material is redistributed to other ships or returned to the supply system. The cost of the program has been repaid several times through this recovery and redistribution, and through the increased operational readiness of the fleet. The computer, which automatically prepunches requisitions, invoices, and ship's stock record cards, saves thousands of man-hours of labor formerly required.

f. Processing of the allowance results in a complete purification of onboard allowance material and the application of the individual ship's demand data for the past 2 years to further update the allowance. The overhaul activities advise the ICP when scheduled equipment installations are modified in order to keep the ICP files accurate. When changes occur between overhauls, the ship is the only source of accurate data available. Therefore, it is incumbent upon the ship to notify the ICPs when changes take place. The ICPs then update their files and send the ship an Allowance Parts List for the individual equipments involved.

g. Changes in equipment hardware normally are treated the same as new equipments as far as provisioning and allowance list development are concerned. If all equipments of a definitive nomenclature are revised, then all allowance lists for that equipment are revised accordingly. If only a portion of the equipments is revised, then the ICP must tailor the equipment allowance. In either case, the new allowance list is distributed to the ship, along with instructions on how to order deficiencies.

h. Changes in the maintenance plan that affect allowances could result from design changes, reprovisioning, analysis of usage or demand data, or recommendations from the customer. Usage data are currently being employed by the ICPs to identify repetitively used parts not included in allowance lists. These instances are referred to the material systems commands where a decision is made whether the maintenance plan should be revised or equipment design changed. These decisions are then reflected in allowance list revisions. In all cases, the material systems commands control the maintenance plan and communicate this plan to the ICP through revisions to the source, maintenance, and recoverability codes assigned during provisioning. When individual equipment allowance lists are revised because of a change in the main-

tenance plan, new allowance lists are also distributed and processed.

13-24. Integrated Logistics Overhaul (ILO) Program

The ILO concept was developed to provide improved maintenance support to the fleet. The ILO Program incorporates the Supply Operations Assistance Program plus configuration status analysis and COSAL quality assurance, planned maintenance system analysis, technical manual analysis, and a training program in use of the COSAL. Basically, the ILO Program is an extension of the Supply Operations Assistance Program, with emphasis on auditing and correcting all logistics support for each ship undergoing overhaul. Eventually, as each Supply Operations Assistance Program team staffing and facilities are upgraded to accommodate ILOs, the current Supply Operations Assistance Program teams and sites will be redesignated as ILO teams and sites.

13-25. Aviation allowance lists

The Aviation Consolidated Allowance List is a list of aircraft materials, both reparable and consumable, stated in quantities that will satisfy predicted requirements for maintenance of a specified mix of aircraft for a predetermined period of time. Listed quantities for reparable items constitute firm stockage objectives, while quantities for consumable items are recommended objectives.

13-26. Allowance Requirements Registers

The building blocks for constructing the Aviation Consolidated Allowance Lists are the Allowance Requirements Registers prepared by the Aviation Supply Office. The Allowance Requirements Register is a list of quantities of major components, subassemblies, and parts estimated to be required for maintenance support of designated weapon systems and subsystems for a 90-day period. The quantities of parts and subassemblies listed in the various Allowance Requirements Registers are based upon the Chief of Naval Operations logistics doctrine, and the recommendations of the aviation supply office, employing usage data and recommendations of the operating forces.

13-27. Aviation Consolidated Allowance Lists preparation

a. Aviation Consolidated Allowance Lists are prepared by the aviation supply of fire for all carrier attack/carrier, surface/carrier, training/landing, amphibious attack/landing, amphibious helicopter ships, including Marine air groups, with data processing capability. Aviation Consolidated Allowance Lists for activities other than the above ships are prepared by of fires under the immediate direction of the fleet-type commanders. Preparation by the aviation supply office is summarized below:

(1) The type commander forwards a letter to the aviation supply office directing the preparation of an Aviation Consolidated Allowance List for a specific ship, specifying the type and number of aircraft to be supported and the number of flying hours anticipated. The aviation supply office then selects the applicable portions from the relevant Allowance Requirements Register and prepares a preliminary Aviation Consolidated List. About 160 different Allowance Requirements Register and approximately 60,000 line items may be included in the preliminary list for a carrier attack ship.

(2) After the computation of the preliminary list from the relevant Allowance Requirements Register is completed, the aviation supply office compares the results to the ship’s stock usage figures for its last deployment. The higher of the Allowance Requirements Register computations or the ship’s usage figures for each NSN is selected as the Aviation Consolidated Allowance List Quantity.

(3) The preliminary list is subjected to a quality review by the type commander and the ship’s representatives who add or delete items and adjust quantities based on their judgment and experience. The aviation supply of flee then incorporates these changes into a final Aviation Consolidated Allowance List.

(4) The aviation supply office then introduces all requisitions for materials on the Aviation Consolidated Allowance List into the supply system or to the cognizant single supply point as applicable. It also forwards the necessary publications and supply aids to the ship, which then assumes responsibility for followup and monitoring actions and for disposal of excess material.

b. A new Aviation Consolidated Allowance List generally is produced for each deployment, even when there has been no change in aircraft load, because aircraft configuration changes and usage experience frequently invalidates the old list.

13-28. Mobile Logistics Support Forces Load Lists

All load lists are developed from peacetime demand information provided by the active fleet using data collection procedures established by the Chief of Naval Material. Where feasible, peacetime demand is adjusted to reflect combat consumption rates.

13-29. Fleet Issue Requirements List

a. Fleet Issue Requirements Lists are prepared annually by the Naval Ship Parts Control Center, Me-

chanicsburg, PA. A separate list is prepared for the Atlantic and Pacific Fleets. *b.* Fleet Issue Requirements List is constructed to provide resupply support for the total deployed fleet over a 90-day endurance period. The Fleet Issue Requirements List depth is sufficient to satisfy 85 percent of the fleet requisitions. Fleet Issue Requirements Lists may he modified to support new equipments and weapon systems; low-demand items which support critical equipments experiencing significant supply problems; and certain low-demand items stocked in the Fleet Issue Load List in lieu of individual Ship Allowance Lists because of economic considerations. Support augmentation items are approved by the Chief of Naval Operations.

13-30. Fleet Issue Load List

a. Fleet Issue Load Lists reflect the afloat portion of the Fleet Issue Requirements List. Fleet Issue Load Lists are positioned in combat store ships and selected shore activities. The number of Fleet Issue Load Lists is designated by the Chief of Naval Operations.

b. Fleet Issue Load Lists are normally revised annually using the best available demand history. Quarterly adjustments are authorized when requested by the Fleet Commanders in Chief.

13-31. Tender and Repair Ship Load Lists

a. Tender and Repair Ship Load Lists are constructed to support the industrial mission for each tender or repair ship and the resupply mission for submarine tenders. The lists are classified as either "hull-tailored" or "oceantailored" based on the degree of maintenance responsibility assigned to each ship. Hull-tailored lists support specific hulls assigned for support to a designated ship. Ocean-tailored load lists support specific hull types, but apply to all tender and repair ships for one fleet.

b. Tender and Repair Ship Load Lists are developed based on the equipment configuration of the supported ships, using demand data collected in accordance with Chief of Naval Material procedures, and reflecting combat consumption rates wherever feasible. They include the following categories of items:

(1) Equipment related items. Required to maintain equipments installed on supported ships.

(2) Industrial-related items. Required to support the maintenance shops on a tender or repair ship.

(3) Resupply material. For submarine tenders to support the resupply of assigned submarines.

c. For the categories of items designated above, the range is determined by the Chief of Naval Operations based upon the degree of commonality of equipment in the hulls to he supported, the estimated average quarterly demand, the maintenance philosophies for specific classes of ships, and the requirements for support of special situations. The depth of material to be stocked is sufficient to satisfy 85 percent of the requisitions for items carried within a 90-day period.

d. Tender and Repair Ship Lists are updated every 3 years unless otherwise requested by the Fleet Commanders in Chief.

13-32. Special Load Lists

Special load items are developed and designed to satisfy special support requirements specifically directed by the Chief of Naval Operations or the Fleet Commanders in Chief. These load lists are prepared by the Navy Ships Parts Control Center.

13-33. Responsibility

Logistics support doctrine is stated by the Chief of Naval Operations. The Commander, Naval Supply Command, acting for the Chief of Naval Material, is responsible for the administration of the load list program The Navy Ships Parts Control Center coordinates the development, maintenance, and review of load lists.

13-34. Special programs

a. The Naval Material Command is supporting a program that will have a profound effect on allowance and load lists. This program includes hardware standardization requirements in concept formulation, validation, procurement, production, maintenance, conversion, modernization, and alteration of aviation, ordinance, ship, electronics, construction, and other equipments

b. The program requires the systems commands to standardize designs with intersystem and intrasystem standardization of components/ equipments, to reuse (in new design) existing, suitable components/equipments already supported indepth by the military supply system; to preclude use of limited application and poor performance components/equipments; to exercise configuration control in maintaining component/equipment standardization; to use procurement techniques (multi-year, exception provisions for standardization, twostep procurement) in restraining repair part proliferation; and to effect item entry control in the design selection phase fit material acquisition.

c. Standardization in the design and procurement phases serves to control proliferation, or the multiplicity of makes and models of components/equipments used to serve the same purpose; i.e., functionally the same but having different internal parts. Many such internal parts, which proliferate when the wide variety of potential makes and models is not controlled, are peculiar

to specific manufacturers and are difficult to support.

d. Standardization clauses have been placed in all major ship new construction contracts. There are requirements for selection of components/ equipments from Standard Components Lists which represent those reliable components currently supported in the active fleet. Standardization of electronic test equipment is also being pursued to reduce divergent support requirements. Other commodities are scheduled to follow.

e. Savings or cost avoidances in the areas of training, maintenance, overhaul, repair, technical data, quality assurance, reliability, and configuration management are anticipated along with improved operational and readiness potential.

Section *III*
Equipment Authorization and Control Systems, US Air Force

13-35. Introduction

a. Equipment items (nonexpendable items) are authorized and controlled through a system called the Air Force Equipment Management System. Its five main objectives are to develop allowances for, authorize, account for, report, and determine requirements for equipment items. The system applies to all Air Force commands and installations. The system is under the direction of Air Force Headquarters, with Headquarters, Air Force Logistics Command responsible for implementation and procedural instruction.

b. Tables of allowances are developed and distributed to major commands and bases by Warner-Robins Air Logistics Center. Air Force bases/organizations establish specific equipment authorizations based on applicable tables of allowances. Authorizations and accountable records are maintained on a central Air Force base computer. Authorized items and in-use assets are reported by all Air Force bases to the central Air Force Equipment Data Bank maintained by, the Air Force Logistics Command. Those data are then fed to the requirements computation system which produces budget/buy programs, disposal programs, etc.

c. The Air Force Equipment Management System receives its direction through a series of plans and programs originating at the highest levels of management in the Air Force in response to its mission commitments. The task of interpreting the plans and programs into materiel terms is assigned to both the Air Force Logistics Command for overall materiel programs planning, and the major commands for planning the support programs for assigned bases, systems, and missions. Basically, the major commands delegate the task of interpreting the plans and programs into equipment requirement terms to the Command Equipment Management Office. The interpretations are translated into directions for the command’s equipment program. The directions can be in the form of forecasted or future requirements for organizations that are programed to be assigned to the command; projected changes in weapon systems and organizational workloads as a result of those changes; or projected changes or increases in wartime additive missions, not only on the command’s own bases but also incurred by the command’s activities as on tenants bases of other commands. In the latter instance, and in fact in all intercommand equipment matters, direct communications among the Command Equipment Management Officers is authorized and encouraged.

d. The Command Equipment Management Office maintains a centralized record informational file consisting of all the command’s existing and forecasted equipment authorization inventory data records and all of the war reserve materiel equipment records. The centralized file is used to exercise surveillance and control of the command equipment program. The file is also used for accuracy and status correlation of all the separate base equipment record files and for support of the management reports forwarded to the Air Force Logistics Command or Headquarters, US Air Force.

e. The Command Equipment Management Officer, who is usually under the direction of the Deputy Chief of Staff for Logistics or the comparable office at the major commands, has the responsibility of tying together all of the many elements of the command’s equipment program. Not only are the materiel aspects of the command’s program funneled through the Command Equipment Management Officer, but also the financial information that has great impact on the Air Forces central equipment budget and buy program. The communications link that furnishes management data from the base through the US Air Force Equipment Data Bank to the command equipment management offices is a series of recurring reports. The Command Equipment Management Officer uses these reports for analysis, comparisons, and corrective actions. The reports also provide the current status fit the authorizations and assets in use by all elements off the particular major command.

f. The Command Equipment Management Officer also functions as the command Equipment Review and Authorization Activity and examines those requests for equipment changes or additions that exceed the base-level approval authority. Not only are the equipment requests screened fair adequate mission support, but also to preclude excess authorizations or present the introduction of new and unrelated equipment into the inventory.

g. A field extension of the command Equipment Review and Authorization Activity is accomplished

through a traveling Command Equipment Management Team. The team, composed of supply personnel and technical specialists, conducts on-the-spot surveys of the command's bases. The objectives of the surveys are to observe the command's equipment actually in use; to examine the impact that mission changes or equipment shortages have on the bases' ability to respond; to determine whether the equipment is properly used; or to direct a reallocation or turn-in if excess property is discovered.

h. A specific byproduct of the Command Equipment Management Team field surveys is the support given to the budget reviews. The requirements that are established on the best technical and military consideration are supported through the teams's field observations of the equipment in use, examination of existing or forecasted deficiencies, changes in missions, and discussions with the operators. The conclusions thus reached lend support and credibility to equipment budgeting statements. Budgetary limitations may preclude the acquisition of all of the equipment that is needed, but, at least, the authorizations are valid and can fend off any challenge. Authenticated by unfilled authorizations are recognized in future budgetary actions.

13-36. The custodian

a. The custodian is a most important element in the Air Force equipment management system. The custodian is one of the personnel assigned to the organization or activity that is using the equipment, and as such, is the "agent" of the commander or supervisor of that organization or activity. As the agent, the custodian represents the commander or supervisor in any dealing with personnel in the equipment management function of base supply. The custodian also assumes property responsibility (not accountability) for the items in use or in place within a particular organization or activity.

b. As the responsible agent, the custodian conducts nominal surveillance over the property and performs periodic "in-use" inventories, either alone or jointly with personnel of the Inventory Section.

c. The appointment of a custodian does not relieve the commander or supervisor of their property responsibilities. In the event the property being used by a particular organization or activity is lost, damaged, or destroyed, and cannot be satisfactorily explained, the commander or supervisor may be held responsible singly or jointly with the custodian.

d. The custodian, as well as any Air Force member having physical possession of public property, has property responsibility, but does not have property accountability. The property accountability is retained by the Chief of Supply whose records are assigned an Air Force equipment account number and are subject to audit.

13-37. Base-level equipment management

At base level, the Customer Support Branch and the personnel assigned to it are responsible to the Chief of Supply for the efficient management of all items included in the nonexpendable equipment items stock record account. The branch carries out the following equipment management responsibilities.

a. Retail Sales Section. The Retail Sales Section operates a centralized onbase issue, storage, and turn-in point for all items authorized to individuals by Air Force specialty code or duty assignment, including common items, special clothing, tools, field equipment, etc. The section maintains files of personal retention items, and custodial receipts for individual clothing and equipment, and for supplemental items of individual issue.

b. The Allowance and Authorization Section. The Allowance and Authorization Section is responsible for the records, management, and control of equipment items managed under the Air Force Equipment Management System. This includes:

(1) Providing technical advice for equipment authorization inventory/ data item allowance, authorization, and change requests, and preparing all computer input documents for the transactions concerned with the managed items.

(2) Monitoring physical inventories, audits, and record adjustments for equipment items and insuring the conduct of the inventories and audits on specified dates within established time limits.

(3) Reviewing requests for approval to exceed the maximum repair allowance on vehicles and endorsing to the major command.

(4) Coordinating the command-directed redistribution of vehicles, and furnishing actual disposition information to the Air Force Logistics Command item manager when the vehicle is dropped from the accountable records.

(5) Preparing all issue/turn-in documents for nonexpendable items (except for individual issue items).

(6) Acting as the base Equipment Review and Authorization Activity in the review and evaluation of equipment allowances, authorizations, and minimum level requests. This involves the approval or disapproval of authorization reductions, technical data changes, and authorization changes within applicable allowance documents which indicated a basis of issue (except for items reserved for higher command action).

(7) Maintaining all necessary files of allowance source code lists and documents, summaries of the current configuration of major weapon systems supported, a cross-reference file of allowance source codes applicable to each custody receipt account supported, and all documentation required to effectively manage the equipment items.

(8) Providing assistance to and acting as the single contact point within supply for unit custodians on matters pertaining to their accounts.

(9) Assisting in the preparation of budget estimates and financial plans for equipment items on which levels are maintained, and scheduling maintenance, repair, or cleaning of equipment items not turned in directly to the repair or cleaning activity by the user.

(10) Initiating computer inputs to add or delete requisition, excess, or shipment exception codes on item records, reviewing machine-prepared notification of requisition, shipment, and excess exceptions, and taking necessary action.

(11) Reviewing all records pertaining to equipment assets, requirements, sources of supply, and requisitioning suspense documents.

13-38. Allowances versus authorizations

a. Air Force allowance documents are made up in the form of tables of allowances. A table of allowances describes the equipment items and the quantity of each item considered most likely to satisfy the needs of a particular mission, function, or duty of an organization or individual. There are special allowances and lists that are necessary to support peculiar needs, or an iterim mission or duty, but most needs are incorporated into a basic applicable table of allowances.

b. A table of allowances provides the necessary allowance source code used in authorization documentation. A table of allowances also serves as a ready reference to guide the selection of proper equipment for the job or mission, and serves as a standardization listing to insure the uniformity of equipment having a similar function. The fact that a custodian may find a particular item of equipment in a table of allowances does not constitute automatic authority to acquire that item.

c. Since a table of allowance reflects mission or individual requirements, it is designed to depict the latest allowances of each. As the mission needs or individual needs change, so also do the tables of allowances. The changes are largely the result of local actions that may request addition, deletion, or modification of any portion of the document to keep the tables of allowances current. After a local determination that a change in a table of allowances is required, a request is forwarded through the Command Equipment Management Office to Warner-Robins Air Logistics Center, or the Air Force Equipment Management System Office where the ultimate decision is made and necessary corrective action taken.

13-39. Equipment review and authorization activity

a. The local initiation of a table of allowances change is through the office of the base Equipment Review and Authorization Activity. However, the primary function of the Equipment Review and Authorization Activity is the determination and establishment of specific authorization for equipment items for the local using activities. Despite the fact that an item of equipment may be listed in an appropriate table of allowances, no requisitioning action to obtain the item is possible until the item is actually authorized or used in specified quantities to specified units, organizations, or activities. This is the proper function of the Equipment Review and Authorization Activity-to sit in review and assess the true equipment needs of an activity or organization.

b. The Equipment Review and Authorization Activity is a committee composed of technical personnel assigned to the Allowance and Authorization Section of the Customer Support Branch. Approval authority is vested in the lowest levels of equipment management and permits wide flexibility of action.

c. The authorization is, in reality, a validated equipment requirement for a specific item or quantity of items to be used by a specified activity or organization. The authorization deals in specifics rather than in the generalitites of the table of allowances. The base equipment Review and Authorization Activity determinations are guided largely by the tables of allowances, but there are some justifiable circumstances that permit the authorization of items not listed in a table of allowances. These special authorizations are usually beyond the jurisdiction of base-level approval and are, therefore, referred to higher management levels for resolution.

d. Once the approved item is documented, an authorization in-use detail card is prepared for input to the computer to authenticate the item authorization and start the process of local management of the item. The detail record actually states combined use and location status of the item.

e. The mandate of the Equipment Review and Authorization Activity is to satisfy the equipment needs of each organization, individual mission, or duty; however, the mandate further stipulates that items can be authorized only to the degree that the authorizations are valid, and these must be tailored to the known and justified needs of the organization or individual.

13-40. Reports

As in all management systems, the Air Force Equipment Management System is joined and linked together by a system of reports. The reports, provided on a recurring schedule, are used by all levels of management for accounting, authorization, budgeting, or reallocation of resources. The ability of the Air Force Equipment Management System to respond efficiently is directly related to the accuracy and currency of the reports.

13-41. Air Force Logistics Command responsibility

Headquarters, Air Force Logistics Command has the responsibility for the overall Air Force Equipment Management System operation. The allowances are designated and are published at this level, the authorizations are reviewed, and the reports generated at the lower levels are used to determine the requirements and support the budget and buy program.

Section IV
Equipment Authorization and Control Systems, US Marine Corps

13-42. Supporting establishment

This generic title includes all posts, camps, and stations, constituting collectively the "non-Fleet Marine Force" activities of the Marine Corps. For these organizations, there are, with minor exceptions, no allowances established above the base level. Equipment and supplies are acquired on the basis of need, within overall budgetary limitations. Allowances are established at Marine Corps Headquarters level for commercial motor vehicles and materials handling equipment, weapons, individual clothing, and publications. All bases perform plant accounting and property accounting under uniform policy and procedures promulgated by Marine Corps Headquarters.

13-43. Fleet Marine Forces

a. The unique role of the Marine Corps requires the highest degree of mobility and self-sufficiency. Equipment authorization and control is, therefore, the subject of detailed policy and procedures by Marine Corps Headquarters and uniformly applied throughout the Fleet Marine Forces no matter where located. The organized Marine Corps Reserve is structured precisely like the active division/ wing teams, and operates under similar supply philosophy and procedures.

b. The Commandant prescribes standard tables of equipment as the principal methods of allowance control. Provisional tables of equipment are developed as required for a particular operation or environment. Materiel needed only under certain operating conditions, such as field fortification equipment or extreme cold weather gear, are not normally carried by the Fleet Marine Forces, but are available to them on an "as-required" basis. Guidance for repair parts stockage is provided in the Marine Corps Stock List. Consumable items are stocked on the basis of actual usage history, under stock level formulas prescribed by Marine Corps Headquarters. Initial stockage of repair parts is governed largely by the range and depth of provisioning by the ICP, after which actual usage history becomes the basis for maintaining stock levels. Marine Corps Headquarters prescribes standard accounting procedures and standard organic supply management procedures, including standard methods of computing stock levels at the using and combat support levels. Under these standard procedures, the unit commander is responsible for asset control. Through the supply officer or property control officer, the unit commander maintains a supply readiness posture by operating within authorized allowances accounting for all resources, including consumables, and safeguarding resources through scheduled maintenance and physical security.

c. Fleet Marine Force commanders are required to submit recommendations for allowance changes to the Commandant of the Marine Corps; thus, allowances are viable and under constant surveillance.

d. Specialized equipment authorization and control systems supplement the foregoing. Maintenance floats and critical low-density floats are pools of secondary items available for direct exchange by units. Operational readiness floats are used to enhance combat readiness by providing replacement items for unserviceable, reparable end items which cannot be repaired in time to meet an operational commitment.

e. The Commandant has established a control system to determine the status of equipment readiness throughout the Fleet Marine Forces. This is the Marine Corps Integrated Maintenance Management System. When force commanders identify supply deficiencies which seriously impair combat readiness, the requisitions under which they failed to receive responsive supply are identified, in a format suitable for ADP. These are each identified to the "last know holder." "When the "last known holder" is within the Fleet Marine Force, the force commander takes necessary expediting action. When the "last known holder" is the Marine Corps "stores" systems, the ICP is provided the documentation of the requisitions and undertakes as a top priority effort the fulfillment of those requisitions, advising the Deputy Chief of Staff for Installations and Logistics and affected commands of progress in each instance.

f. While the Fleet Marine Force is in garrison at a major Marine Corps base where a direct support stock control activity is located, it can obtain common supplies through informal procedures at self-service centers operated by the base. No allowance controls are exercised by the base in making such sales; the only control is to identify the purchaser as being an authorized customer.

g. At the ICP, all items regularly stocked, except for ammunition, are identified by an NSN and listed in one master inventory file in a single integrated computer system (assets in the direct support stock control subsystem are carried by dollar value only). There are in-

terchangeability and substitutability data covering the complete range of items, and the absolute elimination of duplicate efforts. The total visibility of assets in the stores system provided by this technique prevents procurement of duplicate stocks and permits complete control of the disposition of excesses within the Marine Corps. The ICP participates in the DOD Item Entry Control Program.

Chapter 14
Provisioning in the Department of Defense

Section I
The Provisioning Process

14-1. Introduction

a. Provisioning is one of the most important logistics processes. Broadly defined, provisioning means laying-in an adequate supply of materiel, when and where needed and within monetary constraints, to support a weapon system or end item of equipment during its initial period of operation.

b. It is during provisioning that decisions are made which can materially affect the ability of the military services to support their operational systems.

c. These decisions vitally affect our national economy in that many millions of dollars are spent annually to initially provision defense requirements. Selecting support items which are not, in fact, required or buying large quantities of these items which prove to be seldom used is a waste of dollars, manpower, materials, and facilities which could have been diverted to more profitable purposes. The Department of Defense (DOD) policy is to acquire needed items competitively unless to do so would be too costly or would substantively degrade our ability to perform the national defense mission.

d. DOD is faced with provisioning for a vast spectrum of end items ranging from small instrument items to complex major items and weapon systems. Equipment heterogeneity, variety of contractors, types of programs involved, geographical development of the equipment, and missions of users add to the difficulty.

e. Provisioning actions require close coordination of efforts between contractors and the Government, and within the Government.

f. Many of the individuals and activities associated with an end item production program become involved in provisioning. This involvement may influence provisioning decisions. Their input affects the provisioning process, or output produced by provisioning influences their functions. The selection and initial distribution of support items concepts must be consistent with maintenance manuals, training programs, facility needs, and storage locations. Data generated and recorded during initial provisioning provide the foundation for many subsequent maintenance and supply actions. The principal objective of provisioning is to insure the availability of minimum initial stocks of support items at using organizations, and at maintenance and supply activities, to sustain the operation of end items until the support items can be normally supplied, and to do this with the least investment.

g. The establishment of the maintenance concept becomes the basis for technical analyses that develop compatible supporting requirements. This includes requirements for repair parts, tools, test and grounding handling equipment, technical skills, maintenance and overhaul handbooks, and the various overhaul facilities. Technical decisions control the completeness and integrity of the initial maintenance support program and the millions of dollars spent each year for this support. Wrong repair decisions, poor estimates of service life, and improper selection and source coding of parts can result in too little support and lead to inoperative equipment. On the other hand, poor decisions can result in excessive support, reflecting needless expenditure of funds for warehousing and disposal.

Section II
Provisioning in the Army

14-2. Introduction

a. Provisioning is the process through which the Army provides initial support items to the forces for newly introduced weapon systems or end items. This includes spares and repair parts, tools, test equipment, training aids, and technical manuals.

b. The Army is confronted with provisioning for a great variety of end items ranging from small arms to complex missile systems, grouped into a number of commodity areas such as electronics, missile, combat vehicle, aircraft, medical, etc.

c. Army (DA) level, from which it is promulgated through the US Army Materiel Command (AMC) to its major subordinate commands (MSC) which manage each particular commodity. Within the MSC, the Initial Materiel Support Office is responsible for coordinating all provisioning activity among the supply, maintenance, development, and cataloging activities.

d. To achieve provisioning objectives, a multitude of interdependent events must occur in a prescribed manner. There is a close relationship between the end items and the provisioning programs.

14-3. Planning

a. The provisioning for each item to be fielded is tailored to the particular circumstances of the fielding: geographical dispersion, combat essentiality, number of items to be supported, military/commercial design etc.

b. Provisioning planning personnel must enter the program at the earliest stage or development period. Only the most general plans can be made at this time, but as progress occurs and more information becomes available, the plans and requirements become more detailed and formalized. The second major planning pe-

riod falls during the production precontractual period. Provisioning personnel identify and establish the contractual provisioning requirements to be incorporated into the invitation for bid or the request for proposal. The third planning period is during the postcontractual period which is subsequent to the production contract and includes the Government-industry provisioning planning conference and preparedness reviews. The purpose of the provisioning planning conference is to establish a common understanding between Government and industry by discussing provisioning requirements in detail. Preparedness reviews and reviews of contractor progress are made to insure compliance with the provisioning requirements of the contract.

14-4. Provisioning methods

The Army uses a variety of provisioning methods to select and code repair parts. These methods are divided into four basic classifications. Within each major classification, there are also various adaptations of the basic method. The basic provisioning methods are:

a. Conference team. Under this concept, a team composed of Government specialists in supply, maintenance, engineering, procurement, cataloging, or other field make periodic visits to the contractor's plant to conduct the provisioning function.

b. Resident provisioning team. Onsite technical representatives are usually maintenance engineers or technicians stationed at the contractor's facility to review contractor recommendations for repair parts and to perform the selection of items. Their tasks include identifying maintenance significant items; assigning source, maintenance, and recoverability codes; reviewing or assigning maintenance and overhaul factors; and reviewing contractor-prepared technical documentation. Onsite technical representatives are of great help in both the selection process and the monitoring of technical documentation. This method is useful particularly where a system is being provisioned by phases; when the system is being procured under a multiyear contract; when the number of items to be provisioned is large; or when the system may be changed extensively during production. Full-time technical representatives cannot usually be Justified for smaller programs.

c. In-house provisioning. In-house provisioning (sometimes called desk provisioning) is a method in which all actions of selection, coding, allocation, cataloging, computations, and procurement are performed at the Government location. Contractor participation usually is limited, although special contractor representation occasionally is requested. Except for providing documentation, few additional demands are placed on the contractor. In-house provisioning is particularly useful in agencies with provisioning expertise, those who deal extensively with commercial design materiel, or with materiel having relatively few components. Provisioning actions will be coordinated with the contractor.

14-5. Screening

a. Item screening is performed by the contractor or the procuring agency and the Defense Logistics Services Center (DLSC) to eliminate those items which duplicate or are interchangeable with items already in the inventory. *b.* At the procuring agency, part numbers are screened against agency files to determine if a national stock number (NSN) exists or to validate those found by the contractor. Part numbers for which no NSNs are found are then screened by DLSC. With the final screening results, the procuring agency can determine which parts are new to the supply system. Item descriptions must be prepared if source codes assigned to the repair parts indicate that they will be stocked, stored, or issued.

14-6. Selection

By selection is meant the identification of spare and repair parts, tools and test equipment, and their assignment to the appropriate level of maintenance in accordance with the maintenance concept for the end item. The Maintenance Allocation Chart is the vehicle used to assign each item to its appropriate maintenance level. Each part is assigned a source, maintenance, and recoverability code, and an essentiality code to describe how it will be obtained, the maintenance level at which it will be repaired or replaced, whether or not it will be repaired, and its essentiality to the operation of the end item. The validity of code assignments is verified during provisioning conferences, maintenance evaluations, operational tests, and service tests.

14-7. Assignment of items to General Services Administration (GSA) or Defense Logistics Agency (DLA)

a. The Army, after selection of the range and quantities of required spares and repair parts, identifies those items managed by GSA or DLA, determines additional items which are to be assigned to them for management, and advises them of the quantities of these items needed for initial provisioning and the projected annual replenishment demand. The system provides that these data and the applicable program data be transmitted on punched cards, along with the necessary technical data on new items. GSA or DLA does the Federal cataloging actions for the new items assigned to and accepted by them, and procures the quantities necessary to support the end items. Also, GSA or DLA may request the Army to furnish data on end items in order

that the data may be used by other supporting agencies.

b. The Army managers at the Service Item Control Center are the interfacing elements between the Army, GSA, and DLA in initial provisioning providing the information needed to obtain proper support for end items.

14-8. Cataloging

Since all items procured and stocked must be identified, an NSN must be assigned if one does not already exist. This is done by preparation of the item identifications prescribed in Federal Standard No. 5. The NSN distinguishes the item from all other items in the supply system. Since only emergency shipments may be made without an NSN, the submission of item identification data is very important.

14-9. Requirements

a. Computation of requirements is one of the most important steps in the initial provisioning process. Inaccurate computations can lead either to inadequate quantities of parts on hand, which may lead to deadlined equipment; or to excessive quantities, which may mean dollars have been misspent.

b. During initial provisioning' quantitative requirements are computed after the maintenance technicians have selected and source coded the repair parts. Basically, the following three steps are taken to arrive at a "buy" quantity:

(1) *Assignment of the failure factor (failure rate).* This factor is expressed in failures per 100 end items per year and is assigned on a basis of engineering judgment, test data, historical data on similar items, peacetime vs. wartime failure rates, and geographical area.

(2) *Computations of the gross quantity.* This is the quantity obtained by applying the failure factor, allowance factor, requirements objective period, and equipment densities.

(3) *Adjustment of the gross quantity to the net quantity.* This quantity represents the quantity of the repair part to be acquired. It is the gross quantity less quantities on hand, due in or to be recovered.

c. Where possible, phased provisioning is applied to selected spares and repair parts. Phased provisioning is the deferment of quantity procurement of the selected items until the later stages of production. This deferment increases the ability of the provisioning activity to reliably predict requirements. The selected spares and repair parts normally will be high-cost, reparable items. Under phased provisioning, only a portion of the total initial requirements is initially procured. To cover the remainder of the requirements, a buffer stock is maintainers in the production inventory of the contractor. The buffer stock may be in a finished, semifinished or raw material form. Demands which exceed the procured quantity are filled from the buffer stock. On a predetermined schedule, the provisioning activity recomputes requirements for the selected repair parts, using the latest inservice experience and test data. The final computation is made early enough to allow for leadtime and the final production run of the end item. This allows the provisioning activity to procure additional quantities from the buffer stock with short delivery leadtime or release the buffer stock to production.

Section *III*
Provisioning in the Navy

14-10. Organization for provisioning

a. The Chief of Naval Material, under the Chief of Naval Operations, has delegated responsibility for the policies and principles governing provisioning in the Navy to the Naval Supply Systems Command.

b. The systems commands and project managers are responsible for the end results of the provisioning process inasmuch as they have the inherent responsibility for end article support and since the majority of the decisions resulting in individual item selection are based on engineering and maintenance inputs.

c. The Commander, Naval Supply Systems Command, or his agent, the applicable program support inventory control point (ICP), is responsible for business and supply judgment and techniques. These include such matters as the actual procurement of the repair parts selected preparation of initial outfitting allowance load lists; requirements determination rules; furnishing past demand or usage data; mechanized provisioning procedures; cataloging and packaging determinations; recording provisioning information; and the scheduling, coordination, and administration of provisioning meetings.

14-11. Integrated logistics support

The integration of provisioning with other elements of integrated logistics support is complex. The elements cross many functional and organizational lines ranging from the Office of the Chief of Naval Operations down through the Naval Material Command and the fleet. Because of the life-cycle aspect, planning for the initial support of equipments and systems begins concurrently with development of performance requirements or at the earliest possible point in time in the conceptual planning phase. Technical and supply personnel at the systems commands and at the JCPs enter the program at its earliest stage. Therefore, the organizations involved provide the program data and support concepts from which the ultimate provisioning decisions are to

be derived. The Chief of Naval Operations provides basic support doctrine in matters such as allowance lists, mobile logistics support policy, materiel positioning policy, oversee base load requirements, and definitions of the applicable ships, or aircrafts, prime mission. The systems commanders and project managers provide the ICPs with data such as time-phased production and delivery schedules, a maintenance plan description of the equipment, performance requirements, projected equipment usage, number and types of maintenance facilities planned, and the date that supply support is required or, as more commonly termed, the Navy support date.

14-12. The provisioning process

a. The provisioning process begins with release of the Technical Development Plan which is a planning document for fulfillment of a specific operating requirement of the Chief of Naval Operations. The primary feature of this plan, applicable to provisioning, is contained in the supportability plan of the Technical Development Plan, which is a plan for the determination of the range and depth of repair parts, and their method of acquisition and distribution according to the maintenance levels involved. The Technical Development Plan is the responsibility of the material systems commanders or designated project managers procuring the equipment.

b. The next significant step in the provisioning process is the contract award for the equipment, system, or end item. The provisioning specification, which is part of the contract, prescribes the procedures, formats, terms, and conditions governing the provisioning of the items under contract. It specifies the actions to be performed by the contractor and Government activity and time schedules to be met.

c. After contract award, the next significant step is normally a preprovisioning or guidance conference. This conference, attended by representatives of the contractor and the ICP, is held to review the contractual provisioning requirements and to establish firm dates for actions not defined before contact award. Similar meetings may be held to determine long leadtime requirements, to determine if contractor support is required, and to review contractor preparation of required data.

d. The next major milestone is the selection of items required for initial support. The selection is normally made during a conference with representatives from the contractor, the ICP, and the systems commands. Selection includes the assignment of source maintenance, and recoverability codes; determination of item essentiality; assignment of replacement rates or factors; and the development of descriptive data required for assignment of NSNs.

e. After item selection, the ICP determines whether support items will be ordered from the contractor by way of a provisioning item order, from the appropriate inventory manager by way of a supply support request, or through normal replenishment actions for ICP-managed items. The ICP also provides for distribution of material and preparation of allowance lists.

f. At the provisioning conference, engineering drawings, parts lists, and, in some cases, sample equipments are examined in detail to select items required for initial support. This is a joint effort by engineering and maintenance personnel, supply and technical personnel, contractors' representatives, and fleet and repair representatives. The ultimate decision regarding any item rests with the material systems command representatives. Initial decisions to select or not to select an item are based on the assignment of source, maintenance, and recoverability codes which signify:

(1) Whether an item is to be purchased, manufactured, or assembled within the Navy.

(2) Whether the item is reparable and if so, at what level (organizational, intermediate, depot).

(3) If the next higher assembly is to be purchased.

(4) If the item is available from a commercial source and does not meet the established criteria for centralized management and stockage in the supply system, in which event it will not be stocked.

g. Technical determinations also are made with regard to other factors such as military essentiality, shelf life, maintenance replacement rates, recoverability rates, and failure factors.

h. After completion of the provisioning conference, the ICP completes item technical identification, obtains NSNs, and computes the total supply requirements, including supply system backup. The ICP activity includes preparation of procurement requests, distribution of material, and preparation of allowance factors, load lists, and initial outfitting lists.

14-13. Provisioning screening

Support items selected during the provisioning process are screened against the DLSC records to identify those items which have been previously assigned stock numbers or are in long supply. Either the contractor or the ICP, as specified in the contract, may submit the item descriptive data to DLSC for screening.

14-14. Assignments of items to integrated material managers

After selection of support items, the ICP identifies those items which will be coded for support by integrated material managers and obtains this support by way of a supply support request. Upon receipt, the integrated material manager catalogs the items and procures the necessary support quantity.

14-15. Provisioning alternatives

a. Increasing complexities in weapons and equipments, and the attendant unstable design in early production stages, can result in deferring Navy support until a sounder base of knowledge, developed in actual operations, is available. For example, when there is a potential for improvement of the design, it may be practical and economical to the Navy for a contractor to provide support for an initial period of service. Under these conditions, requiring activities may use the following techniques:

(1) *Contractor support.* There are three types OT contractor support considered by the requiring activity for application to a particular contract, based upon the guidance received:

(a) Full support. The contractor assumes total responsibility (maintenance, repair of unserviceables, support equipment, support material, and training) for a specified period of time for specified dollars at a specied degree of readiness.

(b) Material support. The contractor provides and manages for a specified period of time for specified dollars at a specified degree of supply effectiveness.

(c) Limited support. The contractor provides sets of repair parts, either parts peculiar or parts common, or both, for maintenance of the equipment for a specified period of time.

(2) *Phased provisioning.* Between the time the decision to procure is made until the need for repair parts actually arises, numerous changes take place in factors, plans, programs, operational concepts, and configurations over which there is a limited amount of control but an increasing amount of knowledge. This knowledge is used extensively in the phased provisioning technique, in which procurement of all or portions of requirements for selected items is deferred until the system’s design is stabilized and operational experience is available. This technique defers procurement of quantities of items that could possibly become obsolete through design changes. Closely associated with the procurement deferral action are the arrangements made with the contractor to increase the inventory of production items to serve as buffer stock for potential requirements during the uncertain periods of initial design and operation.

b. ICP participation during the provisioning process is dependent upon the type of contractor and contract and the commodity involved. For example, the contract may require some degree of contractor support where initial support requirements are provided by the contractor. In such cases, the ICP participation is limited to the identification of stock numbered items and the determination and procurement of system requirements. This procedure is often used for shipbuilding contracts where the Ships Parts Control Center is the program support ICP. Where the ICP is responsible for, determining initial support requirements, consultation and cooperation with the contractor is necessary to identify and procure support requirements. Consultation and cooperation include use of:

(1) *Team provisioning.* The aviation supply office normally uses the team concept of provisioning. The Ships Parts Control Center usually does not use the team concept of provisioning except for major ordnance and electronics equipments such as Ships Inertial Navigation Systems.

(2) *Onsite technical representative.* Represents fives are on hand in aircraft factories, shipyards, and in the field near manufacturing sites and plants. They perform as technical advisers on provisioning matters and on other logistics problems.

(3) *In-house provisioning.* The ICP accomplishes in-house provisioning largely for follow-on yearly procurements of parts for such items as missiles, computer consoles, etc., where the end item design is relatively stable. Modifications to end items of this nature involve approximately 10 percent of the parts.

Section IV
Provisioning in the Air Force

14-16. Organization and responsibilities

a. Headquarters, US Air Force establishes the Air Force position on DOD provisioning matters and provides Air Force provisioning policy, guidance, and direction. The Air Force Logistics Command is responsible for developing Air Force provisioning procedures and processes required to implement provisioning policies and achieve DOD provisioning objectives in the most timely and economic manner possible. The Air Force Systems Command is responsible for incorporating appropriate documents related to provisioning in Air Force Systems Command contracts. The Air Force Systems Command also provides the necessary contract administration in support of provisioning responsibilities. Other Air Force commands participate in provisioning actions related to equipment for which the command will have maintenance production responsibilities.

b. In order to insure effective provisioning planning from the beginning of a major system/ equipment development effort, the Air Force Acquisition Logistics Division, an Air Force Logistics Command activity, has personnel located at the Air Force Systems Command divisions having development and acquisition responsibility. The Air Force Logistics Command, through its Air Force Acquisition Logistics Division, must work closely with the Air Force Systems Command program office in order to insure appropriate provisioning in-

terface with systems/equipments development and production.

c. Physical accomplishment of provisioning actions is assigned to the Air Force Logistics Command's air logistics centers. The air logistics center assigned system manager/end article item manager has the responsibility for insuring that provisioning is accomplished in a timely and adequate manner. Prior to the assignment of an air logistics center as system manager/end article item manager, the Air Force Acquisition Logistics Division is responsible for early provisioning planning. Details for Air Force provisioning are outlined in Air Force Logistics Command Regulation 65-5, Air Force Provisioning Policies and Procedures.

14-17. Provisioning process

a. Air Force provisioning is accomplished in accordance with MIL-STD-1561, Uniform Department of Defense Provisioning Procedures and MIL-STD-1552, Uniform Department of Defense Requirements for Provisioning Technical Documentation. Action is currently underway to incorporate MIL-STD-1552 into MIL-STD-1388, Logistics Support Analysis. When complete, MIL-STD-1388 will become the primary document for requesting provisional technical documentation. These standards, along with the applicable data item descriptions and the Air Force Addendum to DD Form 1949-2, Provisioning Requirements Statement, are included in all new production contracts that require provisioning actions.

b. The provisioning guidance conference is convened not later than 45 days after the contract mailing date and is held at either the contractor's facility or the system manager/end article item manager air logistics center. The guidance conference may be attended by representatives from Headquarters, Air Force Logistics Command, Air Force Systems Command divisions, Air Force Acquisition Logistics Division, and the using commands in addition to air logistics center and contractor personnel. Through the medium of a guidance conference, the contractor and the Air Force are afforded an early opportunity to discuss and achieve a mutual understanding of the contractual requirements. In addition, the contractor is given an orientation in the Air Force methods of requirements determination, cataloging, and documentation requirements.

c. The provisioning conference allows the Air Force to select support items and assign technical and management codes. This conference is established after the contractor has completed the engineering effort and prepared the proper provisioning technical documentation. The data established must be early enough to meet contractual delivery requirements for new items. Participants in the provisioning conference are representatives from the contractor, systems manager/end article item manager air logistics center, item manager air logistics center, Air Force Cataloging and Standardization Office, and using commands. This conference may be held at either the contractor's facility or the system manager/end article item manager air logistics center.

d. The responsibilities of the Air Force and the contractor are not terminated after the provisioning conference. During the life of the production contract, the contractor has a continuing responsibility to submit to the Air Force, additional management or technical data, such as design change notices. Design change notices inform the system manager/end article item manager of changes to support items and may modify, add to, or delete parts previously under contract.

e. Within 60 days after the provisioning conference, the Air Force will submit provisioned item orders for those items to be procured from the contractor. Items not procured from the contractor will be supported by other means (i.e., purchase request to actual manufacturer or furnishing requirements to non-Air Force manager-DLA or another service/agency). For all practical purposes, the provisioning process ends with the delivery of the required support items.

14-18. Provisioning management techniques

a. Interim release. This procedure permits the contractor to release his forecasted spares requirement for critical or long leadtime items simultaneously with his production requirements for like items. The contractor's interim release does not become a firm order until reviewed and approved by the Air Force. Interim release must be authorized in the Procurement Requirements Statement before it is effective. This technique as proven to be invaluable for extremely compressed programs and has done much to provide timely support to the using commands.

b. Resident provisioning team. This concept requires selection and assignment of a cadre of well qualified Air Force personnel on a permanent change of station basis to the contractor's facility for the purpose of accomplishing provisioning, or a portion thereof. The Resident Provisioning Team may be identified as a logistics support cadre or a resident integrated logistics support activity. The system manager/end article item manager air logistics center is responsible for assigning and staffing the Resident Provisioning Team. The objectives of a Resident Provisioning Team are to reduce the time required to furnish the contractor with a provisioning order, to achieve a greater degree of understanding and compliance with contractual provisioning requirements, to effect closer control of items and quantities recommended by the contractor, and to attain better control of assets through joint usage of support items required for test and operational programs. It

affords the Air Force an earlier look at new items and a better estimate of when the contractor must release an item to production. It also enables reaction to reprograming and design changes.

c. Phased provisioning. This is a concept try which procurement of all or portions of requirements for selected items is deferred until the system's design is stabilized and operational experience is available. This technique can result in deferring procurement of quantities of items that could become obsolete through design changes. The quantities of items deferred, called buffer stocks, are over and above normal production inventors and are to be held by the contractor in the production line. Bonded warehouses are not authorized. This buffer stock will never exceed, at any given point in time, the contractor's requirement for like items for end item production. Decisions to apply this concept will he based on the contractor's capability to maintain buffer stocks and the criteria established for its use. The applicable contractual acquisition document for this concept is MIL-STD-1517. Phased Provisioning.

d. Accelerated provisioning concept. This technique is used when sufficient time is not available for accomplishing provisioning in the normal manner. This can he caused he several factors, some avoidable, some unavoidable. Recognition of this fact has prompted the development of a provisioning concept that can be used to produce initial product support in a much shorter time frame, when required and fully justified. Briefly, under this procedure, the Air Force notifies the contractor to speedily, prepare the provisioning documentation needed at the provisioning conference. The Air Force augments its normal provisioning conference team with additional item managers. At the conference, source, maintenance, and recoverability codes are assigned, cataloging action initiated, requirements computed, and provisioning orders initiated. The necessary actions are taken with the provisioning procurement contracting officer to officials release the provisioning order to the contractor at the close of the provisioning conference. Thus, this concept could reduce the provisioning process by at least 3 months.

e. Mechanized provisioning. The Air Force Logistics Command Provisioning System. D220, provides a mechanical means to assist the provisioning activity in controlling and processing numerous types of provisioning documentation received from the contractor. The voluminous number of hard-copy provisioning documents has always been a problem for Air Force provisioners. The D220 allows the Air Force to receive magnetic tapes in lieu of hard copy. It provides for receipt of-provisioning data from the contractor, interfaces with other systems, provides various review documents, and finally mechanically prepares a provisioning order to be forwarded to the contractor.

14-19. Accelerated provisioning procedure

a. When sufficient time is not available for accomplishing the standard provisioning process, the Air Force may use the accelerated provisioning procedure. Briefly, under this procedure, the Air Force notifies the contractor to speedily prepare the provisioning documentation needed at the source coding conference. The contractor is not required to wait for an item review, normally, provided by DLSC.

b. The Air Force augments its normal source coding team with additional item managers from the air logistics center, and on occasion, DLA personnel. At the accelerated provisioning source coding conference, the cataloging technicians assign temporary management control numbers to those items selected for procurement, if no, valid stock number is available. They accumulate the data needed for stock number control. They also insure that all the required drawings and other data needed for item identification are profited by the contractor, so that normal cataloging action can he done after the source maintenance, recoverability coding has been accomplished. The requirements technicians maintain frequent contact, by telephone with the appropriate item managers, so that a determination as to the quantities of items to be procured can he accomplished during the source coding conference. These actions permit the repair parts order to be developed, reviewed, and priced (based on the contractor's estimated unit cost). The necessary actions are taken with the provisioning procurement contracting officer to officially release the repair parts order to the contractor at the close of the source coding conference.

14-20. Spares acquisition integrated with production

This procedure integrates the ordering and production of selected spares and identical items produced for installation. Thus, the Air Force stabilizes quantities of spares on order, preprices spares orders with items for production installation, and links configuration control of spares directly to production items. This procedure requires contractors and subcontractors to integrate materiel ordering and manufacturing for both spares and items for production installation. This will hold down possible high prices resulting from separate materiel ordering and manufacturing actions. Since spares acquisition integrated with production orders are released with production contract award, provisioning actions must be accomplished early. Provisioning data requirements for spares acquisition integrated with production items must be incorporated in the full-scale development contract. The Air Force implements spares acquisition integrated with production on each new production program estimated to cost $300 million

or more, any modification program estimated to cost $100 million which requires initial spares support, or other programs or projects designated by the commander, Air Force Logistics Command, or Air Force Systems Command.

Section V
Provisioning in the Marine Corps

14-21. Introduction

a. The Marine Corps has long recognized the need for concurrent availability of repair parts, tools, and technical documentation at the time a new major end item is placed into operational use. To this end, the Marine Corps initiates provisioning during the Full-Scale Development Phase of an equipment acquisition as an integrated element of the logistics support analysis process in accordance with MIL-STD-1388 and MIL-STD-1561. Military Standards 1561 and 1552 are used when MIL-STD-1388 has not been included as a requirement in an equipment acquisition. These standards set forth those actions required of the contractor to insure identification of technical documentation requirements and concurrent delivery of end items with associated initial support materiel.

b. It is recognized that operational requirements sometimes call for temporary expedients. Therefore, provisioning may take several forms. For example, in an emergency, a new major item may be introduced with interim initial support and contractor support during the period that supply system stocks are being built up.

c. During the conduct of the provisioning process, every support item entering the Marine Corps supply system is source, maintenance, recoverability coded and identified by an NSN. The procedures of the DOD Item Entry Control Program are followed.

14-22. Purpose

The purpose of provisioning in the Marine Corps is to determine and obtain the range and quantity of repair parts, tools, publications, and support equipment required for the initial support of new equipment. Provisioning includes the identification, selection, and acquisition of items required for maintenance purposes and the preparation of instructions to insure that the necessary initial support items are positioned in the appropriate segments of the supply system and maintenance echelons before new equipment is placed in operational use.

14-23. Organization

The Deputy Chief of Staff for Installations and Logistics is responsible for the management of the Marine Corps supply system and formulation of provisioning policy, which is promulgated by the provisioning manual, Marine Corps Order P4400.79. The ICP implements provisioning policy and determines and acquires the range and quantity of support materiel initially needed for Marine Corps ground equipment.

14-24. Process

a. The provisioning process begins with the establishment of potential Marine Corps equipment objective in the form of a required operational capability statement during the Conceptual Phase. It continues with early funding estimates for budgetary planning, integration with logistics support analyses during full-scale development, acquisition of initial support items when the end item goes into production, and the distribution of initial support items to using and supporting organizations. It terminates at the end of the usage data reporting period, which is normally 2 years.

b. A Letter of Adoption and Procurement, which contains a completion schedule of the significant events that must occur before an end item with complete initial support can be placed in service by using organizations, is developed for each new end item. This letter is the official document used by the Marine Corps to initiate acquisition and it provides the Deputy Chief of Staff for Installations and Logistics with the basic planning data needed for development of integrated logistics support plans, maintenance plans, planned end item distribution, and initial provisioning requirements. Provisioning guidance such as the following is provided to the ICP: planned end item distribution; maintenance plans; logistics support analysis reports/ data; test and evaluation reports; and the Letter of Adoption and Procurement. These are essential for determining the range and quantity of items required for initial support of a new equipment and the preparation of repair parts lists.

c. Provisioning requirements such as technical documentation, repair parts ordering, provisioning conferences, and rescheduling are included in the procurement package. The military standard logistics support analysis and/or provisioning requirements are included as the basic provisioning requirements documents. However, the Marine Corps has existing cross-service agreements with the Army, Navy, and Air Force for using existing technical documentation when the end item was previously provisioned by one of those services.

d. During production, the contractor is required to submit a Provisioning Performance Schedule with his bid or quotation. This schedule depicts time frames in calendar days and the sequence of major actions in the provisioning cycle. A typical schedule would include:

(1) Contract award (production).

(2) Preprovisioning conference (to be held as soon as possible after contract award). During the conference, representatives of the ICP discuss the provisioning requirements with the contractor in order to facilitate preparation of acceptable and accurate provisioning documentation. The contractor is required to furnish a long leadtime item list at the preprovisioning conference.

(3) The ICP forwards a long leadtime repair parts order to contractor after the preprovisioning conference.

(4) The provisioning technical documentation package is submitted by the contractor to the ICP for review and approval. In addition to provisioning lists, drawings, common bulk items lists, and engineering drawing cards, the documentation also includes provisioning screening results provided to the contractor by DLSC in response to the provisioning screening submitted by the contractor.

(5) The ICP accepts the provisioning technical documentation after submission by the contractor.

(6) A provisioning conference is held at the contractor’s plant after the provisioning technical documentation has been accepted. The contractor is required to furnish a complete set of drawings and qualified engineering personnel for the maintenance evaluation of either an assembled and operable end items of the type being procured or a sample of each part which is detailed on the provisioning list if logistics support analysis was not conducted. At the provisioning conference, the ICP provisioning team determines items of support, establishes adequacy of the data requirements for cataloging and the preparation of the repair parts lists, establishes or refines firm failure and replacement factors, designates those items required for support which the contractor did not recommend, and determines item identification requirements.

(7) Preliminary source, maintenance, and recoverability codes are assigned during the provisioning conference; however, final assignment of source, maintenance, and recoverability codes are not made until a selective management review has been conducted with the greatest intensity being applied to the items of highest line item value. Some of the factors that are considered during the review are: usage experience obtained from the contractors, other military services, or the Marine Corps during full-scale development, past experience with similar equipment to update, refine, or establish maintenance and replacement factors; design stability of the item; production and procurement leadtime; use of actual past experience with similar items for repair rate; repair cycle time; item distribution computations; scheduled inservice dates; method of procurement; and use of phased provisioning in lieu of a total initial support item buy in order that actual usage experience can be used.

(8) Preliminary repair parts list illustrations submitted by the contractor are approved by the ICP after acceptance of the provisioning technical documentation. The contractor submits final illustrations to the ICP after acceptance of the preliminary illustrations and the ICP either approves or disapproves the final illustrations.

(9) An initial repair parts order is forwarded by the ICP to the contractor or integrated materiel manager after completion of the provisioning conference.

(10) The ICP furnishes the contractor with NSNs.

(11) The final significant event on the provisioning performance schedule is the delivery of the support items ordered.

e. Management controls are maintained throughout the end item production phase provisioning cycle by a provisioning milestone program, which portrays the progress of the provisioning cycle to insure that the required initial support materiel are delivered on schedule to Marine Corps Logistics Bases. When supportability tests conducted by the ICP indicate that the initial support materiel are available, the initial issue is made to Marine Corps Force Service Support Groups.

f. The initial issue process is initiated when the Deputy Chief of Staff for Installations and Logistics directs the ICP to release the initial issue consolidated tapes which reflect the range and quantity of initial support materiel authorized to the tactical using and supporting organizations. The ICP then sends out materiel release orders to release, from reserved stocks, those assets required for initial issue, concurrently causing a transfer of assets from inactive provisioning requirements stockage to general issue accounts and pre-positioned war reserve accounts.

g. The ICP monitors receipt of the initial issue by using and supporting organizations and advises the Deputy Chief of Staff for Installations and Logistics when the initial issue has been completed. Once the end items are placed in service, the Fleet Marine Force commanders advise the Deputy Chief of Staff for Installations and Logistics.

h. Placing an end item in service completes the provisioning cycle and is the beginning of the usage data development period of the operational phase. The early part of this phase is considered as the time for product improvement and refinement of the initial support determinations. This is accomplished by way of submission and evaluation of quality deficiency report and collection of actual usage data. Collection of these data for the first years of operations is very important in assessing the effectiveness of initial support and insuring continued support.

Section VI
Provisioning in the Defense Logistics Agency

14-25. Introduction

Under its chart, DLA participates as a supporting inventory manager in the provisioning process of the military services and other defense agencies. Their involvement is enunciated more explicitly in DOD Instruction 5100.63 and in joint provisioning regulations. The provision mission applies to repair parts managed by DLA for support of provisioning requirements of DOD customers. It includes the incorporation of provisioning procedural and technical documentation requirements into contracts for end items requiring provisioning. These are end items either managed by DLA or referred to them for procurement under the Coordinated Procurement Program, and for which they issue the contract.

14-26. Weapon system support

DLA plays a major role in support for the weapon systems being developed and managed by the military services. To enhance the support given these systems. DLA has keyed its efforts to give maximum management attention to those items essential to the operation of a weapon system. These efforts may begin even before DLA assumes responsibility for management of the NSNs. By identifying the weapon systems coming into the DOD inventory and working as an equal partner with the military service fielding the system, DLA actively participates in the provisioning and integrated logistics support planning for the system. This participation allows DLA to provide technical support at provisioning conferences, to recognize the provisioning transactions applicable to the weapon system, to expedite the processing of those transactions, to provide status on the DLA provisioning support, and to speed the entry of those items into the supply system. Once in the supply system, DLA uses the essentiality code assigned by the military service to determine those NSNs which should have the highest degree of support and management attention. The DLA Weapon System Support Program, which is reflected in AMCR 700-59, AFM 67-1, NAVMAT Instruction 4420.1, and DLAR 4140.38, details the specific actions taken to support these essential NSNs.

14-27. Processing provisioning transactions

a. Repair parts are furnished to fill customers initial support requirements for items already centrally managed and stocked and for those new repair parts being item management coded to the agency for management during provisioning. The forecast requirements are first transmitted to DLA by way of standard supply support requests, which provide both end item program information and individual repair part technical and supply information to the defense supply centers. The centers use the information provided in supply support requests to establish item identity and accomplish item entry control screening, cataloging, requirements determination, procurement, and stocking of the requested repair parts.

b. During item entry control screening, the centers find similar items which are already standard or are potentially interchangeable/substitutable. These are referred to the originator of the supply support request for consideration in lieu of entering the new item into the supply system. The originator has the final technical authority for accepting or rejecting the item offered, and is required to advise the defense supply center as to its acceptability. When it is determined that a new item will be entered into the system, the center accomplishes all cataloging actions including preparation of the item identification, submission to DLSC for NSN assignment, and furnishing appropriate supply management data to the DOD user. The center determines the method of management and net requirements, and places orders for procurement and delivery of items to meet the operational need dates of the users. The DLA budgets and funds under their stock fund for the purchase of centrally managed items and, when DLA procurement services are required, for the purchase of decentralized (local purchase) items as well. During provisioning, procurements of items which are not under integrated materiel management are financed by military interdepartmental purchase requests provided by DOD users, and such procurements are made by direct citation of users' funds provided in the request. The using military department/agency budgets and funds for reimbursement of the DLA stock fund for those items which it requisitions.

14-28. End items managed by DLA

When an end item is assigned to DLA for integrated materiel management or coordinated procurement, the responsible center insures that necessary actions are taken to accomplish provisioning support. The center notifies the users of planned procurements of end items, and requests that users' provisioning requirements be provided for inclusion in the contract. These contractual requirements, which are more explicitly enunciated in joint regulations, include preprovisioning and source coding conferences, provisioning technical data (provisioning lists, drawings, item identifications, etc.), delivery schedules for these data, options to procure repair parts, and delivery of such parts. The defense supply centers include these contractual requirements in those solicitations or contracts for which the users have indicated a need for provisioning in connection with the

end item purchase. DLA, as contracting officer and administrator, is responsible for processing the contract through to completion including all provisioning requirements. As present, DLA does not provide direct provisioning support to civil agencies and bureaus, but is responsible for coordinating, negotiating, and consummating provisioning agreements and relationships between DOD and GSA.

14-29. Defense Logistics Agency Screening Program

DLA operates a screening program to match manufacturer's part numbered items to existing NSNs. Policies and procedures are provided in DOD 4130.2-M (Federal Catalog System Policy Manual). The program requires military services, defense supply centers, and appropriate authorized contractors to screen manufacturer's code and part number and/or NSN against the total item record maintained at DLSC. The screening minimizes the introduction of new items into the DOD system; prevents procurements of items in long supply; provides the identification of existing inventory managers, full catalog file data, and asset data, where appropriate; and reduces the cost of item identification for cataloging purposes. The screening program is flexible enough to accommodate all the variations that exist in provisioning procedures and to provide standard results for all users.

Section VII
Provisioning in the General Services Administration

14-30. General

a. GSA performs its provisioning functions in accordance with DLA regulations, manuals, and agreements with the services. Therefore, provisioning in GSA is almost identical to provisioning in the agency.

b. The principal difference is due primarily to the difference in organization. In GSA, the responsibility for control and performance of provisioning is in the Office of Federal Supply and Services.

c. Equipment procured by GSA is provisioned by contracts entered into by this activity.

d. Processing of provisioning supply support requests will, in some cases, cause the establishment of depot stocks, depending on the nature and difficulty of procurement.

e. Initial service support requirements for items managed by GSA are supplied by issue from stock or by direct procurement.

Chapter 15
Major Item Management

Section I
Major Item Management in the Army

15-1. Introduction

a. All the military services give primary management attention to major items of equipment, such as aircraft, ships, tanks, and weapon systems. Decisions concerning major items normally are made at departmental or higher levels, and review of requirements is extremely detailed and receives management scrutiny at every step of the process. Major items are individually identified in use and in reserve. They are issued only upon specific authorization or for special projects. Inventory levels, in the sense of bulk stock measured in "days of supply" or some other pipeline factor, are not significant for these items. Because of their importance, major items require detailed analysis and examination of all the factors affecting their supply and demand. Normally, they are identified by their requirement to be centrally managed by their high cost; their worldwide requirement is individually specified, computed, and programed in accordance with force structures as matched against the Table of Organization and Equipment (TOE/The Army Authorization Documents System (TAADS); their essentiality for combat or training; and the difficulty of procurement or production. Major items must be in supply class V (ammunition) or class VII (major end item).

b. Major supply problems in this area involve the establishment of unit allowances based on organizations and missions to determine the total initial allowances plus a provision for any known operational requirements. Sufficient quantities are added to replace items of the initial issue that are expected to be worn out through fair wear and tear or damaged or lost under combat conditions. Computations are made of stock necessary to initially fill the pipeline intransit between the Continental United States (CONUS) and oversea areas. Materiel necessary for special projects must be acquired. Consideration is given to the use of those items to be overhauled.

c. From the point of view of supply management as well as strategic necessity, the segregation of major items from secondary items is a valid and desirable management technique. Procurement, supply control and distribution problems are basically different for major items.

15-2. General information

a. Major items are end items which because of their importance require detailed analysis and management by the Army and close scrutiny by the Department of Defense (DOD). Primary management attention is given to such items as tanks, aircraft, missiles' and major weapon systems which make up the largest portion of the Army's dollar investment and represent the largest part of the annual need for procurement dollars. Estimates of the Army's inventory vary between $125 and $150 billion. Of this amount, the major items represent 1 percent of the total line items and 80 percent of the total dollar value of the inventory.

b. Intensive management of major items is necessary not only because of their high-dollar value and combat essentiality, but also because of their impact on secondary items and repair parts to support the equipment in the field. The level of review given these items will differ depending on how critical the end item is and its total inventory dollar value. Some are reviewed by the major subordinate command (MSC), which are comprised of the materiel readiness commands and materiel development commands, some by the US Army Materiel Command (AMC), and some by the Deputy Chief of Staff for Research, Development, and Acquisition (DCSRDA). The item emphasis for management analysis may vary from year to year.

c. The computation of requirements for major end items is an important function in the logistics system. It is through this process that the Army evaluates its materiel readiness position at different points in time, insures that excesses are not accruing, and provides a basic input to support its annual budget request and subsequent apportionment of the appropriate dollars. The consolidated requirements of all the military services representing the defense plans of the United States provide the basis for determining the military demands upon the industrial capacity of the Nation's resources in terms of facilities, raw materials, and manpower. These major item requirements are the focal point from which almost all major item inventory management actions originate; e.g., procurement, production, distribution, maintenance, and disposal.

15-3. The Army Materiel Plan

a. The Army uses as its primary instrument for major item management analysis a document called the Arms Materiel Plan (AMP). The AMP integrates all elements of logistics planning directly affecting attainment of Army major item materiel objectives, namely: requirements, assets, losses, and production capabilities. The AMP is a basic source document used in the development and execution of that portion of the Army Long-Range RDA Plan (LRRDAP), Program Objective Memorandum (POM), and Office of the Secretary of Defense (OSD)/Office of Management and Budget (OMB) Budget Estimate as they pertain to major items of equipment and munitions in Procurement Appro-

priations, Army (PAA). It is a planning document only. The purpose of the AMP is to determine which major items of equipment and munitions should be bought, rebuilt, and disposed of; in what quantities; and at what time. The AMP also provides for the development of major item overhaul and repair (depot and contractual) programs required to maintain the US Army inventory.

b. The unclassified, unofficial booklet entitled Procurement Planning and Policy Guidance (PPPG) is used to determine overall procedures used for planning, programming, and budgeting for PAA and explains the relationships between elements of materiel acquisition and logistics. Detailed instructions for the conduct of the biannual AMP reviews at the MSCs are contained in guidance letters promulgated by Office of the DCSRDA (DAMA-PPP-P). Generally, these reviews are held to make repricing and executability changes only. The results of these reviews are used by ODCSRDA as the basic baseline data for formulation of the POM and the OSD/OMP Budget Estimate.

15-4. Information requirements

OSD expects the military departments to react promptly to changes or proposed changes in the logistics guidance and the composition of their forces. The Army Staff must be able to prepare without delay accurate estimates of materiel requirements in dollar costs dependent upon these changes and proposals.

15-5. Planning guidance

a. Preparation responsibility. The AMP is prepared by AMC and its MSCs. The AMP and the Army Production Base Support Plan are prepared twice a year to support the POM and OSD/OMB Budget Estimate. AMP review dates and detailed instructions on the conduct of the review and preparation of the AMP documentation are announced separately by ODCSRDA (DAMA-PPP-P).

b. Study requirements. The AMP is comprised of seven sectors (e.g., Army acquisition objective (AAO), buys, losses, production) that relate to a standard study number (SSN). The compilation of individual SSNs in each of the five Army procurement appropriations becomes the AMP for the POM on the OSD/OMB budget.

c. Budget study items. SSN items selected for study are based on consideration of programed quantity and dollar values reflected in the DOD P-1 Budget Estimate.

15-5. Requirements computation

a. Two terms are used to describe the total quantity of an item of materiel required by the Army to be included in the AMP study-gross requirements or the AAO. The gross requirement is the sum of the initial issue quantity (IIQ), maintenance float, operational projects, post D-day consumption, required to support the planned force in a wartime situation and to sustain that force until civilian industry can be mobilized to support the Army's total wartime daily needs. The AAO is the quantity of an item of equipment or ammunition required to equip the approved US Army force and sustain that force, together with specified allies, in wartime from D-day (day the war begins) through the period prescribed and at the support level directed in the latest Defense Guidance (DG). The AAO is broken down into various packages based on force packaging methodology outlined in the Army Plan. The DG establishes procurement programing objectives to be achieved by specific fiscal year (FY) funded delivery periods (FDP). The packages in the AAO can be related to the procurement programing objectives in the DG. A net requirement is computed for each FY FDP by comparing asset position plus projected receipts less projected peacetime losses with appropriate AAO packages.

(1) *Support of allies.* Materiel provided for the support of allied forces is another element of the AMP. Computation and display of these quantities is dependent upon many factors, to include the source of funding (procurement appropriations or other funds) and the type of transaction (sale, grant, aid, or issue with transfer of title). Authorization for equipment for allied forces are not included in the force structure. Annual requirements are developed in a series of coordinating conferences between the country, the unified command, and DOD. The requirements are submitted to Congress as the Foreign Aid Program Proposal. That portion of the proposal approved by Congress and incorporated into the AMP, authorized on a by-item-by-dollar basis. It is not a part of the AAO, but is a part of the total procurement plan developed by the readiness commands.

(2) *Support of other US activities.* The materiel support provided the other US military departments and agencies is also an integral element in the AMP. Both current and mobilization requirements are included. Current requirements are coordinated directly with the appropriate commodity commands; mobilization requirements are coordinated with DA which furnishes the requirement to the proper MSC.

b. Equipment and ammunition items to sustain, not equip, specified allies is referred to as War Reserve Stock Allies (WRSA) and does represent a portion of the AAO. Procurement is programed based on the DG.

c. The automated AMP is known as the System for Automation of Materiel Plans for Army Materiel (SAMPAM). Currently, an effort is underway to modernize SAMPAM. It is called AMP Mod and phase I should be operational in late 1984.

15-7. Preparation of gross requirements

Based on guidance furnished by ODCSRDA (DAMA-PPP-P), the US Army Research, Developments and Acquisition System Agency (RDAISA) computes the AAO. The elements of the AAO are:

a. IIQ. This represents the requirements (by line item number LIN)) for items as set forth in the Logistics Structure and Composition System (LOGSACS is an interface of the Force Accounting System (FAS), TAADS, TOE Files, Basis of Issue Plan (BOIP), and represents the approved initial wartime force for active and reserve components. The Office, Deputy Chief of Staff for Operations and Plans (ODCSOPS) provides these data to ODCSRDA (DANIA-PPP-P) for AAO development purposes and to the US Army Depot System Command (OESCOM) for the Total Army Equipment Distribution Program (TAEDP) development purposes.

b. Maintenance float. Maintenance float contains those end items authorized by DA for stockage at installations or activities for replacement of unserviceable items of equipment when immediate repair of the unserviceable equipment cannot he accomplished by the supporting maintenance activity. The immediate exchange of serviceable for unserviceable equipment enables a using unit to perform its assigned mission without serious disruption. Maintenance float is authorized for selected major items. Maintenance float stocks may be loaned to replace items which have been lost, destroyed, or are uneconomically reparable, but these items are loaned only when the scheduled supply delivery date is determined to be after the operational need date. Maintenance float includes both operational readiness float (direct support float) and repair cycle float (depot-level overhaul float). Maintenance float factors are published in Supply Bulletin (SB) 710-1-1. If a maintenance float is authorized for an item but a factor has not been published, agencies preparing the AMP use factors published for similar items of equipment. Army Regulation (AR) 750-1 contains the details for determining these maintenance float factors.

c. Operational readiness float. End items or major components of missionessential, maintenance-significant equipment, specified by DA for stackage, normally by direct support or general support maintenance units, to replace unserviceable equipment needed to meet operational commitments.

d. Repair cycle float. An additional quantity of major items of missionessential, maintenance-significant equipment, specified by DA for stockage at depot level to permit withdrawal of equipment from organizations for scheduled overhaul, without detracting from organizational readiness. The float is used to replace equipment awaiting overhaul, in the overhaul process, and intrasit to and from depot overhaul.

e. Operational projects. It is through operational projects that nonrecurring needs for supplies over and above normal allowances are authorized to support specific logistics or contingency plans. These requirements are authorized by DA through the PPPG Document and do not constitute a regular demand; e.g., a plan indicating the need for a port facility to be built in the event of military operations at a specific locations. Since this is a one-time requirement for a specific need, it qualifies as an operational project. A bill of materials is prepared and, when the project is approved by DA, the port facility bill of materials is added to the AAO as an additional requirement.

f. Post D-day consumption. The materiel anticipated to be lost in combat or worn out after D-day is referred to as post D-day consumption. The anticipated consumption is computed by multiplying a wartime replacement factor (WAFR) and/or peacetime replacement factor (PTRF) by the initial issue requirements of units scheduled to he in these postures during the number of months depicted in a postulated scenario.

15-8. Replacement factors

a. The computation of replacement requirements for equipment and consumption rates for ammunition represents an effort to arrive at the expected annual demand. Since no two wars or engagements are ever pursued under precisely the same conditions; since environmental conditions vary throughout the world; and since technology changes so swiftly, by the time data have been collected and analyses made, newer conditions exist. Under these dynamic conditions, the computation of requirements on an economical, combat readiness basis presents a real challenge. The annual requirement to replace equipment in use is determined by applying the appropriate replacement factor to the in-use inventory.

b. A replacement factor is the estimated percentage of equipment in use that will require replacement each month due to wearing out beyond repair, enemy action, abandonment, pilferage, and other causes except catastrophes. Obsolescence, maintenance float, issues to replace equipment undergoing overhaul, ship sinkings, storage, and operational projects are not included in this computation; the replacement factor is applied against the IIOs only. Unclassified replacement factors are published in SB 710-1-1 and are listed under two categories: peacetime and wartime active. The peacetime factor is used to forecast peacetime consumption quantities and mobilization training losses. The wartime active factor is used in computing combat consumption and to determine war reserve requirements for some allies. Classified wartime active factors are contained in the SSN, but are not displayed in SB 710-1-1 to preclude classing the supply bulletin.

c. Peacetime replacement factors are based on historical demand data; wartime factors on experience in World War II and in Korea and on technological advances. Because of the intense interest in replacement factors by the Department of the Army (DA), DOD, and Congress, the Army has sponsored studies to develop new methodologies for computing these factors. The principal theme of each new methodology is that requirements are separately identifiable by cause. For peacetime, this includes wearout or accident; while wartime is related to type of combat mission and various ways in which equipment might be lost in combat. A more complete description of policies and procedures for determining replacement requirements for Army equipment using the results of these methodologies is found in AR 710-60.

d. Materiel will be destroyed or consumed at an accelerated rate under combat conditions, and within combat conditions there are varying consumption intensities. Normal combat is that intensity anticipated in an active theater over a prolonged period and includes all types of combat activity, from very heavy fighting situations to where there is no actual combat. Intense combat implies a much higher degree of intensity during which, although including the elements of normal combat, very heavy fighting is projected. The PPPG will include instructions for application of a combat intensity factor tailored to the specific degree of consumption expected in each oversea area.

e. Ammunition replacement requirements are computed approximately the same way as equipment requirements. The requirement is expressed in rounds/unit per day per weapon or in units of measure for bulk items. The quantity expected to be expended is based on ammunition factors found in SB 710-1-1. Ammunition expenditure is also referred to as combat consumption.

15-9. Preparation of net requirements

Agencies responsible for preparing the AMP must await the receipt of the AAO data. At this time, they will compare assets and projected peacetime losses with the AAO to determine the net requirement, and develop the production data to satisfy the new requirement.

a. Total procurement plan. This is a summary of procurement actions showing actual program accomplishments for the prior year, the approved program for the current year, program quantities developed by the preparing agencies for the budget year, and projected programs for subsequent years (budget + 1 through budget +5).

b. Inventory objective plan. The Inventory Objective Plan displays the results expected to be achieved by the Total Procurement Plan as of the end of each studied fiscal year. The principal objective of this plan is to insure that the readiness of the Army will not be lowered for economy purposes. Normally, specified packages of AAO will be achieved during the 5-year plan (budget + 1 through budget + 5). The leadtime it takes to deliver all the equipment procured with 1 year's funds determines which year specified packages of the AAO will be achieved. This objective, less the net asset position, represents the quantity the Army should budget for annually as reflected in the Total Procurement Plan. The Inventory Objective Plan is formulated on projected receipts, losses, and the year-end asset position. Subtracting the combined total of receipts and assets type-classified as standard less the losses from the specified packages of AAO give; the net asset position for the year concerned.

(1) *Receipts.* The main source of increase to the inventory is from production. The projected receipts reflect approved production schedules from past fiscal year appropriations, and proposed production schedules for future years. The proposed schedules are subject to change by each year's submission of the AMP. Receipts from sources other than production are also projected for the same periods.

(2) *Reductions to the inventory.* Reductions are incurred when an item of equipment is no longer under the Army's control. Transfer of equipment from one theater to another does not constitute a reduction to the inventory because it is still under the Army's control. Reductions occur in many ways, through peacetime wearout, combat, "washout" programs, sales/grants to allied countries, and by other means not discussed here but considered by agencies preparing the AMP in projecting future assets. Reported losses are used when actual losses are to be portrayed.

(a) Peacetime losses. Replacement factors appearing in SB 710-1-1 are used to project peacetime losses to the in-use inventory. These projected losses are now tempered by reported loss data.

(b) Combat losses. The preparing agencies will use other replacement factors in SB 7101-1 to project combat losses, if applicable.

(c) Washout programs. Washout programs provide for the planned phaseout of older equipment items that are no longer needed or are being replaced by new items. They are not considered to be normal peacetime losses. The program is developed by the AMP preparing agency and submitted to DA on the AMP. The funds provided for procurement of the newer items determine the rate at which the program is executed.

(d) Sales, grant aid, and other. HQ, AMC, approves transfer of Armyowned assets to non-Army customers, and these quantities are displayed in the AMP as projected inventory reduction.

(3) *Worldwide asset reporting*. Generally, all assets which are type classified as "limited production"

or "standard" are subtracted from the AAO in arriving at a net requirement. This includes all serviceable assets except those which have been coded "uneconomically reparable." The year-end asset position for the prior year is determined by the continuing asset balance reporting procedures. The reports include assets in the hands of troops, intransit, and in storage both overseas and in CONUS. The reports are received at DESCOM, consolidated, and forwarded to the preparing agencies.

(4) *Contract data.* Contract information concerning producers who are already under contract or have bid successfully and are to be awarded a contract is reflected in this portion of the AMP.

15-10. Production data

Information concerning actual and planned production capabilities is needed for review, analysis, and revision of the procurement portion of the Army budget and for determining capabilities for support of the Army needs, those of allies and other claimants, and mobilization requirements. Combat consumption quantities displayed in the HQDA Critical Items List (CIL) reflects the total needs for prioritized wartime requirements. Government-owned capacity includes depot assembly of an identifiable end item from components required under a breakout program and in-house fabrication. This total production capability is based on the latest planning for industrial preparedness with consideration given to the type of equipment the manufacturer normally produces.

a. Production base analysis. To insure that the plans for the Army's D-day readiness position is complete, the post D-day consumption requirements are computed and published annually in the HQDA CIL for industrial preparedness planning. This permits accurate, realistic planning for post D-day industrial base support. In addition to the total requirements, also displayed are the current and planned producers who have written agreements with the Government to produce the item during mobilization. Their total anticipated production output is reflected by month in order to correlate mobilization requirements with production.

b. Manufacturers' data. For those manufacturers already producing or committed to planned production of an item after D-day, a considerable amount of information is needed to compute the mobilization production schedule. These data include but are not limited to:

(1) *Minimum sustaining rate*. The minimum rate required to maintain a production line operating with reasonable efficiency and without excessive increases in item cost.

(2) *1-8-5 production rate.* A maximum monthly rate of production that can be efficiently obtained by each manufacturer on a single shift 8-hour day, 5-day workweek basis, using installed production equipment and special tooling.

(3) *2-8-5 production rate.* The maximum monthly production rate that can be efficiently obtained by each manufacturer on a 2-shift, 8-hour day, 5-day workweek basis, using installed production equipment and special tooling.

(4) *Maximum production rate with current tooling.* A maximum production rate that can be obtained using installed production equipment and current tooling. Since the post D-day production offset is a reduction in the number of items which the Army can procure in peacetime, great care is exercised in developing how much more a producer can deliver in the time period after an assumed D-day. Such factors as leadtime to hire and train new employees, leadtime to obtain components from vendors, and leadtime to acquire additional tools and equipment should be considered realistically.

(5) *Number of months to reach maximum rate.* The number of months from the mobilization day which will be needed for the manufacturer to achieve the maximum production rate. This number is based on an assumption of a declaration of a national emergency with no requirement for formal advertising in competitive procurement.

(6) *Economical procurement quantity.* The determination of this quantity is a judgment matter. As such, this quantity is based upon the best estimate available. This information is used to determine the minimum annual quantity which can be procured without paying a penalty to a manufacturer.

(7) *Minimum procurement quantity.* The determination of this quantity is also a judgment matter and is based upon the best estimate available. Normally, it would be expected that this is the smallest quantity a prospective bidder could be expected to bid on. For items of a commercial nature (e.g., certain types of construction equipment, materials handling equipment, vehicles, air-conditioning equipment), this quantity could be one unit. This information is used in studies to determine if procurement should be made in lesser monthly quantities over a longer period of time the objective being to retain production capability for as long a time as practical.

c. Peacetime production schedule. Procurement plans normally are designed so that total acceptable assets of each item of equipment will reach the AAO as quickly as possible. When reached, enough production is programed each year to maintain the inventory of acceptable assets at that level. The procurement planning phase of the AMP preparation requires close attention to insure the many facets affecting procurement contracts are complied with. The schedule reflects the contracts in being for which delivery has not been com-

pleted; procurement schedules approved by Office of the Secretary of Defense, for which contracts have not been let; and the forecasted schedule to support the current AMP. As a total entity, the production data section of the AMP presents the planning actions taken to provide for peacetime production. Should any element of the planning indicate the requirements will not be met, timely notice is given so that appropriate decisions can be made in this regard. It might be that additional production facilities can be located and put into production; careful analysis of the use and mission of the item may indicate requirements are too high; a recognized risk may be taken that as many items will not be needed as programed; or it may be that it will be impossible to produce as many items as programed and another item will have to be used to accomplish a part of the mission assigned this particular item.

15-11. Distribution planning policies

a. General. Materiel requirements displayed in the AMP reflect quantities necessary to equip an initial wartime force and to keep this force fully operational during the time frame of a postulated scenario. This ultimate purpose, and the equipment and ammunition requirements generated therefrom, are used to support appropriation requests. However, distribution planning is based upon a different concept-that of making the best use of Army assets in a pre-D-day environment, and requirements stratification is somewhat different. For example, equipment whose purchase was justified by vaguely defined post D-day consumption requirements is actually issued to very specifically defined distribution requirements for theater reserves, priority mobilization reserves, general mobilization reserve, and other types of war reserve.

b. Objectives. Although DA policy requires that all units and commands have on hand or on requisition all items they are authorized, items are not always available in the supply system to meet these needs. In order that the optimum use can be made of available assets, the distribution of major items of equipment are forecasted in accordance with a master planning document called AEDP rather than by the date and issue priority reflected on requisitions. The objectives of this distribution program process are to:

(1) Reflect the most economical and effective means of distributing selected items of equipment.

(2) Establish control over equipment in short supply so that issues are in accordance with priorities established in AR 11-12, commitments to foreign governments, and the policy to provide training support to Reserve components prior to the Active Army receiving 100 percent of their authorized quantities.

(3) Provide an approved plan for orderly and effective distribution of newly adopted items of equipment.

(4) Provide an approved plan to indicate current and projected requirements, assets, and scheduled delivery dates.

(5) Provide an approved plan for the orderly and effective phaseout of old equipment no longer meeting the combat needs of the Army (assets type classified in an obsolescent category).

(6) Provide management information to assess the impact of various distribution alternatives; examine the adequacy of procurement programs; equipment details for specified units and an audit capability to track and program changes through the program, budget, and execution; processes.

15-12. Total Army Equipment Distribution Program

a. This program is prepared by DESCOM and the MSCs of AMC, and other commands designated by DA. All major commands are responsible for the review, reconciliation of data, and use of the TAEDP in their management of these selected items of equipment.

b. The TAEDP provides DA, AMC, and major commands a means to more effectively and efficiently manage and execute the distribution of Army’s major items of equipment. The program is designed to cover the life cycle of equipment from the initial requirement to procurement, through its useful life period, and finally its ultimate disposal from the system. This program is used as the basis for filling requisitions; determining the Army’s logistical capability to support unit actions and war plans; to forecast the allocation of future assets; to determine if redistribution of assets from lower priority assignments to higher priority is justified; and to evaluate the impact on the Army’s readiness and logistical posture if an item is reclassified from a standard to an obsolescent type classification. This distribution program is developed through the use of automated procedures which applies data from 16 sources, including the SACS File, SAMPAM, the procurement data base (PDB), the Continuing Balance System-Expanded (CBS-X), and SB 700-20. It is prepared in accordance with Distribution Policy and Guidance issued by the Deputy Chief of Staff for Logistics (DCSLOG). Publication of TAEDP documents by DESCOM when approved by HQDA, shows a sequence by which the MSCs are to issue equipment to claimants.

15-13. Determination of distribution requirements

IIQs are controlled by the DCSOPS through use of the SACS data. Files of authorization documents are matched with the current force, and the product is a list of requirements structured by oversee areas and by

force within CONUS. DESCOM, which receives these data, computes maintenance float, and incorporates operational project requirements. This command then computes war reserves, pre-positioned war reserves, and pipeline levels requirements based upon other guidance from DA (which indicates deployment date and area for each unit), and on guidance contained in AR 11-11. A TAEDP is then prepared by an automated program which uses the latest asset position and other data. The MSCs, based on guidance from HQ, AMC and DA, can override the automated program by using the Commodity Manager Input Data System.

15-14. Configuration management

Configuration management is an accepted and approved management discipline. It is a system for recording established military requirements for materiel; insuring that all changes affecting these requirements are reviewed for total impact and cost-effectiveness; and maintaining adequate records of the requirements, changes, and hardware status throughout the life cycle of materiel. Configuration management for large and complex systems can be regarded as the means of controlling and documenting the systems development and production descriptions as well as being the source of information for provisioning, manuals maintenance evaluation maintenance allocation, and other data tasks concerned with insuring system readiness at time of distribution. Further discussion of this approved management discipline is found in FM 700-80.

15-15. War reserves

a. War reserves are stocks of equipment acquired in peacetime to meet increased military requirements subsequent to an outbreak of war. These reserves are intended to sustain combat operations until normal resupply to the combat areas can be established. War reserves are categorized as:

(1) *Theater war reserves.* That quantity of materiel that is pre-positioned in the oversea theaters and commands. These materiel are:

(a) Positioned at or near the point of planned use.

(b) Intended to support post D-day consumption until normal resupply can be established from CONUS.

(2) *CONUS war reserves.* That portion of war reserves complementing theater war reserves (CONUS resupply) and supporting:

(a) Specific contingencies. plans, and projects.

(b) Partial/general mobilization. *b.* War reserve quantities are computed in accordance with *(c)* AR 11-11 and special policy and guidance issued by DA. Consideration is given to the D-day force and unit deployment schedules. Use of war reserve stocks during peacetime is normally not authorized (only under certain conditions as outlined in AR 710-1). (*Note:* New policy on peacetime use of war reserves is being placed in chapter 8, AR 710-1; expected completion February-March 1984).

c. Operational project stocks are specific authorizations, approved by DA, for major commanders to acquire material for theater or CONUS stockage for the purpose of supporting operations, contingencies, and/or war plans for certain geographic areas. They comprise a specific type of war reserve and, although they fall within the definition of a war reserve, they are treated as separate requirements. *d.* More detailed information on war reserve stocks and selection of items for mobilization reserve stockage is found in ARs 11-11 and 710-1. The war reserve stockage list is published in SB 700-40.

15-16. Type classification

a. The process of an item being acceptable and supportable for service use is known as type classification.

b. The basic purpose of type classification is to increase the combat effectiveness in military forces while simultaneously conserving money and materials. Materiel purchased for troop use is classified as Limited Procurement, Standard, Contingency, or Obsolete. Limited Procurement is assigned to an item if procurement is necessary because items are needed to complete testing or to fulfill urgent operational requirements. This classification is not used unless an evaluation indicates that the item can be expected to pass all tests and subsequently adopted as standard.

c. After successful operational and development tests prove that an item satisfactorily fulfills the required operational capability, it is assigned a type classification of Standard. These items are the most suitable for the mission intended can he produced in the necessary quantities, and are logistically supportable. There can be many different makes or models of equipment, all of which are designated as Standard. For example, the Army has several different makes and models of warehouse tractors, any one of which can be issued to fulfill a requirement for such a tractor. Within the inroad category of Standard, some makes or models are designated as preferred, faith the balance being secondary or in lieu of.

d. The Contingency type classification is applied to items which no longer fully satisfy operational requirements but which have residual value for either training or emergency use. Peculiar repair parts are obtained from cannibalization of end items rather than from procurement. Redesignation of expensive major items from Standard to Contingency impacts heavily on the budget because such redesignated items can no longer

be included in the total asset position.

e. Items which are no longer required or acceptable for use are reclassified as Obsolete, and disposal action is initiated.

f. The normal type-classification progression is portrayed above. However, it is not essential that an item progress through each of these classifications during its life cycle. More detailed information is found in AR 70-61.

g. The type-classification system is augmented by the assignment and use of logistics control codes which indicate the degree and type management to be used for each item.

15-17. Project management

a. Project management is a concept for the technical, business, and administrative management of specified projects based on the use of a designated, centralized management authority (usually a project manager) who is responsible for planning, directing, and controlling all phases of research and development, initial procurement, production, distribution, and logistical support for the purpose of providing a balanced program to accomplish the stated project objective.

b. This management authority is also responsible for insuring that planning is accomplished by the organizations responsible for the complementary functions of evaluation, logistics support, personnel, training, operational testing, activation, or deployment. The centralized management authority is supported by functional organizations which are responsible to them for the execution of specifically assigned project tasks. Project manager functions normally are carried out by a project manager who is appointed by the Secretary of the Army.

15-18. DA system manager

a. When the development, production, and support of a new materiel system will impact on the fundamental national interest, or redirect basic national policy for an extended future period, a DA system manager may be designated by the Secretary of the Army. In determining whether a system manager is required in addition to a project manager, one or more of the following criteria must apply:

(1) The development and deployment of such a system would significantly influence elements of the national interest other than the purely military for an extensive period in the future.

(2) The subelements or components of the hardware system are anticipated to require exceptional and prolonged study and experimental effort.

(3) Nonmateriel subelements of the system under development cannot yet be optimized.

(4) Definitive cost and schedule data depend on trade-off studies that cannot yet be undertaken.

(5) The development and deployment of a system having major impact on the national interest also involves significant participation by another service or by an ally of the United States.

b. Proposed projects under the project management concept are documented by the developing or procuring agency, and ultimately approved with an initial charter issued by the Chief of Staff. Final charters require Office of the Secretary of Defense approval before being issued by the Secretary of the Army. System management charters also are issued by the Secretary of the Army after the necessary approvals. A further explanation of system project management and related functions is contained in AR 70-17.

15-19. DA system coordinator (DASC)

DCSRDA appoints DASC to act as the DA point of contact for all aspects of materiel acquisition and to coordinate the status of all events in the LifeCycle System Management Model for a major system, a designated acquisition program, a nonmajor system requiring a DA in-process review approval or other nonmajor system(s) selected for DASC management.

15-20. Committee for Ammunition Logistical Support

a. The Committee for Ammunition Logistical Support is the official agency of DA under the control of the Commander, AMC to control distribution and redistribution of Army ground ammunition identified as in actual or potential short supply. The committee will meet at least quarterly or on call of the chairman to discuss and act on ammunition logistical problems.

b. The objectives of the Committee for Ammunition Logistical Support are to:

(1) Insure that proper controls and remedial actions are maintained over conventional ammunition items.

(2) Provide a forum for discussing and resolving problems encountered in such vital topics as supply, maintenance, production, trends and developments, quality assurance, modernization program, suspension and disposal of ammunition in the Army.

(3) Monitor ammunition items identified as being in actual or potential short supply or having other problems that preclude normal distribution. This will include establishing distribution plans for items so identified.

(4) Enable major commands/other services to present problems and to insure that these problems are resolved.

15-21. Industrial preparedness planning program

This program is designed to provide the basis for an

orderly and effective transition of the economy from a peacetime to a war supporting role with a minimum of delay or disruption. In order to insure that the industrial base is capable of producing adequate and timely quantities of materiel during wartime, it is necessary to periodically compare the production capabilities of the base with the estimated wartime demands for production capacity. Potential shortages can be identified and appropriate corrective action initiated. The information developed by the industrial preparedness planning program permits: accurate calculation of the quantities of materiel which should be acquired and held in reserve stocks before D-day; initiation of industrial preparedness measures designed to expand/ maintain/ establish an industrial production base which consists of the total privately owned and Government-owned industrial production capacity of the United States.

Section II
Major Item Management in the Navy

15-22. Introduction

a. Inventory management of Navy material is divided between two groups of Navy inventory managers-the naval systems commands/project managers and the inventory control points (ICP). The type of material management required determines the group to which an item is assigned for management.

b. Where the dominant need is for inventory control, the item is assigned to one of the two ICPs under the command of the Naval Supply Systems Command. Where the dominant need is for technical/management control, management may be retained by one of the naval systems commands, or project managers, provided the item satisfies one or more of the following conditions: it requires engineering control decisions; it is in a research and development stage; it is unstable in design; or it is specifically assigned to a systems command or project manager by the Chief of Naval Material.

c. Responsibilities for material management are assigned to the five naval system commands and project managers based upon assignment of material management responsibility for weapons systems as:

(1) Naval Sea Systems Command-Ships support equipment to include new hull, mechanical, and electrical equipments; submarine batteries and fleet ballistics missile support equipment; minesweeping equipments; training items; equipments for ship alterations, nuclear components; small boats; naval gun ammunition, ship-launched antisubmarine warfare ammunition, shipboard ordnance equipment, small arms and ammunition and ship-launched missiles and supporting equipment.

(2) Naval Electronics Systems Command Communications, electronics, and cryptographic equipment.

(3) Naval Air Systems Command-Aircraft, aviation ordnance, air-to-air missiles, air-to-ground missiles, aviation support equipment, and aviation electronics control equipment.

(4) Naval Facilities Engineering Command-Automotive, construction and weight handling equipment and base construction material.

(5) Naval Supply Systems Command-Materials handling equipment.

(6) Project manager PM-1-Fleet ballistic missile weapon system equipments and repair parts.

15-23. Determination of requirements

a. Several methods are used within the Department of the Navy for the development of material requirements for major items. Basically, all requirements evolve from approved planning documents. The importance of the item dictates the level and method for which the requirements are determined. For example, requirements for major equipments and weapon systems installed in new construction/ conversion ships and aircraft are approved by top management on an item-by-item basis. Detailed requirements for ammunition and missiles are determined from the Navy nonnuclear ordnance requirements prepared at the Office of the Chief of Naval Operations level with direct input from fleet commanders. These detailed statements of requirements are furnished to the Chief of Navy Material who applies asset, production, and pricing data and determines those quantities needed from onset of war until the time when production meets projected consumption. Subject requirements are also reviewed by the Office of the Secretary of Defense, on a line item basis. Other items may be determined by the systems commands from peacetime and mobilization plans, initial outfitting and allowance lists, and construction and overhaul scheduling and be reviewed and approved by higher management. Generally, requirements for major items are computed, reviewed, and budgeted for on an individual item basis with inventory control on a world-wide basis. Inventory control of items such as vehicles materials handling equipment, aircraft engines, and missiles is accomplished by serial number. While ships and aircraft are categorized as major items, they are managed as force units.

b. Inventory management for major items is vested in separate naval systems commands under the direction and control of the Chief of Naval Material. They are responsible for all aspects of inventory management, including worldwide inventory control, budgeting, procurement, and program execution. Although inventory management is vested in the naval systems commands the central focal point for formulating the overall plan, establishment of priorities and for measuring progress

on that plan remains with the Chief of Naval Operations. There is designated within the Office of the Chief of Naval Operations a program sponsor for each major program. The program sponsor is the central point of control for each major program wherein the overall program plan is centrally controlled and continuously analyzed, and wherein the up-to-date program information required by the Chief of Naval Operations and higher authority is continuously available. In addition to program sponsors, budget sponsors have been designated for each major budget activity. The budget sponsor is responsible for coordinating the preparation, review, and execution of the budget programs.

c. The breakdown of responsibilities recognizes the "user-producer" relationship between the Office of the Chief of Naval Operations and the Naval Material Command. These responsibilities have been more specifically implemented by Secretary of the Navy Instruction 4000.5B (Preparation of Material Planning Studies for Principal Items of Material). This instruction establishes within the Department of the Navy a uniform procedure for the periodic presentation and review of major item material requirements. It requires the preparation of Material Planning Studies by the systems commands/Naval Material Command which, on a uniform analysis format, present to the Chief of Naval Operations the complete inventory status of an item in relation to current and future demands for the item. These Material Planning Studies provide the basis for material programing and are used to determine the supply action needed to attain or maintain a proper supply position. Major (principal) items are designated in the current edition of the Department of the Navy Master List of Principal Items.

d. The Material Planning Study was designed to be a management tool for various administrative levels. It provides budget and program backup data, is used to determine inventory objectives authorized under current Secretary of Defense logistics guidance, and serves as a basis for detailed procurement and production planning. It also is used to exchange requirements information between services. Detailed use of the Material Planning Study is portrayed in the following paragraphs.

15-24. Determination of requirements for major items

a. Weapons and ordnance material requirements reflect the translation of plans into the peacetime and mobilization needs of the Navy. These requirements computations serve as an indication of combat readiness, a basis for budgeting, a basis for procurement, a means of determining excesses, a basis for material disposal, a means of determining needs for raw materials and components, and a basis for determining needs for manufacturing facilities and tools.

b. The Secretary of Defense has overall responsibility for defense requirements and special concern for these requirements as they are reflected in defense budgets. Within the Navy, the chief responsibility for major item requirements rests with the Chief of Naval Operations.

c. The Secretary of the Navy has certain responsibilities for the review of requirements. The Office of Program Appraisal serves as a staff to the Secretary in making these reviews.

d. The Naval Sea Systems Command is responsible for computing the detailed requirements for guns, ammunition, surface-to-air missiles, and other designated major items. Table 15-1 portrays the types of information used and necessary for these requirements studies.

e. The Secretary of Defense provides logistics guidance and assumptions and fiscal guidance upon which major item requirements are computed. It is the Secretary of Defense who determines the time periods to be planned for, the type of war to be planned for, and the program data required. The Chief of Naval Operations, with the approval of the Secretary of Defense, determines the detailed force levels; that is, the numbers of cruisers, destroyers, submarines, etc. The Chief of Naval Operations provides detailed information on the numbers and types of ships and the planning factors that are to be used, such as the size of the initial ammunition allowance per ship, assumed combat consumption rates, combat sorties, fleet training consumption rates, operational test quantities, and the number of months authorized for material pipeline.

f. The Bureau of Naval Personnel provides information on the number of students in schools and detailed personnel data including training requirements.

g. The systems commands provide data on contractor and proof test quantities, materiel to be issued to schools, production schedules, inventories, and actual expenditures. The systems commands then process all the data into a complete requirements study.

15-25. Requirements plans

Requirements are initially computed upon receipt of tentative Secretary of Defense Fiscal and Logistics Guidance in the development of the Navy Preliminary Material Support Program of the POM. Upon receipt of the final Secretary of Defense Fiscal and Logistics Guidance, these requirements are updated to reflect force, program, and fiscal decisions. Upon approval of the Secretary of Defense of the Navy POMP the first year of these requirements is included in the budget year, and the full 5-year requirements are used to update the FYDP. Material requirements are continuously updated to reflect current inventory and production

Table 15–1.
Example of Information for Requirements Studies (Navy)

Secretary of Defense	Chief of Naval Operations	Naval Sea Systems Command	Bureau of Naval Personnel
OSD logistics guidance. OSD fiscal guidance. Time periods to be covered. Type of war(s) to be planned for. Force level categories. Reviews and approves budget request.	Detailed force levels. Detailed logistics guidance. Initial allowance factors. Combat consumption rates. Training consumption rates. Operational test quantities. Ship/aircraft construction. Programs, reviews, and approves. Logistics pipeline factors.	Contractor test quantities. Quality test quantities. School quantities. Production rates. Inventory objectives. Worldwide asset position. Expenditures. Computers detailed requirements. Prepares budget requests. (Other systems commands have similar tasks for designated items.)	Personnel requirements. Training requirements.

data and to incorporate force and program decisions as they occur. Upon incorporation of all changes, these requirements are used for execution of the program.

a. The form most frequently used for commuting major item requirements is the Material Planning Study. This is a standard form established by the Secretary of the Navy. These studies are prepared for each major item of equipment and ammunition. The Material Planning Study includes the name of the item, unit of measure, unit cost, and procurement leadtime. The study also includes peacetime and mobilization computations for 5 fiscal years in the future. The studs provides a section for requirements information for assets, and for mobilization requirements and production. In essence, the studs compares requirements with assets over a projected period consistent with the POM and FYDP. Currently, the studs covers the budget year plus 4 additional years.

b. The Material Planning Study includes a section for readiness analysis. The readiness analysis compares the Navy's acquisition objective with projected assets from approved procurement for 5 fiscal year periods in the future. Other sections of the study cover locations of stocks and stock experience such as deliveries from production, consumption and losses, and disposal of material.

15-27. Steps in determining material requirements

a. The following guidance and information is considered when computing major item requirements:

(1) Secretary of Defense and Secretary of the Navy guidance and assumptions.

(2) Information from planning documents program objectives for peacetime force structure, and the Navy Support Plan for mobilization forces.

(3) Various allowance and consumption factors from the Chief of Naval Operations.

(4) Command data on proof test production quantities, on inventories, production and supply.

(5) Funding data.

b. The computation processes in the Material Planning Studs provide information the Navy uses to support its requests for funds in the budget process; to fix requirements for peacetime and for mobilization; to plan and justify the production and repair facilities needed; to provide planning for mobilization production; to determine excesses and to determine what should be disposed of; to tell or predict the state of readiness and to indicate where peacetime and mobilization deficiencies exist; and to define the quantities to be procured.

c. In terms of the calendar, data are provided in May for the POM; in June for the apportionment request for release of funds for the operating year which starts in October; in August for the initial Navy budget submittal; in October for the Office of Secretary of Defense budget submittal; and December for the congressional budget submittal. Requirements are updated to reflect current inventory data and to incorporate force and program decisions for each submittal, and for updating the FYDP.

15-28. Project management (weapon system management)

a. Whenever a Navy management objective, such as development of a complex weapon system, is of sufficient military importance, complexity, cost, and urgency to warrant extraordinary attention and emphasis, a special organization or group is established solely to

accomplish that objective. This organization provides the singleness of purpose, the quick recognition and correction of problems, the concentration of resources and talents, the rapid decision machinery, and the immediate executive authority necessary to accomplish the objective in the most expeditious manner. Thus, project management involves the central direction and control of all or part of the definition, development, production, and material support of a major weapon system or support system by a special group under a project manager who is specifically designated to accomplish a given task. The project manager is responsible, within well-defined boundaries of time, resources, and performance requirements, for executing an approved project and is provided the necessary authority, funds, personnel, and facilities to carry out his responsibilities. The classic example of a Navy project management organization is the Strategic Systems Project Office, which developed and introduced into the fleet the Fleet Ballistic Missile (Polaris) Weapon System.

b. In general, the functions of project planning, programing, and appraisal are performed by a permanent full-time staff assigned to the project manager. Project or weapon system support is provided by existing functional organizations and field activities of the various bureaus and levy Department offices, and in some cases by contractors in industry.

c. The Commander, Navy Supply Systems Command, is responsible for assisting the project managers in developing supply support requirements of their weapons system and, through the field activities of the Navy supply system, provides supply support throughout the operating life of the weapon system. Normally, supply support is provided in three stages. The first is support during the test and evaluation phase of a project and usually is performed by the contractor. The second stage is support during the introduction of the weapon system in the fleet. This is accomplished by an initial outfitting of repair parts and other material as determined to be required during the provisioning process. Contractor support in the form of technical assistance is an important element during this second stage. The third stage is assumption of full support responsibilities by the Navy for the remainder of the life of the weapon system. Routine supply replenishment and maintenance of backup stocks is provided by the Navy supply system.

Section III
Managing Weapon Systems and Major Items in the Air Force

15-29. Introduction

In the Air Force, the broad tasks of materiel management are accomplished by assigning specific responsibilities for weapon systems and items of supply to the Air Force Systems Command and the Air Force Logistics Command. Air Force Systems Command is responsible for research, development, and acquisition of new weapon systems and major end items. Air Force Logistics Command is charged with the overall logistics support of the Air Force. Other major air commands (such as Strategic Air Command) accomplish logistics functions at the operational level to maintain force readiness, employing assets and services provided by Air Force Logistics Command, Air Force Systems Command, Defense Logistics Agency (DLA), General Services Administration (GSA), and direct from commercial sources. The Secretary of the Air Force and Chief of Staff direct and control the logistics system through both the major commands and the Air Staff.

15-30. Capabilities and requirements

At the Department of the Air Force level, the Air Staff is responsible for determining required military capabilities and securing approval of the Secretary of Defense for mission-essential programs and resources. The process of deciding upon required capabilities involves continuing analysis, justification and review within the Air Force and by the Joint Chiefs of Staff (JCS), Secretary of Defense, the President, and Congress. The process brings together the needs expressed by operational commands, the technology available, and logistics implications of modifying existing weapons or developing new ones. At each decision point, alternatives are considered and requirements are confirmed. The result is an Air Force statement of required military capabilities and a judicious commitment of scarce resources.

15-31. Weapon system acquisition

a. Once a requirement for a new weapon system (for example) is approved and budgeted, the Air Force Systems Command is responsible for managing the necessary research, development, production, and testing activities. Air Force Systems Command normally designates a System Program Director who has full responsibility for directing the course of the program in accordance with an approved charter. He accomplishes this through the System Program Office and a variety of Air Force agencies and contractors. The System Program Office is the single point for program management and serves to integrate all of the actions required to provide the operating command with the new weapon system. Air Force Logistics Command, of course, is involved in the acquisition process from the very beginning.

b. Under the integrated logistics support concept, Air Force Logistics Command appoints a Deputy Program Manager for Logistics who assists the System Pro-

gram Director in all phases of development and production. In this way, the logistics support concept, maintenance concept, spare parts, and technical data are prepared as the new weapon system is developed, produced, and fielded. More importantly, logisticians motivate system and hardware engineers to recognize and respond to mission availability and support cost ramifications of their design decisions early in the acquisition process, thereby, minimizing support costs and increasing the potential readiness of the deployed weapon system.

15-32. Logistics management

a. Air Force Logistics Command, as the command responsible for weapon systems and item management, receives full program management responsibilities from Air Force Systems Command usually during the Production Phase. The Air Force Logistics Command system management concept has evolved from the need to coordinate functional elements of support and to instill a disciplined response in the total logistics system. Each Air Force Logistics Command air logistics center is assigned system management responsibilities for selected weapon systems early in the acquisition process. Initially, Air Force Acquisition Logistics Division (an Air Force Logistics Command organization) exercises leadership authority and depends upon the designated system manager and support air logistics centers for assistance. After program management responsibility transfers to Air Force Logistics Command, the system manager becomes fully responsible for integrating all functions in providing materiel and services consistent with resource availability and priority. Thus, Air Force Logistics Command responsibilities begin in support of Air Force Systems Command, intensify as program management transfers to it, and continue throughout the operational life of United States Active and Reserve systems.

b. To understand the ramifications of major item management in the Air Force, the criteria for determining which items will be designated major system acquisitions must be known.

c. The need for new major items (weapons support or command communication and control systems) is determined by the major commands and the Air Staff with final approval by the Air Staff and the Office of the Secretary of Defense. DOD Directive 5000.1 provides the criteria and guidance for designating major systems/items and major system acquisition programs. It also provides the criteria for applying system/item acquisition management process.

d. Major system/item means that combination of elements that will function together to produce the capabilities required to fulfill a mission need. The elements may include, for example, hardware, equipment, software, construction, or other improvements or real property. *e.* Major acquisition programs are those programs;

(1) Involving an anticipated cost of $75 million in research, development, test, and evaluation or $300 million for production.

(2) Directed at and critical to fulfilling an agency mission

(3) Entails the allocation of relatively large amounts of resources.

(4) Warranting high-level special management attention.

(5) Significantly advancing technology capability.

f. In addition, HQ, US Air Force, makes an individual determination as to when a major item procurement should be "otherwise designated" for application of systems management. Examples of when it is applied are: for joint service programs and military assistance programs, and for major modifications. An essential criterion for designation of an engineering or operation al system development to employ the systems management concept is the required participation of other Air Force commands with Air Force Systems Command, and the consequent delegation to Air Force Systems Command, from HQ, US Air Force, of the executive management responsibility for directing the course of the approved system program.

15-33. Definitions

In the management of Air Force major items, two definitions are of prime importance in defining the methods of management used. These definitions are:

a. System. A system generally is defined as a composite of equipment, skills, and techniques capable of performing and/or supporting an operational role. A complete system includes related facilities, equipment computer software, materiel, services, and personnel required for its operation to the degree that it can be considered a self-sufficient unit in its intended operational and/or support environment.

b. Weapon support and command control system. A weapon system is that composite where the prime equipment is an instrument of combat which usually, but not necessarily, has an aerospace vehicle as its major operational element, such as a B-52 bomber or Minuteman missile. A support system is that composite where the prime mission equipment supports the weapon system, such as cargo and tanker aircraft. A command/control system is that composite where the mission is, for example, a command post or an air defense system.

15-34. Air Force Systems Command role in major item management

In the Air Force Systems Command, major items are

developed and managed on a system life-cycle basis. There are five phases through which a system must pass. These phases are Conceptual, Demonstration and Validation, Full-Scale Development, Production and Deployment.

a. Conceptual Phase. In the Conceptual Phase, the identification and exploration of alternative solutions or solution concepts to satisfy a validated need, usually through the use of contracts with competent industry and educational institutions. This phase requires the active involvement of all participating commands to identify the candidate solutions and their characteristics. One or more of the selected candidate solutions are then approved for entry into the Demonstration and Validation Phase.

b. Demonstration and Validation Phase. This is the phase where selected candidate solutions are refined through extensive study and analyses; hardware development, if appropriate; tests; and evaluations. The objective is to validate one or more of the selected solutions and give a basis for deciding whether to proceed into Full-Scale Development.

c. Full-Scale Development. During this period, the system and the principal items necessary for its support are designed, fabricated, tested, and evaluated. The intended output contains, as a minimum, a preproduction system that closely approximates the final product; the documentation needed to enter the Production Phase; and the test results that show the product will meet the requirements. This phase includes the procurement of long production lead items and limited production for operational test and evaluation.

d. Production Phase. The Production Phase is the period from production approval until the last system is delivered and accepted. The objective is to efficiently produce and deliver effective and supportable systems to the operating units. This includes the production of all principal and support equipment.

e. Deployment Phase. The Deployment Phase encompasses the process of uniting facilities, hardware and software, personnel, and procedural publications; and delivering an acceptable integrated system to the using and supporting commands. This overlaps the Production Phase.

15-35. Air Force Logistics Command support of the system program office

a. Air Force Logistics Command is an early participant in System Program Office planning, management, and engineering actions. On 1 July 1976, Air Force Logistics Command activated the Air Force Acquisition Logistics Division to focus on logistics considerations in the acquisition process. The mission of the Air Force Acquisition Logistics Division is to expand and strengthen the interface between Air Force Logistics Command and Air Force Systems Command-thus improving the operational utility, field availability, and supportability of new systems-while reducing their operating and support costs. The Air Force Acquisition Logistics Division acts as a catalyst to stimulate and improve the interchange and feedback of information from the combat command, air logistics centers, and contractors.

b. Examples of logistics actions performed in the acquisition phase include:

(1) Providing technical information concerning the availability, reliability, performance, and support costs of materiel in the Air Force inventory in order to influence the design of new systems and components.

(2) Conducting logistics support analyses concerning supply and maintenance concepts as well as the lifecycle costs of ownership.

(3) Accomplishing materiel identification and provisioning tasks.

(4) Establishing requirements for initial and replenishment spares.

(5) Planning and activating depot sources of repair.

(6) Developing procurement strategies, including the use of warranties, incentive plans, and technical criteria.

(7) Participating in test and evaluation activities.

(8) Planning and scheduling weapon system fielding actions.

(9) Evaluating components for packaging, preservation, and transportability factors.

15-36. Program management responsibility transfer from Air Force Systems Command to Air Force Logistics Command

a. Program management transfer provides for the Air Force Logistics Command to assume responsibilities and insure integration of effort by all participating organizations in achieving systems support goals for the life cycle of the system. The Air Force Systems Command is then freed to use command resources to pursue its primary role of a more aggressive acquisition program; while the Air Force Logistics Command provides using commands with operational engineering and logistics support; and HQ, US Air Force, provides command guidance.

b. A formal agreement for each series of a system is prepared jointly by the system program director and the system manager and presented to HQ, Air Force Systems Command, and HQ, Air Force Logistics Command, for approval.

c. The formal transfer agreement encompasses such areas as purpose, scope, general information, schedules, policy, and approval signatures. In addition, it contains schedules and milestones required to show spe-

cific time-phased actions.

d. The concept is simple-only the great amount of detail makes it appear complicated. The system program director designs, develops, produces, and delivers the system; then his job is done. The using command receives the system and exploits its capabilities for the intended purpose; while the system manager supports the system and picks up the remaining program tasks from the system program director. The transfer agreement simply delineates in detail those remaining management tasks to he completed by the system program director and those which are being transferred to the system manager so that none will get lost.

15-37. Other management methods

The following points about management methods (other than systems management) employed in Air Force Systems Command are introduced to assist in placing the scope of systems management in the proper perspective:

a. The Air Force Systems Command acquires much of its system-peculiar materiel by farming out separate tasks to its functional organizations in support of system programs. For example, propulsion subsystems for ballistic missiles are acquired by a functional Directorate of Propulsion. All of the parameters of this propulsion acquisition must satisfy the requirements levied by the System Program Office which will use the propulsion subsystem. The System Program Office uses systems management; the Propulsion Directorate uses functional management.

b. The Air Force Systems Command acquires a substantial amount of materiel which is nonoperational in nature; hence, a using command and the Air Force Logistics Command are not involved. Therefore, this is not systems management. Some examples are space programs and large radars, research and development in nature, yet involving so many aspects of systems management that the job should not be farmed out on a functional basis; rather, a group of people should be pulled together to work the total problem.

c. Air Force Systems Command acquires a good percentage of its materiel through functional organizations, and these materiel bear no direct relationship with either a system program or a nonoperational program (a and b above). Examples are standard space boosters, off-the-shelf radios, and small-scale modifications.

15-38. Logistics management in the Air Force Logistics Command

a. In the Air Force Logistics Command, the system manager is a key man in logistics management. The system manager is the Air Logistics Center designated by HQ, Air Force Logistics Command, or an individual appointed by the commander of the air logistics center to insure that logistics actions within the Air Force Logistics Command in support of systems are in consonance with program objectives and the operational requirements of the using commands. Responsibilities and functions of the system manager vary, depending upon the type of supply support to be accorded a specific system. System managers perform no inventory management functions, but maintain constant surveillance to insure that support is provided by the inventory manager and that support problems are resolved. The system managers are charged with performing the following broad functions:

(1) Serving as the Air Force Logistics Command focal point to which Air Force commands refer matters for support of specific systems.

(2) Insuring required support to assigned systems anywhere in the world.

(3) Insuring that inventory management actions by the Air Logistics Center in support of approved systems are properly phased to meet programed target dates.

(4) Evaluating and resolving system support problems pertinent to assigned systems. In cases where problems exceed the capability of the system manager even though engineering responsibility has been transferred to the Air Force Logistics Command, assistance is solicited from the appropriate activity of the Air Force Systems Command.

(5) Performing materiel management functions as authorized and directed. For example: aggregating and maintaining the range of items authorized for weapon systems support at weapon system storage sites; providing a single requisitioning and distribution control point for using activities, worldwide, for materiel essential and required to support specific weapon systems; reducing pipeline time and inventory investment through close control and proper positioning of materiel.

b. Items having the following criteria are authorized to be stocked at the air logistics center where the system management is assigned. The items are affixed with the materiel management code applicable to the system.

(1) Items affecting the required performance of the weapon system.

(2) Items required for organizational or field maintenance of the weapon system, or for depot-level maintenance which is, in fact, performed by the base activity operating the weapon system.

c. Items not authorized for stockage by system managers are: complete aircraft engines; jet engine repair parts identified by code 2840 H (jet engine aircraft parts); complete missile propulsion units; nuclear ordnance items, except those required for intermediate range ballistic missiles: Thor and Jupiter C; aerospace ground equipment end items other than initial controlled mision equipment required for activations or

conversions and aerospace ground equipment acquired to support modification programs; local purchase items; local manufacture items; ammunition; fuel; explosives; gas; equipment installed on real property and all items used exclusively in support of such equipment; propellants; bulk and packaged petroleum products.

d. The system managers insure that action is initiated and maintained by inventory managers in providing supply support to using activities. System managers, air logistics centers, have the responsibility in resolving complaints and reports from using activities of excessive back-order actions on requisitions, and the failure of inventory managers to respond to priority requirements within established time standards. The system manager at the air logistics center assists the inventory manager in analyzing and determining action necessary to alleviate critical item problems. Major commands and other using activities experiencing difficulties in obtaining supply/ logistics support for systems refer their problems to the system managers. The system managers evaluate and analyze the problem areas and initiate appropriate action with the inventory managers to resolve the problems.

e. The system manager has the responsibility for insuring the availability of a suitable source for programed depot maintenance, overhaul, and repair of complete aircraft as well as applicable accessories for which he has management assignment. This includes production scheduling, development of work specification, maintenance and updating of technical orders, and solving engineering problems arising after transfer from Air Force Systems Command in accordance with the transition agreements and managing the modification program. The system manager also has responsibility for insuring active program for weapon configuration control and corrosion prevention.

15-39. Air Force Logistics Command control of major items

a. The Air Force Logistics Command Aerospace Vehicle Distribution Office located in HQ, Air Force Logistics Command, is responsible for the assignment and distribution of aerospace vehicles (all aircraft, all missiles, except tactical air intercept and air-to-ground missiles/major components) allocated to all authorized recipients.

b. Assignments and reassignments of aerospace vehicles between major air commands, to and from the Air National Guard and to non-Air Force activities, is made only upon receipt of instructions from the Aerospace Vehicle Distribution Office. The basic planning document for the assignment and distribution of aerospace vehicles is the US Air Force program-Aerospace Vehicles and Flying Hours, published by HQ, US Air Force.

c. Assignment and reassignment of aerospace vehicles is based on allocations issued by the Allocations Division, Directorate of Aerospace Programs, HQ, US Air Force. HQ, Air Force Logistics Command, Aerospace Vehicle Distribution Office maintains the stock record account for aerospace vehicles procured by or assigned to Air Force and Air National Guard organizations.

d. Tactical air intercept and air-to-ground missiles/major components are assigned Air Force serial numbers under provisions of Air Force Regulation 67-35. Property accountability for these missiles/major components is maintained by the designated air logistics center item/system manager and base activities.

e. Transfer of assignment for aerospace vehicles to or from major commands is effected by issuance of an assignment directive and Ferry Crew Request by the Aerospace Vehicle Distribution Office. Assignment directives cover one or a multiple number of aerospace vehicles.

f. At base level, control of aerospace vehicles by the Air Force Logistics Command is accomplished through base aerospace vehicle distribution officers who insure the necessary coordination, preparation of reports, certification of condition, completeness of equipment, serviceability, and accuracy of the record of flying hours and discrepancies.

g. Assignments of aerospace vehicles to activities outside the Air Force is accomplished by means of assignment directives. Excess and abandoned aerospace vehicles are reported to the Aerospace Vehicle Distribution Office by the major commands. Reports of excess aerospace vehicles are prepared to include the following information: type, model, series, serial number, and location; brief description of general overall condition; and special modifications incorporated and special nonstandard equipment installed.

h. The Aerospace Vehicle Distribution Office applies aerospace vehicles reported as excess to command requirements to fill other requirements as follows:

(1) Existing operational or storage requirements.

(2) Nonoperational requirements such as Air Force museums, ground instruction, firefighting, test requirements, exhibits, and displays.

i. Accountable property records showing worldwide density of aerospace vehicles is maintained by the Aerospace Vehicle Distribution Office. Property accountability is assumed upon receipt of a Materiel Inspection and Receiving Report, prepared at the time of acceptance of new aerospace vehicles from production; or upon receipt of a properly executed release/ receipt document transferring the vehicle between an outside activity and the Air Force.

j. Aerospace vehicles are accounted for by the Aerospace Vehicle Distribution Office as long as they remain

assigned to an Air Force or Air National Guard activity or until a properly executed document is received for transfer or termination of property accountability. Aircraft on loan to the Air Force from foreign governments or Military Assistance Programs are identified and accounted for separately in the stock record account. Detailed instructions covering the worldwide aerospace vehicle inventory reporting system are contained in Air Force Manual 65-110.

15-40. Equipment-type items

a. End items of ground support equipment are also classed as major items in Air Force terminology. These items are commonly referred to as equipment items. There is no formal definition of equipment items, but if there were, it should read something like this: "An article of nonexpendable equipment, which is not consumed in use, and whose issue, accountability, requirements determination, and management are controlled through tables of allowance documents." However, they are probably more easily identifiable by their expendability, reparability, recoverability, and cost coding which is NF2 and ND2. They are frequently referred to as replacement items, equipment items, end items, and/or aerospace ground equipment. Examples of these items are:

(1) Vehicle and industrial plant equipment.

(2) Engine driven generators.

(3) Communications and electronic equipment.

(4) Photographic and training equipment.

(5) All remaining aerospace and ground equipment.

b. Equipment items are considered nonexpendable and their issue, accountability, status, reporting, requirements determination, and all other related management actions are under the control and guidance of a selective materiel management program: the Air Force Equipment Management System.

c. The Air Force Logistics Command is assigned the responsibility for determining Air Force requirements for central procurement of equipment items.

d. It provides the requirements policy, procedures, and guidance for the operation of the equipment item requirements management system. It describes the source and building of necessary input data as well as output products and their uses. It is applicable to the item managers and system managers at the air logistics centers.

e. Consistent with Air Force policy, the requirements system is designed to insure optimum materiel support readiness and operational capability. This is accomplished by combining minimum essential authorization data with maximum usable asset data to determine a realistic net item requirement.

15-41. Equipment item computations

a. Requirements for equipment items are calculated from allowances and authorizations. Allowance means an item is suitable and acceptable for Air Force use; authorization delineates the specific number of items allocated to a specified organization. The requirements determination process begins when each Air Force unit prepares a record of the authorized and inuse equipment needed in support of its mission. The status of authorized and inuse equipment is reported through the Air Force Equipment Management System. The reports provide basic information on the unit’s requirements for its maintenance, transportation, common aerospace ground support, and administrative functions.

b. The reports are forwarded to the US Air Force Equipment Item Data Bank monthly. Item managers through their requirements computation system, then withdraw these data on a quarterly basis and match them to a 7-year program prepared by the major air commands. Phased item/weapon system requirements are projected for budget programs.

c. The requirements computation for equipment items is based on the number of organizations authorized to have the specific items and the number of items that each organization is authorized, plus replacements (wearouts), and additive requirements. After the organizations receive their initial issue of the items, further needs consist primarily of replacements for wornout or damaged equipment. Practically all equipment items are recoverable in that the item’s service life can be extended through repair or overhaul.

d. Property accountability and responsibility for equipment items continue after their issue. To be relieved of obligation, the using activity must turn in the equipment item when it is no longer required or is worn out. Formal survey actions are taken to report items lost, damaged, or destroyed. Generally, no additional stock levels of equipment items are permitted other than those authorized in the war readiness materiel or special projects programs.

e. A similar selective materiel management program, the Registered Equipment Management System, is concerned primarily with the vehicle fleet; the replacement code of the item is considered as a factor during computations.

f. For the new equipment items having little or no historical usage data, it is necessary to draw analogies based on experience with similar items for which wearout rates and replacement factors have been established. The analogies are usually based on similarities of construction, use, repair, and operational environment. The use of such analogies involves subjective judgment and, since the typical item manager must carefully choose an analogy that closely matches the

item under consideration, and he must closely watch developing data to note any differences.

g. Table 15-2 summarizes the major item management functions in the Air Force.

Section IV
Major Item Management in the Marine Corps

15-42. Marine Corps supply system

a. The Marine Corps supply system is oriented toward support of the Fleet Marine Forces, and does not carry stocks of items for the supporting establishment, except for military-type items such as weapons, ammunition, and individual clothing. Major item management is, therefore, concerned with materiel for the Fleet Marine Forces.

b. Major items are controlled through the allowances based upon assigned missions as outlined in chapter 13. Allowances are established at the Marine Corps Headquarters. In adopting new items, or establishing allowances, consideration is given to the "lighten-the-load" concept of keeping Marine forces highly mobile by curtailing the range and quantity of major end items. Consideration is also given to the environment in which Marine forces operate, so that the items must have off-the-highway capability, durability, lifting eyes, and other essential military characteristics.

c. Research and development are conducted under projects controlled by Marine Corps Headquarters. Headquarters computes requirements, programs, budgets, and procures major end items. It also directs the depot maintenance program for these items, establishing phasein and phaseout plans, conducts industrial readiness planning, makes allocations to the Security Assistance Program, and provides provisioning guidance to the ICP.

d. The ICP conducts provisioning, catalogs the major item, enters it into the computer records, establishes receipts, accounts for assets in store, processes requisitions, and performs subsequent supply management functions. Further, the ICP provides asset data to Headquarters, Marine Corps for periodic recomputation of requirements. The ICP establishes liaison with the DLA on provisioning when the latter is involved.

e. The ICP maintains a computerized record of major end items and secondary reparable items showing Marine Corps assets worldwide. Field organizations report changes in their asset status to the ICP on an as-required basis. The ICP makes these data available, in the format desired, to Marine Corps Headquarters. At any point in time, worldwide asset data for these items are available at the ICP.

f. The Marine Corps employs the use of project managers to coordinate the introduction and supply support of major weapon systems. Ground ammunition is handled similarly to other end items, except that the ICP is operated by HQ, Marine Corps and Marine Corps does not have depot-level magazine storage. Ammunition in stores is owned by the Marine Corps but received, stored, and issued at Army and Navy facilities in response to Marine Corps requirements.

g. Major items are funded by the Procurement, Marine Corps appropriation, which is a nonexpiring, non-revolving appropriation. They are issued to the operating forces in response to requisitions placed upon the ICP. New items entering the system are not issued until fully provisioned, although in some cases opera

Table 15–2.
Major Item Management Summary (Air Force)

Headquarters, USAF	Computes major item (weapon systems) requirements. Manages item throughout life cycle (Director of Operational Requirements determines disposal or location of weapon systems).
Air Force Systems Command	Develops the item (system).
Air Force Logistics Command	Supports the item (system) logistically—computes initial spare engineand replenishment repair parts requirements. Controls the assignment and distribution of aerospace vehicles (major items) worldwide. Computes major item (equipment item) requirements.
Using Commands TAC, SAC, USAFE, etc.	Responsible for utilization of the item to accomplish the assigned mission—assist HQ, AFLC/USAF, in managing the item (system) by providing periodic status reports, etc.

Table 15–3.
Specific Management Roles of Headquarters, Marine Corps and the Marine Corps Logistics Base, Albany, in Weapon System/Equipment Support Management

Function	Headquarters, Marine Corps Role	MCLB, Albany, Role
1. Acquisition	Assign acquisition project officer at program initiation. Prepare integrated logistics support management plan (ILSMP)/integrated logistics support plan (ILSP)/letter of adoption and procurement (LAP)/advance logistics order (ALO). Procure weapon system/equipment. Determine requirement to provision, fund, and monitor provisioning process. Estimate weapon system/equipment operating and support costs. Determine requirement and conduct logistics support analyses.	Assign weapon system equipment support manager at program initiation. Review and provide recommendations regarding ILSMP/ILSP/LAP/ALO. Procure secondary items. Compute provisioning requirements and provide status reports. Maintain logistics support analysis record (LSAR) during production/deployment and operational phases. Provide historical logistics support resource requirements of comparable weapon system/equipment when requested by Headquarters, Marine Corps. Participate in logistics support analyses.
2. Phaseout	Advise MCLB, Albany, of the decision to replace a principal end item (PEI). Determine and promulgate item exit dates. Provide final disposition instructions. Approve phaseout plan.	Formulate phaseout plan. Implement phaseout of PEI and related support materiel (e.g., secondary reparable items, consumable repair parts, tools, test equipment, modification kits, publications) as directed by Headquarters, Marine Corps.
3. Configuration Management	Approve and fund configuration changes. Resolve Headquarters, Marine Corps administered contractual discrepancies. Identify modification kits to be procured by MCLB, Albany.	Implement configuration control and status accounting. Recommend configuration changes. Maintain configuration baseline package (for hardware and software). Determine quantitative requirements for those modification kits to be procured by MCLB, Albany, as identified by Headquarters, Marine Corps. Fund, procure, provision (if required), and prepare necessary documentation (technical instructions) required to effect the changes.
4. Inventory Management	Provide PEI inventory objective (I/O) and acquisition objective (A/O). Provide PEI standard and exception repair/washout criteria. Provide priority of applying assets to in-stores and out-of-stores requirements.	Manage the total weapon system/equipment inventory and recommend actions where planned objectives are not being met. Provide analysis and projection of washout rates and repair cycle requirements for weapon system/equipment. Provide secondary items inventory management.

Table 15–3 (continued)

Management

Function	Headquarters, Marine Corps Role	MCLB, Albany, Role
5. Rebuild	Approve the 5-year depot-level maintenance (DLM) rebuild quantitative requirements. Fund PEI DLM rebuild requirements. Develop the depot maintenance interservice support agreement (DMISA) for PEIs. Publish the Five-Year Rebuild Plan, Master Work Program, and Master Work Schedule for PEIs. Let commercial contracts/DMISAs for PEIs.	Determine the 5-year DLM rebuild quantitative requirements, to include priority assignment for each item based on materiel readiness needs. Fund secondary depot reparable (SDR) DLM rebuild requirements. Publish the Five-Year Rebuild Plan and Master Work Program for SDRs. Let commercial contracts/DMISAs for SDRs.
6. Quality Assurance	Establish policy and procedures for weapon system/equipment assessment reviews. Monitor quality assurance program implementation to insure compliance with stated Department of Defense, Department of the Navy, and Marine Corps objectives and procedures.	Conduct periodic weapon system/equipment assessment reviews. Manage quality assurance programs.
7. Analyses	Utilize MCLB, Albany, analyses for design, modification, and investment decision.	Conduct periodic readiness reviews. Conduct secondary item support trend analyses. Accumulate and analyze incurred operating and support costs. Monitor and insure accuracy of logistics systems.
8. Management ADP Logistics Systems	Functional manager for all class I automated logistics systems. System sponsor for class I systems not assigned to MCLB, Albany.	System sponsor for assigned class I automated logistics systems.

tional necessity is such that the time required for the full normal provisioning cycle is not available, and temporary arrangements, such as contractor support, are effected on an interim basis.

h. Once issued to the Fleet Marine Forces, end items pass from control of the ICP. The ICP no longer has redistribution rights until the items are returned to store by action of the force commander.

i. Issue of a major end item that has been processed for long-term storage requires considerable "make-ready-for-issue" time. Therefore, certain Marine Corps contingency requirements have been identified; and end items in appropriate quantities are carried in a "ready-line" status at the two Marine Corps Logistics Bases-Albany, GA and Barstow, CA-available for immediate issue.

j. The Marine Corps conducts a replacement and evacuation program. Under this program, the Fleet Marine Forces identify certain items, annually, which meet the replacement criteria established for each particular item. Serviceable replacements are shipped to the Fleet Marine Forces for these items, which are kept in service until the replacements arrive. Upon receipt of the replacements, the replaced items are then shipped to the appropriate Marine Corps Logistics Base. This provides maximum equipment readiness to the Fleet Marine Forces, who do not have to wait until the equipment is inoperable before turning it in for overhaul.

15-43. Weapon system/equipment support management in the Marine Corps

a. Weapon system/equipment support management is defined as the organization and application of resources to monitor and influence the acquisition process and the full range of logistics support throughout all or designated phases of the life cycle of specified weapon systems and equipments. In essence, the goal is to organize available resources in the most effective manner to maintain the Marine Corps inventory of principal end items at the highest level of readiness possible.

b. Objectives of the weapon system/equipment support management program are to:

(1) Maximize materiel readiness while at the same time minimizing the risk of equipment nonavailability to support mobilization and contingency requirements.

(2) Increase the capability to develop visibility and management of support costs during the life cycle of weapon system/ equipment.

(3) Provide management information necessary to insure that the logistics planning documents for a weapon system/equipment acquisition are fully implemented and supportive of a given weapon system/equipment throughout its life cycle.

(4) Identify those weapon systems/ equipments whose readiness is demonstrating deterioration and take corrective action before degradation occurs.

(5) Provide the means to measure provisioning effectiveness.

(6) Provide more effective control of modification applications.

(7) Provide a better data base for budget formulation.

(8) Provide information to support/deny product improvement modernization decisions.

(9) Provide information to examine alternative logistics support concepts and equipment design capabilities during the acquisition process.

c. The functions of weapon system/equipment support management are accomplished by assigning specific management roles to HO, Marine Corps and the Marine Corps Logistics Base, Albany. All weapon system/equipment decisions which result in the application of investment dollars, acquisition strategies, inventory objectives, and materiel policies are the responsibility of the Deputy Chief of Staff for Installations and Logistics. The Marine Corps Logistics Base, Albany, is responsible for managing the inventory objectives and materiel policies established by HO, Marine Corps. Table 15-3 summarizes weapon system/ equipment support management roles and functions.

Chapter 16
Secondary Items and Repair Parts Management

Section I
Secondary Items and Repair Parts Management in the Department of Defense

16-1. Introduction

a. Overall authority and responsibility to provide basic policy and guidance in the area of materiel management is the responsibility of the Assistant Secretary of Defense (Manpower, Installations, and Logistics)(ASD(MI&L)). This includes policies and guidance regarding the management of secondary items.

b. Secondary items are all items not defined as principal items or major items and include reparable and consumable components, subsystems, and assemblies, consumable repair parts, bulk items and materiel, subsistence, and expendable/durable end items (including clothing and other personal gear). Secondary items include end items as well as spares and repair parts.

c. Various methods are used to select, group, procure, and otherwise manage secondary items. The most important methods of management are discussed in the following paragraphs.

16-2. Selective inventory management of secondary items

a. Selective management is a widely used form of management in which the degree of intensity of management effort is determined by the prime characteristics of the item being managed. More emphasis is applied to items of greater importance and those with the higher dollar inventory investment, and less emphasis is placed on items of lower importance and those with the higher dollar inventory investment, and less emphasis is placed on items of lower importance and those with lower dollar inventory investment.

b. The Department of Defense (DOD) has, in pursuing its selective management policies, established two primary objectives. They are to:

(1) Provide maximum use of every possible management improvement and modern inventory technique to insure support of our military forces in the field at minimum cost.

(2) Maximize the cost-saving potential of its selective management policies and minimize the additional workload resulting from these policies.

c. The DOD selective management policies for secondary items encompass the following general areas:

(1) *Selective management.* This is a method of dividing items into categories to determine the degree of thoroughness of controls and review to be applied to an item. Some of the criteria upon which such decisions are based are: dollar investment in inventories, degree of protection desired against stock depletion, high unit cost of the item, combat essentiality of the item, and difficulty of procuring the item. Selective management extends the item manager’s asset knowledge and control over worldwide assets.

(2) *Economic order quantity.* This policy is a comparison of the cost to buy versus the cost to hold in order to arrive at the most economical procurement quantity.

(3) *Reduction of leadtimes.* This policy stresses the necessity to reduce pipline inventories. The administrative leadtime and production leadtime used by components is under constant surveillance by DOD.

(4) *Use of premium transportation*. This policy visualizes the use of such transportation modes as airfreight, sea express, and related surface systems in order to furnish required materiel to the customer within a reduced time frame. The mode of transportation must be cost-effective; i.e., savings in pipeline investment and other considerations must be greater than increased costs. This, in turn, tends to reduce the required pipeline quantities and, thus, effects reduction in overall inventories.

16-3. Stratification of secondary items

a. The stratification process provides for the accumulation, extraction, and display of basic supply data for the approximately 3.5 million secondary items in the defense supply systems, in a manner that uniformly relates assets to requirements. By arranging the data in various formats, supply managers are able to measure supply system readiness, prepare personal property reports to Congress, formulate procurement budgets, and make retention and transfer decisions. The requirements and assets are first stratified on an individual item basis, both quantitatively and by dollar value. The dollar value is then summarized in the different formats prescribed by materiel category (such as clothing, aviation components and parts, and subsistence) for each major operating subdivision of the defense-wide supply establishment.

b. The explicit relationships between supply management actions and the planning, financial program control, and budgeting are recognized in DOD Instruction (DODI) 4140.24, Requirements Policy and Asset Application for the Secondary Items, which states "A primary objective is to bring the stratification as nearly as possible into line with the basis upon which to relate assets to requirements, and upon which procurements will be initiated." The stratification system outlined in DODI 4140.24 depicts not only the current supply position for each item but, by a simulation process, develops a schedule of supply actions and the future supply

posture for each item. Summaries of this information are used by managers within inventory control points (ICP) and at higher commands to prepare and review budgets and to exercise program control through financial inventory accounting. Supply control studies and supply action forecasts are of direct concern and are used by individual item managers; summaries of these supply management data are useful to commodity group or system managers at various management levels.

16-4. Retention and transfer of materiel assets

DODI 4100.37 establishes defense-wide policies for the retention and transfer of materiel. The military departments and defense agencies are required to establish specific levels for the retention and transfer of materiel. These components are required also to avoid the procurement of materiel for US or allied forces support, when such materiel are available from another component. This policy directs the components to avoid unnecessary operating and maintenance costs for materiel which need not be retained. DOD retention and transfer policies apply to all major and secondary items. Retention and transfer policies are summarized in the following paragraphs:

a. Retention policy. ICPs are authorized to retain materiel assets up to the sum of the Approved Force Acquisition Objective, Economic Retention Stock, and Contingency Retention Stock. DOD components are authorized to retain retail stock of centrally managed secondary items not to exceed the sum of its approved war reserve materiel requirement, requisitioning objective, and 30 months of stock, based on peacetime issue rates.

b. Transfer policy-wholesale stock. Transfer of assets applicable to the Approved Force Acquisition Objective are made on a reimbursable basis. In the case of intra-DOD transfers within the Approved Force Acquisition Objective, it is mandatory for each owning service to offer those on hand assets which exceed the sum of its-pre-positioned war reserve, requisite on hand and on order peacetime supply levels, and current fiscal year requirement. The directive also provides the basis for transfers of materiel assets in excess of the Approved Force Acquisition Objective.

c. Return policy-retail stock. Subject to the exceptions listed in DOD Directive (DODD) 4100.37, each holding activity is required to report to the wholesale manager any retail stock in excess of the holding activity’s retention level. Upon receiving information from the wholesale manager that an item is in a critical supply status, holding activities are required to report any stock in excess of the sum of the approved pre-positioned war reserve requirement and requisitioning objective for reimbursable transfer.

16-5. Procurement cycles and safety levels of supply

a. DODI 4140.39 establishes policy for determining procurement cycles and safety levels of supply at ICPs for all secondary items managed by the ICP.

b. The military departments and the Defense Logistics Agency (DLA) are required to minimize the total variable cost relative to ordering and holding inventory at ICPs and their stock points. This minimization of the total variable costs is subject to a constraint on the average number of days forecast for delay in the availability of materiel, in terms of requisitions, for release by item managers or by the automatic data processing (ADP) systems supporting the item managers. Relative essentiality is also used as an additional element of consideration after approved by the Office of the ASD (MI&L). The objective of this policy is to minimize the total of variable ordering and holding costs subject to a constraint on time-weighted, essentiality-weighted back-order requisitions.

c. The applicable mathematical formula calls for the use of a shortage parameter which can be set to control the safety level, not only in consonance with the general DOD policy outlined above, but to satisfy other constraints that become necessary as a result of policy decisions relative to national priorities; for example, constraints on budgeting or funding for inventory levels. This shortage parameter acts as the cost of one requisition short for 1 year in the model; however, it is determined on the basis of the average number of days to be forecast for delay in the availability of materiel or to satisfy a budget or funding constraint and, thus, is only an implied shortage cost, the true cost of the shortage being unknown.

d. The total variable cost consists of the cost of order, the cost to hold, and the implied shortage cost. The cost to order and the cost to hold are developed in accordance with DODI.

e. The implied shortage cost is a function of other management decisions; i.e., the average number of days to be forecast for delay in the availability of materiel, or the funds available for inventory levels.

f. The management decisions affecting the implied shortage costs to be used in supply operations and budget preparation are made outside the scope of DODI 4140.39. No special provision for those items managed with a high degree of intensity is made; however, DOD expects that value judgments relative to those items in the "very high" and "high" management groups will be made, with probable reductions to those requirements indicated by the inventory model.

16-6. Grouping of secondary items for supply management purposes

a. Secondary items are grouped in a uniform manner in accordance with DODI 4140.33, Grouping of Secondary Items for Supply Management Purposes. These secondary items are grouped and assigned supply management group designators and supply management grouping codes for management purposes. The supply management group designators include: grouping by value of annual demand or planned issues; grouping by degree of management intensity; and, grouping by recoverability. The supply management grouping codes are single-digit codes that have been established to correspond to each three-digit supply management group designator. These codes are intended to facilitate computer processing of materiel requirements computation data.

b. There are four prescribed degrees of management intensity which are categorized by the supply management group designator:

(1) Very high management intensity.
(2) High management intensity.
(3) Medium management intensity.
(4) Low management intensity.

c. The financial management aspects of secondary item management are discussed in chapter 24.

Section II
Secondary Items and Repair Parts Management in the Army

16-7. Introduction

All elements of the Department of the Army (DA) are responsible for insuring that each using, stocking, distributing, and controlling activity under their jurisdiction provides accurate and timely requirements and stock status data needed for computation of requirements by the national inventory control points (NICP). All using elements are also responsible for the prompt return of unneeded serviceable items, unserviceable reparables, and recoverable items to the supply system.

16-8. Levels of responsibility

Each level of command is vested with certain responsibilities in regard to inventory control and requirements. These responsibilities are shown below.

a. Department of the Army. DA furnishes the basic policy, prescribes general standards, and gives planning and policy guidance for the development and implementation of inventory control programs. This includes the requirement in conjunction with the US Army Materiel Command (AMC) for the development of new and improved inventory control concepts and changes to inventory control policies occurring as a result of technological developments. DA is also responsible for developing and disseminating program guidance, reviewing and approving major system changes and procedures, policy compliance, and corrective action in regard to unsatisfactory inventory control conditions.

b. US Army Materiel Command. AMC is the focal point for conducting research, and for improving and extending the application of selective management techniques throughout the Army logistics system. In this role, the command develops and disseminates programing guidance; develops and implements policies and procedures for the management of secondary items; develops, tests, and evaluates new systems and concepts; reviews and approves system changes; and insures that subordinate activities comply with approved doctrine.

16-9. Major commands other than AMC

Major Army commands (MACOM) are required to provide DA and AMC with the management data required to determine stock positions and compute quantitative requirements for secondary items. The major commands maintain supply discipline and insure that supply levels and materiel pipelines are limited to authorized stocks, and that AMC is furnished trend forecasts, plans, and materiel requirements, to include information regarding deficiencies resulting from the lack of functional or essential secondary items. The major commands require that requisitioning objectives be computed for items stocked at retail-level installations under their jurisdiction.

16-10. Oversea Army commands

Oversea commands are required to maintain, analyze, and provide AMC with the inventory management data necessary to determine stock positions and forecast requirements for secondary items. Commanders compute and report separate requisitioning objectives for each item required based on geographic separation of subordinate commands or of receiving ports. Base-level requisitioning objectives for special management items are computed at the intermediate and direct support levels and reported to the NICPs.

16-11. Grouping of items for management emphasis

Secondary items are grouped into segments to be managed with different degrees of thoroughness depending upon essentiality, investment inventory, and the desired degree of protection against supply failure. The item groupings are based primarily on annual dollar value of demand or procurement with emphasis on essentiality and criticality. If the status of an item changes, the degree of management attention may be changed to accommodate it.

16-12. Very high dollar value items

Very high dollar value items are accorded the highest possible degree of management emphasis. They are intensively reviewed and analyzed by item managers to include all facets of requirements forecasting and supply control operations. Review and approval of requirements is at a high command level. Consideration of worldwide asset, demand, and return information (including control by serial number, if appropriate) is provided for these items on a day-to-day management basis.

16-13. High dollar value items

a. High dollar items receive less management attention than very high dollar items but are still carefully controlled by item managers. Requirements are reviewed at least quarterly. Maximum use of the computer is made to determine requirements, but computer output is carefully reviewed and validated by managers.

b. The system is a consolidation of the line item stratification and supply control study into one fully automated management system for secondary items. This system compares assets to computed requirements and then simulates successive supply reviews through the apportionment and budget years to determine the dollar value of forecast procurements for input into the budget.

16-14. The Item Management Plan

Very high, high, and medium management intensity items use the Item Management Plan. A requirements objective is computed; assets are compared to those requirements; and the resulting supply position is used to determine whether to buy/repair, cut back due-in receipts, and declare or recall excess. To accurately identify supply positions for items in the Selected Item Management System, worldwide demand, return, and asset data below the wholesale level are used. The remaining items use wholesale level data with considerations given to oversee and available worldwide data.

16-15. Routine Supply Control Study

This supply management routine is used for all low dollar value management intensity items. This routine accomplishes the same actions as the Item Management Plan except it contains streamlined computations and uses only wholesale level demand, return, and asset data.

16-16. Budget stratification

This routine stratifies all requirements and assets, developed in the Item Management Plan and Routine Supply Control Study, into special tables to justify/present funding requirements for the next 2 years.

16-17. Selected Item Management System Expanded

a. The principal objectives which DA intends to achieve through the design, development, and implementation of the Selected Item Management SystemExpanded for vertical management of selected secondary items of equipment are to provide item managers and planners at the national level (AMC ICP, HQ, AMC and DA, Deputy Chief of Staff for Logistics (DCSLOG)) with a more timely and sharply increase degree of visibility or asset knowledge, of major retail supply activities worldwide, major depot accounts in oversea area, posts, camps, and stations in the Continental United States (CONUS); and other retail stock record accounts in CONUS (arsenals, proving grounds, hospitals, etc.). Stated another way, worldwide asset knowledge and control will be maintained to the point of interface between the stock funds and consumer fund, under phase I of the Selected Item Management System-Expanded. In phase II, as military standard documentation and ADP equipment are installed at the direct support and general support unit level, daily asset status will be extended to that level. Provision will be made also for the same major retail stock to be identified as to quantity, purpose, and condition, as well as due-ins and the requisitioning objective for the items in question.

b. Improved timeliness of asset knowledge would be achieved by proving that both transaction data and asset status be transceived as frequently as daily to AMC ICPs as a by-product of daily cyclical processing against the major retail stock record accounts worldwide. The proposed system would provide equivalent asset knowledge to other responsible activities (e.g., DLA, the US Army Intelligence and Security Command, Air Force, Navy, and Marine Corps) for items under their managership.

c. By achieving significantly improved visibility and more timely asset knowledge, asset control should improve, particularly materiel requirements determination and related procurement actions and stockage level determinations worldwide, as well as positioning, distributing, and redistributing materiel within and among the major retail stock record accounts and wholesale stock record accounts at the ICPs. Under the Selected Item Management System-Expanded, the ICP will have the responsibility and authority to position, distribute, or redistribute (under established HQDA criteria) all selected items. Improved asset control should result in the ultimate objectives, namely, increased operational readiness at reduced cost through more accurate requirements determination, reduced net stockage levels worldwide, reduced pipeline, reduced procurement, and increased maintenance effectiveness.

16-18. Secondary item demand forecasting

a. Forecasting demands is one of the most important functions in the inventory management and requirements process. Demand forecasting may be based on demand history (usually an eight-quarter base period if available) or, when the history is inadequate, on engineering or mathematical estimates of these demands. Another technique is to base forecasts on the planned use of equipment. Programs such as the flying hour program are used to determine the projected hours in operation of aircraft and aircraft equipment. The technique used in demand forecasting in the Army is moving averages.

b. The moving averages method uses a variable number of periodic records of quantities of items requisitioned that are averaged for an estimate of the demands for the next period. Demand data accumulated on a monthly or quarterly basis are usually used for developing averages.

Section III
Secondary Items and Repair Parts Management in the Navy

16-19. Program direction

a. The Chief of Naval Operations is responsible for overall direction of the Navy's material programs and the stating of material requirements in general terms.

b. The Office of the Chief of Naval Operations has primary responsibility for stating the characteristics and capabilities required of Navy ships as well as the quantity of ships required by each type and has primary concern for stating the characteristics, capabilities, quantity, and support of aircraft. The Deputy Chief of Naval Operations for Logistics has primary concern for support equipment and material programs such as equipment for support of ships and facilities; repair parts, petroleum, oil, and lubricants; and consumable material.

c. The chief of Naval Material is responsible to the Chief of Naval Operations for management of the production process which delivers weapon systems and associated logistics support subordinate to the Chief of Naval Material. The Naval Supply Systems Command is the Navy's principal agent for management and policy for secondary items and repair parts.

16-20. Organization for supply

Two ICPs, the Aviation Supply Office in Philadelphia, Pennsylvania and the Ships Parts Control Center in Mechanicsburg, Pennsylvania, manage the majority of the secondary items and repair parts for which the Navy has supply responsibility, although certain items have been retained for management by miner inventory managers. Items are distributed as appropriate to their use and demand at naval supply centers, supply depots, shipyards, and air stations, which are the principal stock points in the Navy distribution system. The Mobile Logistics Support Force, consisting of stores ships, tenders, and repair ships, extends the distribution system to oversea fleets. These ships are, in effect, floating depots and repair shops deployed with the fleet for its logistics support.

16-21. Requirements determination

a. All of the Navy material requirements for weapons systems, weapons, equipment, and support material derive from operational concepts, program direction, logistics guidance, and support policy stated by the Chief of Naval Operations. The logistics guidance and supply support policy is expressed in number of days endurance to be provided to support designated forces at prescribed tempos of operations or consumption rates.

b. Requirements determination decisions started by the Chief of Naval Operations are classified as qualitative or quantitative. The Deputy Chief of Naval Operations expresses qualitative requirements in general terms by prescribing the characteristics and capabilities to be designed in ship and aircraft construction programs. The Deputy Chief of Naval Operations also makes quantitative requirements determinations for ships and aircraft which may be expressed in finite terms: number of ships, aircraft, or major equipments to be procured or supported; or in general terms, unit allowance lists, individual aircraft ordnance loads, consumption rates, sortie rates, or number of aircraft missions to be supported.

c. The Deputy Chief of Naval Operations for Logistics has primary responsibility for stating the requirements for ship and facilities support equipment and material. He gives these determinations in broad terms, such as the number of days endurance and the required degree of supply effectiveness (filling of demands on board) to be built into allowance lists, policy with respect to insurance items to be carried aboard ship, policy with respect to range and depth of stocks to be carried by ships of the mobile logistics support forces and at oversea bases and other logistics guidance.

d. The Chief of Naval Operations takes other actions which directly determine the type, quality, or precedence of material requirements. These actions include providing decisions and direction with respect to budget constraints and program changes generated by operational considerations, program reevaluation, excessive cost of proposed new weapons, extensive material losses (e.g., from typhoons or fire), changes in tempo of operations, or other unprogramed needs. Where any of these result in an approved program change, a new

or revised material requirement is stated by the Chief of Naval Operations.

16-22. Computation of secondary item requirements

a. Initial requirements for secondary items and repair parts are determined when a new major weapon or equipment is adopted for use by the Navy, following the guidelines of DODI 4140.42. During the manufacturer, complete documentation on the parts which make up the basic weapon or equipment. From these data and other available technical information, representatives of the ICP, the systems command which is procuring the major equipment, and the manufacturer meet in conference and compile the data necessary to determine those items and quantities which will be needed to provide initial support to the equipment.

b. Replenishment requirements for wholesale system stocks are determined by the ICP from frequent comparison of stock balances with replenishment levels computed pursuant to DODI 4140.39. Shortage costs are developed in response to authorized and funded performance goals through use of simulation and analytic models. Tailored support is afforded designated weapon systems. Through data processing procedures, items whose inventory assets have reached a reorder point are selected for purchase or for repair, if appropriate.

c. A similar process pertains at the retail level. At naval supply centers, requirements levels are determined by an inventory model which trades replenishment workload against safety level within specified funding limitations to maximize the level of service provided.

d. Fleet support requirements computed by users in response to planned maintenance are communicated to inventory managers so that appropriate procurement actions can be taken in advance of the date of intended use.

e. Lists of material allowed for units of the operating forces are computed at Navy ICPs based on data such as configuration, failure rate, essentiality, etc.

f. Management of repair parts is supplemented by special programs such as the Standard Navy Maintenance Material Management System. Under these procedures, detailed data on part failures for a wide spectrum of naval weapons and equipments are collected and analyzed. This information is used to improve the accuracy of provisioning and procurement requirements and to update allowance lists and replacement factors.

16-23. Selective management

The basic task of Navy inventory managers is to have the right amount of stock on hand when needed. This calls for maintenance of stock levels at each support level, ship, mobile logistics support force, and stock point so that items are available when they are needed and inventories are kept to a minimum consistent with need. The military services have attacked this problem by developing policies of selective inventory management. These policies recognize that it is impossible to manage every item of supply in the same way. For some items, supply performance is primary; the item must be ready for issue upon demand wherever it is needed and whatever the cost. Efforts are made, however, to keep this group to a minimum. For other items, keeping inventories at the lowest practical level is the important factor because of high turnover and heavy investment in such items. For yet another group of items, those which are low in dollar value and turnover, the workload and cost of maintaining such items is the controlling element. Selective inventory management, therefore, concentrates time and attention on those items justified by military essentiality or by dollar turnover. It weighs the cost of inventories against the cost of personnel and reporting systems to arrive at the most economic overall method of inventory management.

16-24. Item management assignments to Navy inventory managers

a. Items are assigned to the Naval Material Command inventory managers by the Chief of Naval Material based on the principle that only one inventory manager will manage each item of supply. Material systems commanders and project managers manage less than 3 percent of the items, representing 37 percent of the money value of the total Navy-managed inventory of equipments, components, and repair parts needed to support major end items and hardware systems. The vast majority of Navy-controlled minor equipments and repair parts are assigned for inventory management to the ICPs.

b. However, material systems commanders and project managers retain responsibility for technical functions related to inventory management for those items assigned to another organization for inventory management for those items assigned to another organization for inventory management. These responsibilities include research and development, design and configuration control, specification and inspection standards, repair parts failure and replacement rate and information, and maintenance policy.

16-25. Program support/supply support

a. Under program support, a single ICP insures that the appropriate degree of repair parts support for each assigned weapon system, subsystem, or equipment is available. The inventory manager carries out this responsibility by either arranging for specific item support

from appropriate inventory managers (Navy, Defense Logistics Agency (DLA), General Services Administration (GSA), other services) or providing the supply support for parts peculiar and items falling within his commodity assignments as an inventory manager. Thus, the material systems commander or project manager can look to one ICP for the support of a system or an equipment. Pinpointing responsibility in this way is necessary to accomplish such tasks as the accumulation of technical data, provisioning, compiling allowance list and usage data, and coordinating with other ICPs.

b. Supply support signifies that an ICP assigned responsibility for an item will stock the item in its segment of the stock distribution system for all requirements or programs unless the item is readily available from commercial sources or other Government agencies.

c. ICPs thus perform dual roles in program support/supply support; they are responsible for program support of an assigned equipment or component, and they provide single-item supply support to equipments assigned to other ICPs for program support. Program support agreements are made between the material systems commanders; the project managers; and the Commander, Naval Supply Systems Command.

d. Program support responsibilities of an ICP begin with the determination of initial support requirements for the weapon. During the provisioning cycle, cataloging and requirements computations for the items of supply required to support the weapon or arrange with another ICP to provide the supply support. The commanding officer is accountable to the material systems commanders and the project managers for supply readiness. He must respond to changes in design, operating programs, and other programs which involve systems he supports.

Section IV
Secondary items and Repair Parts Management In the Air Force

16-26. Item management

In the Air Force, item managers at air logistics centers have responsibility for management of secondary item and repair parts. Item managers perform the same standard management functions regardless of range, consumption rates, and complexity of their items. Actual number of items managed will vary depending on numerous factors which affect difficulty of individual item managed.

16-27. Assignment of item management responsibilities

Headquarters, Air Force Logistics Command assigns item management responsibilities by Federal supply groups, Federal supply classes, and an item’s functional relationship to particular weapon systems or subsystems. In some cases, items unique to support of a particular weapon are collocated with the weapon system-managers. Each new item introduced into the Air Force inventory is assigned to one item manager. Some items are also listed for use on one or more weapon systems end items.

a. The principal criteria for assigning item management responsibilities are capabilities to respond to needs of the Air Force. Supply support planning begins early in the life cycle of the weapon system. Under the current concepts of expedited concurrent production schedules and deliveries, the supply plan must adequately support a weapon system upon delivery. The capability of the supply system depends on how well the initial planning was executed and how well objectives were met. Success depends on the effectiveness of the relationship between the Procurement and Production Directorate of each air logistics center and the contractors who manufacture the items.

b. In assigning Federal supply classes to air logistics centers, the Air Force considers all facets of total support to produce the most efficient and economical results.

c. Some of the considerations include physical or technical charateristics of the item, interservice support agreements, difficulty of item management, available repair and storage facilities, trained work force, etc.

d. Under the single-manager concept, it was never intended that all functions would be performed by a single division or branch in the air logistics center. An item manager relies on a large number of activities and agencies, including contractors to supply an item to the user. For example, the item manager relies on the Directorate of Maintenance Engineering to repair, overhaul, or modify items; the Directorate for Distribution to store and ship assets upon his direction; the Directorate for Procurement and Production to negotiate contracts for centrally procured items and for repair and overhaul of items that exceed the air logistics center’s repair capabilities.

e. Certain other support functions may be performed more economically or effectively by the consolidated service components of the Directorate for Materiel Management. Typical examples are: provisioning, cataloging, design engineering, standardization, inspection, requirements, and analyzing maintenance data gathered in accordance with the provisions of the Air Force Manual 66-1.

16-28. Determination of materiel requirements

a. Requirements determination involves close application of higher headquarters policies and procedures and skillful analysis of demand experience. Many in-

terdependent activities of the system are managed to provide flexible control of the inventory. The task is based on number and types of activities to be supported, analysis of available data related to materiel in the Air Force inventory, and application of assets against total computed requirements. It affects management decisions on entry, retention, and disposal of materiel in the supply system. Responsibility for furnishing accurate and current information necessary for analysis is shared equally by planning, using, distributing, and controlling activities at all levels of command. Determining accurate requirements demands a comprehensive team effort responsive to the support of the Air Force mission.

b. Requirements computations are basic tools used in a large number of materiel management decisions. Among these are the determinations of materiel to be purchased, repaired, reclaimed, retained, terminated if on contract but not yet delivered, transferred to other than Air Force activities, or disposed.

c. Requirements computations also provide summaries in dollars and numbers of items. The dollar information permits better management of available funds, and item information insures that necessary parts are available where and when needed.

16-29. Basic methods

There are two basic methods of computing requirements for consumption items.

a. The first employs an economic order quantity computation. This applies to bits and pieces consumed in use, and presumes that future usage is best measured from past demands. However, the economic order quantity method does not automatically respond to changing operational program trends, but must be selectively used to reflect the trends. This is done by program; i.e., comparing past flying hours to future flying hours for aircraft on which the items are used.

(1) The economic order quantity considers relationships among cost elements is based on the principle that, as the size and frequency of demands vary, certain costs of supply management vary directly, while other costs vary inversely.

(2) The cost of holding inventories is related directly to the quantity of stock obtained at each buy. The cost of ordering stock is related inversely to this quantity, since larger quantities mean fewer orders; i.e., more units should be bought less often to reduce order frequency. This is affected by dollar value of annual demands.

b. The second method of computing requirements compares usage rates directly to programed flying hours, engine overhaul, missile hours, months, or other program relationships.

(1) Projected program activity is multiplied by a rate of usage. The rate of usage may be the item’s issue rate, its wearout rate, or its overhaul replacement rate. To this computation are added support requirements for war reserve materiel, special projects, foreign military sales, etc.

(2) The basic calculation estimates the projected operating requirements. It is the sum of those quantities of assets needed to maintain stock levels and repair functions at base-and-level activities. The sum of these calculations represents the total gross requirement. The sum of these calculations represents the total gross requirement. The gross requirement is reduced by total Air Force available assets, including inventories on and serviceable and unserviceable, and assets due in from contractors, reclamation or interservice supply support, etc., to determine net requirements.

(3) Additional calculations convert the net requirements position into a quantitative expression which provides the basis for budgeting, procurement, repair, modification, determination of excesses, and final disposal of items.

16-30. The determination process

a. Computations include compilation and analysis of all pertinent data on an inventory item and translating it into quantities. They are governed by the categories of materiel being computed. Equipment item computations consider initial issues and replacement factors or rates, while consumption computations consider past usage, current inventory levels, maintenance actions, and future projections.

b. Equipment items are also considered nonexpendable and their issue, accountability, status reporting, requirements determination, and other related management actions are controlled by the Air Force Equipment Management System. This system was examined in chapter 15. *c.* Consumption items are expendable and may be designated as investment type (recoverable) or expense type (stock fund). Their requirements are based on past demands or on generation of unserviceables. Data for requirements determination computations are derived from Air Fore-wide inventory status reports, reports from repair activities, and from special project reports. Consumption items subject to depot-level repair are managed under the Air Force Recoverable Assembly Management System.

16-31. Consumption Item computations

a. Consumption items normally lose their identity in use, either by being consumed or by becoming a part of some higher assembly or end article. They are expendable in that property accountability is terminated upon issue. These items include a wide range, from complete assemblies, such as motors, pumps, naviga-

tion instruments classified as investment items, to minor maintenance parts and consumable supplies, such as paint, fuel, chemicals, nuts, bolts, and springs, classified as expense items. *b.* Air Force items are further classified as depot recoverable (investment) or nonrecoverable (expense). Depot recoverable items are those which, when unserviceable, can be economically repaired by depot maintenance activities and then reissued. Conversely, nonrecoverable terns are either consumed in use or are repaired at the retail or user level when they become unserviceable. They are not returned to the depot for repair if they cannot be repaired at the retail level. Thus, the system not only determines whether the items are recoverable, but also the lowest level of maintenance at which the items can be condemned. *c.* The requirements computation for depot recoverable items considers all assets less condemnations in the repair cycle as realizable assets to partially satisfy gross requirements. They are constantly moving from storage, to installation on an end item or weapon system, to removal after failure, through a repair facility and back to the supply activity for reissue. Thus, all of the assets necessary for the total gross requirements do not have to be on the supply shelf. Assets in the repair cycle are considered as ultimately available to partially satisfy requirements. When requirements exceed available onhand or due-in assets, all repair possibilities are exhausted before a buy requirement is generated. Accurate requirements determinations depend on current and accurate information. Item managers are at the far end of a long worldwide information network. They rely on the network to furnish information from numerous sources, and use it in requirements determination decisions. Implementation of the Standard Base Supply System and extension of the automatic digital network have improved both accuracy and currency of information.

16-32. Requirement decision information

a. Some information sources available to item managers are the Air Force Recoverable Assembly Management System, the Air Force Equipment Management System, maintenance data as prescribed in Air Force Manual 66-1, Installation and Checkout Lists, due-in asset information, and overhaul and condemnation reports. Additional information is received from contractors and specialized repair activities on status of reparable assets. The information is used in requirement determination and budgetary statements. The item’s inventory position is compared with the calculated requirements to determine whether the requirements can be satisfied by repair programs. If not, the item is procured to offset the deficiency, provided that funds are available.

b. In addition to expanded asset visibility control made possible by the Air Force Recoverable Assembly Management System, additional features were added to investment items identified during periodic requirements computations as being in a "buy" or "repair" status. They are coded "A" which results in automatic high-speed processing through transportation and repair pipelines, and the reduced order and shipping times minimize base stock levels. This and other refinements have resulted in eliminating high-value controls, which in the past were used to manage high-cost and/or high-demand items.

c. Secondary expense or consumable items are managed within the Economic Order Quantity System. Items controlled by this system include repair parts which are recoverable at the base level and throwaway items which are not recoverable at any level. The economic order quantity for an item is computed as a function of the cost to order and cost to hold and the item’s annual dollar requirements. Limitations have been established on the economic order quantity so that it is never less than 6 months requirements nor more than 3 years.

16-33. Selective management of propulsion units

a. At Air Force Logistics Command Headquarters, engine program managers develop necessary procedures for computing repair parts requirements and overhaul requirements, and prepare engine programing data. The engine inventory manager at the air logistics center computes engine requirements, both for overall totals and for the major commands. The engine inventory managers insure that base stockage objectives are maintained and that engine accountability maintained through user reporting. Engine inventory managers also perform actual functions and determine which engines are to be modified for training purposes.

b. Centralized accountability for aircraft engines and airborne auxiliary power units is maintained by the Data Automation Division of the Oklahoma City Air Logistics Center. To facilitate accounting and control, each installation commander appoints a base engine manager responsible for maintaining a current record of the status and condition of all propulsion units. Engine managers maintain debit losses to the centralized Air Force account.

c. Selective management procedures are used also for aerodynamic missile, ballistic missile and drone engines, and gas turbine engines for aerospace ground equipment. Selective management of propulsion unit follow-on repair parts includes computation of requirements, budgeting, funding, procurement, production scheduling and control, identification, cataloging, storage, packaging, inventory control, accounting and reporting, distribution, transportation, repair and

overhaul marketing and redistribution, and other related functions.

d. The Engine Management Program covers requirements computation, procurement, distribution, overhaul, and disposal. Its main features are serial number control, an actual method of computation, and high-speed transportation. The first permits identification of engines by age bracket; the second provides forecasts of failure rates for each engine type, model, and series. Finally, high-speed transportation, usually by airlift, reduces pipeline time and minimizes investment in engine inventories. It is estimated that requirements for aircraft spare engines have been reduced by about 30 percent through application of the above management procedures.

Section V
Secondary Items and Repair Parts Management in the Marine Corps

16-34. Marine Corps supply system

a. The Marine Corps supply system is dedicated primarily to support the Fleet Marine Forces, and provides the supporting establishment with such military items as weapons and individual clothing.

b. The system design places maximum emphasis on combat readiness of Fleet Marine Forces with maximum economy a corollary objective. The supply system employs maximum centralization of management in the one ICP. At the same time, it affects maximum decentralization of distribution, with the flow of materiel from procurement sources (commercial, GSA, DLA, other service stocks) direct to the base at which it will be consumed, or to the Marine Corps Logistics Base supporting the Fleet Marine Force operations. Centralization of management provides the desired degree of visibility over assets. As a matter of policy, automated operations and processes, coupled with the management-by-exception technique, are employed wherever practicable. With few exceptions such as ammunition, every item stocked in the supply system stores level is identified by a national stock number (NSN).

c. The ICP, with its third-generation computer capability, operates the Marine Corps Unified Materiel Management System, which is the depot level or stores portion of the total supply system. It carries out provisioning, effects cataloging, computes requirements, establishes item and financial accounting, procures, processes requisitions, redistributes, schedules for maintenance, and disposes of excesses. The ICP receives appropriated funds for procurement of major components and secondary reparable items. However, most secondary items are funded by the Marine Corps stock fund, and are stocked based on the results of the provisioning process, or on the basis of sufficient demands during a specified period.

d. Marine Corps secondary item requirements are divided into two basic categories: demand-based requirements (recurring) and nondemand-based requirements (nonrecurring). Major nondemand-based requirements are concerned with bills of materiel for depot repair programs, with provisioning, and with war reserve. Responsibility for the nondemand-based requirements is assigned to specific managers at the ICP, and these requirements are maintained in a project requirements file at the Marine Corps Logistics Base, Albany, GA. With certain exceptions, stock levels based on recurring demand are determined in a mechanized program using an item coding structure to determine the requisitioning objective. This coding structure identifies the type of stock levels and the computation method authorized for each NSA demand-based items use a monthly forecast quantity derived from past demand, deviations in past demand, and the measurement on past errors in forecasting. This program generates forecasts based on demand trend. In addition, provisions exist for quantum reductions and increases in demand forecasting based on anticipated program fluctuations.

Section VI
Secondary Items and Repair Parts Management in the Defense Logistics Agency

16-35. Introduction

a. With the implementation of the Standard Automated Materiel Management System, essentially uniform supply management procedures are being applied to all commodities managed by DLA. The system is based on centralized accounting and management of assigned commodities at five of the six defense supply centers, which supply military service customers and programs (including international logistics programs monitored by individual military services) and certain other agencies of the Federal Government.

b. Stocked items (as opposed to those which are bought upon receipt of a requisition only or those which are decentralized for local purchase) are divided into two separate categories for the purpose of forecasting requirements. Those experiencing sufficient demands are catergorized as replenishment demand items and their requirements are predicted upon the basis of past demands experienced. Other items are stocked only if they are considered to be of sufficient importance to the operational requirements of customers, in which case they are identified as numeric stockage objective items and a minimal insurance quantity is maintained in stock.

c. For supply management purposes, replenishment demand items are further separated into the following management categories based on the critical importance of the item to operations and/or the dollar value of annual demands experienced:

(1) Very important program items.
(2) High-value items ($4,500 and above).
(3) Medium value items ($400 to $4,499).
(4) Low-value items (under $400).

d. Categories are ranked in descending order of importance, with items in the first category (very important program items) receiving the greatest amount of individual management attention and with the last category (lowvalue items) managed largely by application of automated procedures, with a provision for informational printouts occurring under predetermined situations.

e. The functional alinement as between the military departments and DLA in the area of requirements is distinguished by the difference between requirements determination and requirements computation. It can be stated that the determination of requirements is solely the prerogative of the user, or the military departments, and the computation of requirements is a service which can be performed by the supplier or DLA. In terms of the requirements function, military departments determine what materiel are needed, where they are needed, when they are needed, and the priority of the need.

f. By its charter, DLA has been charged with the responsibility of computing the replenishment requirements for those items it manages and the military services are charged with the responsibility for computing special programs and war reserve requirements.

g. Annually, the military services select the items and determine the quantities to be included in the DLA War Reserve Program. All the military services, requirements are consolidated by DLA and adjusted by a war reserve safety level, industrial capability data, and peacetime assets to determine the DLA Other War Reserve Materiel Requirement. Any DLA war reserve stocks applicable to the newly computed Other War Reserve Materiel Requirements are then applied to arrive at the DLA war reserve deficiency. These deficiencies are subsequently included in the DLA Program Objective Memorandum for funding support.

h. Forecasting recurring system requirements for replenishment demand items is accomplished through use of a double exponential smoothing technique which permits variation in the weighting factor assigned to more recent demands experienced in the light of expected or known trends. Requirements are forecast monthly for very important program items and monthly or quarterly or all other items. Unusual requirements which cannot he anticipated on the basis of past experience are forecast by the military service program manager either as special program requirements or as provisioning requirements (in the event new equipment items are being introduced by the military services). In either of these situations, one-time requirements forecasts become additives to the recurring demands anticipated.

i. An additional exception to the demand-based forecast occurs in the area of clothing items where issue and stockage requirements are predicted upon the basis of troop program information (such as number of recruits scheduled to be inducted, by time period, and total military service strength), initial issue allowances and computed replacement rates.

j. Consideration of wholesale supply levels logically starts with the reorder point-the point of initiation of orderly replenishment actions which ultimately result in delivery of materiel into the distribution system to replenish stock levels. During this process, materiel continue to flow from the system to the using military services, and a level of materiel must be available for this purpose.

k. The reordering process can be described as having three distinct phases. The three phases administrative, production, and delivery times-make up the procurement leadtime of an item. During the reorder process, materiel are flowing from the system. Therefore, at the point of placing an order, the defense supply centers must have on hand or on order sufficient materiel to support demands during this time-consuming process. The supply level required to support this process is identified as the procurement leadtime requirement.

l. It must be recognized that the requirement computed to support demands during the procurement leadtime is an estimate of demands. It is an estimate of the demand which the defense supply centers anticipate the military services will be placing. Actual demands fluctuate around the estimate, and often the actual demands are greater than the estimate. Also, it must be recognized that there are delays in the procurement process. These two factors bring about the necessity for having stock in addition to the procurement leadtime requirement in order to minimize the probability of being periodically out of stock. This requirement is identified as the safety level. The reorder point quantity is the sum of the protectable was reserve requirement, the safety level requirement, the procurement leadtime requirement and any additive requirements (e.g., provisioning).

m. At the point at which assets on hand plus on order minus back order have been reduced to level less than or equal to the reorder point, a supply control review to study the need for procurement action is indicated.

n. The procurement quantity is a function of the forecasted demands to be placed upon the system and the frequency with which an item is to be procured. This

frequency may be quarterly, semiannually, annually, or less frequently for low-dollar value items based upon economic order quantity principles.

o. The safety level, the procurement leadtime, and the procurement cycle go to make up the peacetime supply levels necessary to insure continuous support of peacetime operations. These three elements represent the maximum quantity that normally is required to be on hand and on order during peacetime. The safety level and procurement leadtime quantities represent the minimum peacetime requirement that should be on hand and/or on order at any given time.

p. Variable safety levels are used for all established items in accordance with DODI 4140.39, 17 July 1970.

q. Supply control encompasses those management actions designed to satisfy anticipated demands, and to insure a proper balance between supply and demand. It is a comparison of time-oriented requirements with assets in sequence of availability for issue in order to determine any action which may be required to maintain balance. All essential data relating to the supply and demand status of an item must be compiled, kept up to date, and consolidated in a form which will permit maximum utilization of information.

r. It is the purpose of the supply control review to maintain continuity of supply on an orderly and preplanned basis. Although it may at times uncover problems of immediate concern, in general, the review is designed to prescribe current actions directed at a supply situation in the future. It is essential, therefore, that the supply control study encompass all requirements on a time-phased basis and an assessment of total resources which will be available to meet these forecasts. The following are the basic data needs for effective supply control actions:

(1) *Requirements forecast bases.* To include as a minimum demand history and appropriate programing data.

(2) *Requirements*.

(a) Time-phased forecasts of total peacetime demands which will be placed on the defense supply centers through a given time period, including both recurring and nonrecurring (provisioning, special program requirements, etc.) demands.

(b) Mobilization requirements to provide the basis for mobilization reserve stockage and funding.

(c) Levels to govern retention and disposal actions.

(3) *Assets*. The resources under defense supply center ownership which will be available to meet the statement of requirements. These include:

(a) Serviceable and unserviceable stocks on hand in storage depots and intransit among storage depots.

(b) Stocks scheduled to be received into the storage depots from all sources including procurement, repair and rebuild, returns from customers, and returns from loan status.

(c) Shipments scheduled direct to customers.

Section VII
Secondary Item Management in the General Services Administration

16-36. General

a. Most items managed by Federal Supply and Services of GSA, with the exception of ADP equipment and commercial vehicles are secondary items or are treated as such.

b. Many principal items are contracted for or bought by Federal Supply and Services for agencies, but they are not "managed" in the terms of the concepts of this chapter. Description of the program, the system and techniques, and areas of responsibility will be directed toward items in distribution facilities and how they are managed from the standpoint of stocking patterns and stock replenishment.

16-37. Stocking pattern

a. Federal Supply and Services of GSA has 12 NICPs located nationally which manage the classes delegated to them. Within GSA’s assigned group, there are three categories of items:

(1) Stocked in all supply distribution facilities.

(2) Stocked in more than one, but less than all.

(3) Stocked in a single facility.

b. The basic criteria for determination of where items are stocked:

(1) Demand data.

(2) Annual dollar volume.

c. However, there may be other considerations such as:

(1) Nature of the item.

(2) Shelf life.

(3) Special program commitments.

d. Stock management responsibility is vested in 1 of the 12 NICPs located nationally. The stock system has 10 wholesale distribution facilities within CONUS. Which facilities will stock a given item or group of items is an NICP decision, and normally is based on space available, storage conditions, location of major customers, etc.

16-38. Demand forecast and reorder point updating

a. Each customer address record is assigned a normal servicing facility. When requisitions are processed, demand is registered on the record of the facility normally

servicing the consignee. If the item is available at the normal servicing facility, the demand is recorded and the requisition automatically referred to the nearest stocking facility. "Potential or referral demand" is reviewed to determine if stocking should be expanded. "Issue demand" is used for updating demand forecasts. Demand forecasts, expressed in units per month, are updated monthly using the expontential smoothing technique with a trend adjustment. All stocking facility records are updated, with exceptions produced for item manager review. The exceptions represent changes from the old to the new monthly demand forecast which exceed an acceptable tolerance on a sliding scale, based economic order quantity and variability of demand simultaneous with the updating of the monthly demand forecast, the safety stock level and the economic order quantity, both expressed in months, are updated. Safety stock is a variable, the variation being related to the demand rate, the length of procurement leadtime, and the economic order quantity. The economic order quantity is recomputed using the carrying cost and the procurement cost from the item record, and the value of the updated demand forecast. The procurements and carrying costs used are constants for each Federal supply class, but vary between classes. A program for periodic updating of leadtime of each item by the computer, based on actual experience on normal receipts and using the exponential smoothing technique, was installed in 1969.

b. A limited number of items are not subject to machine updating. Among these are seasonal items such as calendar pads and antifreeze and other items identified for intensive management.

c. These items, with the complete demand history, come out as exceptions each month. The "recurring" or "nonrecurring" demand codes in requisitions are ignored. The reason for this is that, on a very large number of items, the total demand against the system is made up of what the requisitioners consider to be nonrecurring demand. Customer estimates are used to a very limited degree since experience has shown that, on the whole, demand history is far more reliable. Exceptions are made for such items as household crates on which the demand forecast comes from a single activity, office furniture for a new building, large quantities of handtools for a planned assembly program, and other similar situations. In the exception review by the item manager, management emphasis is placed on abnormal forecasts for a given item.

d. Economic order quantity is applicable to all stocked items except a limited number of seasonal and specifically managed items which are bought on an annual basis. Minor variations such as "related item replenishment" will bring up for replenishment all items in a specific group which are close to reorder point, usually within 1 month’s stock. Another minor variation is item consolidation of nationwide requirements for scheduled periodic buys. Quantities bought on these items represent stock equal to the scheduled frequency or economic order quantity, whichever is greater. Shelf-life items subject to constraints. The replenishment quantity on these items equals the economic order quantity or one half of the shelf life, which ever is less. These variations are built into the item record and the computer program so that appropriate adjustments are made in stock replenishment analyses.

Chapter 17
Asset Control and Reporting

Section I
Asset Control and Reporting In the Army

17-1. Introduction

a. Many factors have influenced the manner in which asset reporting techniques were developed within the US Army: the nature of ground combat; the Army's organization for supply; the diversity of items or equipment; and the uses to which asset data are put.

b. The US Army Depot System Command (DESCOM), Letterkenny Army Depot, Chambersburg, Pennsylvania, and New Cumberland Army Depot, New Cumberland, Pennsylvania, are the two prime data collection points for most asset reporting. Both of these organizations are elements of the US Army Materiel Command (AMC).

17-2. Reportable Items

If the Army needs asset data reported for management or control of any stock numbered item, that item is assigned one of four reportable item control codes (RICC). These RICCs signify which organizations are to report, the reason for the report, and the level of management interest. The number of reportable items is indicated as shown in table 17-1.

17-3. Identification of reportable items

a. Supply Bulletin (SB) 700-20. Army Adopted/Other Items Selected for Authorization/ List of Reportable Items, is used by supply personnel to identify those code 1, 2, and 3 items to be reported. This publication is prepared by the AMC Cataloging Data Activity (CDA), which also extracts pertinent information and prepares item master cards. These are distributed worldwide to specific supply activities and to The Adjutant General (TAG) data processing activities which provide data processing support to reporting units and installations. For example, during a past transmittal of cards, these cards went to 175 different recipients, including the 52 US Fiscal and Property Officers of the National Guard. The recipients may request transmittal by automatic digital network (AUTODIN), mail, or magnetic tape, and receive either a new set of cards or a revision on 1 March and 1 September. Item master cards are only prepared for RICC 1 and 2 items, and are much more convenient to use in data processing applications than the published SB 700-20.

b. The Army Master Data File identifies RICC 8 items. It is published by the AMC CDA, New Cumberland, Pennsylvania.

17-4. Continental depot asset reporting

a. For convenience sake, each MRC of AMC appoints one individual as accountable property officer. The property officer's task is to insure that computer files and other records are maintained in accordance with regulations. These files list all items of materiel for which the readiness command is accountable and the Continental United States (CONUS) DESCOM depots in which the materiel are stored.

b. DESCOM depots maintain custodial records, indicating all items in storage and the MRC which main

Table 17–1. Reportable Item Control Codes

RICC	Number of Items	Description
1	3,000*	Items contained in Department of the Army (DA)-approved authorization documents, selected and designated by Headquarters, Department of the Army (HQDA), for which asset data are required for evaluating unit readiness and inventory management by DA Staff.
2	6,000*	Items contained in DA-approved authorization documents, designated by the materiel readiness commands (MRC) for centralized control and management, for which asset data are required from all Active Army and US Army Reserve component units, organizations, and installations.
3	1,000*	Items contained in DA-approved US Army Reserve unit authorization documents which have not been designated RICC 1 or 2. Office of the Chief, Army Reserve provides guidance for the selection and designation of these items.
8	5,000*	Those items selected by the national inventory control point (NICP) or the service item control center for intensive management in accordance with Department of Defense Instruction (DODI) 4140.37.
		Note: Supply status reporting of RICC 3 equipment is limited to US Army Reserve units, organizations, and activities.

*Approximate

tains the formal accountability and control. The depots' custodial records are reconciled periodically with the accountable records of MRCs. Normally, each depot stores materiel for more than one MRC, and each MRC orders materiel to be shipped into the depots.

c. Secondary item managers have access as required to the accountable records pertaining to items under their management. The data are used in the asset portions of supply control and stratification studies.

d. Major item managers likewise have access to these records. At the end of every month, the stock control activities at MRCs extract and transmit to DESCOM an asset report which displays condition and ownership or purpose codes for all code 1 and code 2 items. DESCOM uses these data in developing the Continuing Balance System-Expanded (CBS-X).

17-5. Oversea Commands

a. Assets located overseas are found in theater storage activities, in general and direct support units, in the hands of using Army units, and in locations for prepositioned war reserve stock and theater war reserve levels.

b. Theater materiel management centers collect and consolidate data from all theater depots and general support/direct support units. The depots do not literally make reports. Instead, they furnish the materiel management center with a complete copy of all their property records, which is called the Availability Balance File. The copying of the records, in trade jargon is known as the "ABF Dump," because there is no attempt to sort out the items by major or secondary item categories, by manager, or by RICC. The records are simply "dumped" onto magnetic computer tape.

c. Those general support/direct support units which are equipped with small capacity computers, report all necessary information concerning demand for and stocks of both serviceable and unserviceable code items to the materiel management center. Units without automatic data processing (ADP) facilities must report the same information from their manually maintained stock record accounts. Code 1 and 2 items, which are authorized by Modification Table of Organization and Equipment (MTOE) or held for maintenance float purposes, are reported in accordance with troop asset reporting procedures, which are covered in subsequent paragraphs.

d. At the theater materiel management center, the depot Availability Balance File dumps and the general support/direct support unit reports are consolidated into one complete theater Availability Balance File, which is transmitted monthly by mail to New Cumberland Army Depot for further processing. General support/direct support units report quarterly, and their latest reports are merged with the most current depot data, which are furnished monthly to arrive at a theater Availability Balance File. General support/ direct support units currently lack ADP capacity sufficient for monthly reporting. The final Availability Balance File contains information on RICC 8 items from all theater supply activities and information on RICC 1 and 2 items, plus items coded as nonreportable. In addition, theater war reserve levels and stocks applicable to these levels are identified in the theater Availability Balance File.

e. The New Cumberland Army Depot, using its ADP equipment, sorts out all data by national stock number (NSN) and transmits the data to the manager of the item, even though it may not be centrally managed by an Army NICP. The Army secondary item managers use these data in forecasting requirements for items included in the Selected Item Management System which is the Army's implementation of DODI 4140.33, Grouping of Secondary Items for Supply Management Purposes, and DODI 4140.37, Asset Knowledge and Control of Secondary Items.

f. Certain US Army forces are available for air transport to Europe, less their heavy equipment. Pre-positioning of materiel configured to unit sets (POMCUS) equipment and supplies are made available in case of operational need. These pre-positioned materiel are accounted for on computerized divisional property books and at the end of every quarter, the data from these property books are sent to the AMC Logistics Systems Support Activity at Chambersburg, PA. Here, requiremeets for operational projects are compared with the assets which can be or are reserved to support operational projects. At the end of every quarter, DESCOM extracts from the files of the Logistics Systems Support Activity the information concerning code 1 and 2 items. These data are used in preparing the worldwide asset position worksheets.

17-6. Continuing Balance System-Expanded

a. CBS-X is the Army s single equipment accounting system for RICC 1, 2, and 3 items. CBS-X operates on a policy that every time equipment moves between accountable records, the documenting supply transaction is furnished to the system. The majority of supply transactions are furnished by the key automated supply systems. A small percentage of supply transactions, those not available from the automated systems, are furnished on forms that are currently used by the property book officers to adjust their property book records.

b. Supply transactions update the CBS-X on a monthly basis, but annually CBS-X balances and supporting transactions are reconciled with each Army property book or other accountable record. *c.* CBS-X provides the Army with official equipment balances on which to base procurement and distribution

decisions and for use in Army planning documents (the Army Materiel Plan, Total Army Equipment Distribution Program, and other budget studies). *d.* The Worldwide Ammunition Requirements and Assets System Report, CSGLD 1322, is used as the data base for all ammunition reporting within the Army. The Worldwide Ammunition Report provides the Army with the current view of ammunition asset data in the Active Army and National Guard. The report is in two parts, part I for monthly reporting of selected items and part II for monthly reporting of all items. The US Army Armament Munitions and Chemical Command (AMCCOM) designates the items to be reported on and receives reports from the field. The report is fully automated.

17-7. Weapons Management Improvement Program

The DOD Small Army Serialization Program is a centralized control system for DOD small arms up to and including 106 millimeter recoilless rifles. It is designed to respond to investigative agencies, within 72 hours, as to the last accountable activity responsible for a specific serially numbered weapon. Development was a joint effort under Army leadership using Air Force computer programs, modified to accommodate all the military services and defense agencies. The Defense Control Registry has been established at AMCCOM, Rock Island, IL. The registry, operated and/or maintained by the Army, will file serial number data down to the levels of the services and DLA, and will establish a permanent history for weapons which have been demilitarized, lost, stolen, shipped to foreign countries or others, which are no longer under the control of DOD. The military services and DLA will be responsible for maintaining small arms serial number data within their organizations, and for the necessary defense transaction reporting. The program uses standard reporting procedures, card formats, transaction document identifiers, and content indicator codes. It was approved by the Assistant Secretary of Defense (Manpower, Installations, and Logistics) in November 1974.

Section II
Asset Control and Reporting in the Navy

17-8. Introduction

a. The Navy has two principal systems which provide for asset contrail and reporting of centrally managed items. These are discussed below:

(1) Uniform ADP system for inventory control points (ICP) and inventory managers. Within this system, all wholesale stocks of material stored at major supply depots and centers, naval air stations shipyards, ordnance stations, and industrial activities are subject to daily transaction item reporting to the ICP/ inventory manager. Operating from a single data base concept, the data are processed, stored, and made available to the item manager by way of remote teleprocessing from two computer sites.

Computer Site	Inventory Manager
Aviation Supply Office, Philadelphia, Pennsylvania	Aviation Supply Office
	Branch Aviation Supply Office
Ships Parts Control Center, Mechanicsburg, Pennsylvania	Ships Parts Control Center
	Naval Sea Systems Command
	Naval Electronics System Command

(a) Automatic or nonautomatic issues and critical item control is exercised by the item manager through discretionary usage of restriction coding applied at the central computer and at the storage activity.

(b) Inherent within the computer systems are extensive edit and validation routines which automatically trigger supply demand review studies and procurement, allocation/ reallocation actions, or recommendations when selected levels are breached. Online access to unhand, due-in, due-out assets by purpose and condition coding is provided, plus intransit, inprocess, back orders, and planned requirements documents together with technical and application data.

(c) Positive visibility and control is exercised for 100 percent of Navy wholesale stocks (consumable and reparable) from up to 45 wholesale stocking activities per computer site by way of military standard procedures as specified in Naval Supply System Command Publication 437.

(d) Additionally, for below the wholesale level the computer base and programs provide online worldwide asset visibility for 100 percent of Navy cognizance material from up to 250 mechanized afloat and ashore activities based on quarterly asset/requirements reports submitted in accordance with Naval Supply Systems Command Instruction 4400.74.

(e) Standard interfaces between ICPs and wholesale/retail stocking activities are insured through the Uniform Automated Data Processing System for Stock Points and Shipboard Uniform Automated Data Processing System.

(f) Direct management control over ICP, stock point, and shipboard Uniform Automated Data Processing System is vested in the Commander, Naval Supply Systems Command. The Fleet Material Support Office is the central design agent for these systems.

(2) Conventional ammunition integrated management system. This system is an automated management information system for worldwide asset visibility and control over Navy expendable ordnance (less nuclear). The Ships Parts Control Center operates the system and is the central design agent for the system under the direct control of the Commander, Naval Supply Systems Command. Salient features of this system are a secure data base and secure network or remote telecommunication devices to user activities. It represents the single data base for all Navy expendable ordnance under the management control of the Ships Parts Control Center, Naval Air Systems Command, Naval Sea Systems Command, and the Naval Mine Engineering Facility.

b. The data base is maintained by worldwide daily transaction item and asset reports. Access and processing of data is keyed upon NSN, Navy ammunition logistics code, or DOD identification code to facilitate customer and management requirements.

c. Interface with major ammunition stocking activities is provided either through the Naval Ordnance Management Information System or the Uniform Automated Data Processing System for Stock Points.

17-9. Improved reparables asset management program

Two additional intensified management techniques, designed for management of selected reparable assets within the program, are the Closed Loop Asset Management Program and Fleet Intensified Reparables Management Program.

Section III
Asset Control and Reporting in the Air Force

17-10. Nonexpendable items (also termed equipment items)

a. The Air Force maintains asset visibility below the wholesale level by various systems depending upon the general type of materiel involved. Following is a summary of these management techniques and major evolutions relating to them.

b. Prior to 1962, nonexpendable equipment items were managed through a unit authorization list system. Worldwide authorization and inventory data were collected periodically and used to determine items and quantities needed to support Air Force activities.

c. In 1962, the Air Force Equipment Management System was implemented to improve all areas of management with better reporting being a major objective. Specifically, these improved procedures provided for an equipment management function responsible for the management of the equipment program at base level (Customer Support Branch) and at major command level (Command Equipment Management Office (CEMO)). Worldwide support of this system is by a central data processing site physically located at the Sacramento Air Logistics Command. The procedures provide for audit techniques to insure the accuracy of authorization and inventory data reported to the Air Force Logistics Command for use in requirements computations.

d. The Customer Support Branch submits to the processing site at the Sacramento Air Logistics Center daily reports concerning equipment authorizations and inuse assets for each command’s units. The processing site, in turn, provides each CEMO, on a weekly basis, with data applicable to all equipment authorizations and inuse assets within its command. Reports include authorization and inventory data furnished by the Customer Support Branch, as well as authorizations forecasted by CEMO.

e. The data furnished by the Customer Support Branch are subjected to numerous edits, consistency checks, and comparisons, including assurance that reports are received for each programed organization. Records with detected errors are suspended and submitting activities are requested to update and furnish corrected input. Non-matches involving inventory managers are listed and forwarded to the major command CEMO and the cognizant ICP for clarification and correction of input data. Matched data are forwarded to the appropriate ICP for use in computation of equipment requirements. Numerous other products are furnished to the base Chief of Supply and to the CEMO of parent and host commands.

f. Initial distribution and subsequent redistribution of centrally procured materiel is predicated upon each organization’s entitlement in accordance with DODI 4410.6 (Uniform Materiel Movement and Issue Priority System).

g. On base redistribution, except for controlled items, may be affected by the Chief of Supply. Major commands may redistribute vehicles to fill authorized shortages. Intracommand transfer of equipment between bases of a major command, under emergency conditions, may be made with coordination of the cognizant ICP.

h. Complete requirements computations for nonex-

pendable equipment are made twice each fiscal year. On certain commodity groupings and selected items with critical management considerations, requirement computations are made as required.

17-11. Air Force Recoverable Assembly Management System

a. Prior to November 1967, the Air Force maintained asset visibility over recoverable and consumable assets below the wholesale level entirely through the Stock Balance and Consumption Report. This report was submitted quarerly by all Air Force bases/activities to the air logistics centers assigned item manager responsibility.

b. The Stock Balance and Consumption Report began as a manual report, but as Air Force logistics was mechanized, reports were transmitted by punchcard over an AUTODIN to air logistics centers.

c. Air Force segregated management of materiel. More attention was given to expensive depot recoverable investment items and less to inexpensive consumption items.

d. Over 80 percent of the Air Force Logistics Command’s spares inventory, by dollar value ($14 billion), consists of investment items while 20 percent consists of consumable items. Air Force policy requires mandatory reporting on all investment items and no reporting from the retail or base level for consumable items other than excess asset reporting and dollar value reporting for the stock fund.

e. Asset and usage reporting by Air Force bases’ activities worldwide provides the information necessary for item managers to compute worldwide requirements, and also redistribute assets to customers when materiel are not available from depot stocks. Asset and usage reporting are basic to the recoverable item requirements computation. However, quarterly reporting was not sufficiently responsive. Consequently, a more timely asset and reporting system was developed and implemented in November 1967. The Air Force Recoverable Assembly Management System was designed to provide daily transaction reporting for investment items. Transaction reporting required an asset and usage report at end of day from all Air Force bases when a balance or condition change occurred. When no changes occur, no report is required. Interfacing of data with existing systems and formats minimized the impact on reporting activities. The Air Force Recoverable Assembly Management System now covers over 130,000 depot-level repair items.

f. Implementation of the Recoverable Assembly Management System resulted in a significant improvement in redistribution of materiel. The redistribution order confirmation rate increased from a 25to 30-percent average under the quarterly reporting technique to a 65-percent average under the Air Force Recoverable Assembly Management System.

g. The Air Force Recoverable Assembly Management System responds to customer needs with fewer assets in the logistics system through a greater use of available assets.

17-12. Critical items

The Air Force Recoverable Management System also provides for collection of data on critical items, including consumables and those not otherwise incorporated in reparable item control programs. The system, on a daily basis, summarizes status of critical items for use by item managers in the issuance of redistribution orders and applying other programs for control of critical items responsible for weapon systems or equipments being in a "not mission capable" condition. Items remain under critical item controls until there are sufficient assets to meet urgent needs.

Section IV
Asset Control and Reporting in the Marine Corps

17-13. General

The key to asset control and reporting in the Marine Corps is found in the structure of the Marine Corps Unified Materiel Management System. The system is built around one ICP with one computer and 15 related subsystems. All supply transactions requisitions, shipments, receipts, etc-are inducted into this one computer system. The result is that management information is generated on a transaction basis at the ICP and the need for external reports from the field is eliminated to a substantial degree. The Marine Corps has total asset or dollar value visibility of all items in stores, available in the computer at one ICP. Further, this information can be presented in a time frame that allows management to take corrective action without delay.

17-14. Controlled item management

a. For the purpose of definition, controlled items are those items which require Marine Corps-wide asset knowledge for requirements computation, conrol of issues, and determination of dispositions. The range of items is firm at any point in time, but is subject to change as new requirements develop. The actual items are completely identified in current Marine Corps directives available to all echelons of supply.

b. The controlled item management subsystem provides the means for individual item management of controlled items within the parameters of the Marine Corps Unified Materiel Management System with a minimum

of administrative effort on the part of the item manager. The subsystem provides the ability to validate requirements against recorded allowances and inuse asset data, provide asset data for use in materiel requirements studies, produce reports for management review, and provide preprogramed file status reports, as may be required. The predominant features of this subsystem are:

(1) Full asset data for controlled items are available and adjusted as issue/disposition decisions are made.

(2) Full allowance data are available for the purpose of monitoring requisitions prior to issue.

c. Through the files maintained in the controlled item subsystem, the necessary data are available to provide end item density for requirements computations of secondary components, modifications, and collateral equipment, and to establish the quantity of end items to be placed in ready-forissue condition.

d. Various programs have been developed which permit management to compute requirements or obtain status checks for control purposes through the use of the controlled item subsystem and by drawing elements of information from other subsystems. The programs are:

(1) Collateral Equipment Computation.

(2) Readyline Requirement Computation.

(3) Comparison of War Reserve Requisitions to Authorized Allowances.

(4) Comparison of Onhand to Total Materiel Objective.

(5) Computations of End Item Density by NSN.

17-15. Recoverable items program

a. The recoverable items program was developed to insure that reparable items are either recovered, evacuated, or disposed of based on the condition of the materiel and/or the asset Position of the Marine Corps. Action is initiated by equipment users through a recoverable items report. These reports are submitted to the ICP when a designated end item meets one of the following criteria:

(1) The item is in excess to command allowances.

(2) Required repairs are beyond the echelon of maintenance available to the commander.

(3) Required repairs are not economical based on current Marine Corps directives.

b. Upon receipt of the report, the ICP will take the following actions: (1) Refer to the Commandant of the Marine Corps those items that are controlled/managed by headquarters. Headquarters will notify the ICP of action to be taken.

(2) Furnish the holding organization disposition instructions-shipping destination, cannibalize, dispose, evacuate, etc.

(3) Establish a due-in to the stores system when materiel are to be evacuated to the stores system.

(4) Decrease the asset records of the owning organization if applicable.

17-16. Special programs

a. Headquarters, Marine Corps provides executive-level policy supervision for the internal execution of the Defense Materiel Utilization Program, one of several special DOD management programs in which the Marine Corps participates.

b. Other management programs have been established within the Marine Corps Unified Materiel Management System which are designed to:

(1) Assemble end items from available components, or to disassemble them when requirements for individual components exist.

(2) Insure modification of end items/ weapon systems through administrative control and availability of modification kits.

(3) Provide control and account for Government-furnished materiel for contractors' use.

(4) Control materiel issued from stock for temporary loan.

Section V
Asset Control and Reporting In the Defense Logistics Agency

17-17. Scope

a. The supply management role of DLA is primarily that of manager of what may broadly be termed secondary consumable items, as contrasted with the major end items of weapons and equipment managed by the military services. The agency supplies basic materiel and repair parts used in the operation and maintenance of service-managed weapons and equipment.

b. The span of functions performed for assigned items is somewhat narrower than those traditionally performed by military department materiel managers.

c. The military services exercise full control of their respective requirements for items managed by DLA. The services retain full responsibility for research and development and for the development and maintenance of specifications for all DLA items, thus insuring their control of qualitative requirements. The military services retain control over retail requirements through prescribed stockage criteria and retail pipline levels. They also compute and furnish to DLA the estimated requirements for war reserves and special programs. The agency computes replenishment requirements for wholesale stocks, determines quantities to buy and quantities to keep in wholesale stock, determines how best to distribute supplies, and insures that the required

item is available to the military service retail supply manager at the time the customer needs it.

d. The supply management functions are accomplished by the six defense supply centers in conjunction with stock distribution functions performed at the 15 storage activities of the Materiel Distribution System.

e. Defense supply centers are the controlling activities which dictate all phases of action in the cycle of supply for all items assigned within a commodity; e.g., procurement, requirements, distribution, and maintenance. In addition, defense supply centers perform centralized requisition processing against a national inventory record of each item, which reflects the available quantity at each storage location where the item is stocked. Exceptions to centralized requisition processing at the defense supply centers are DLAowned stocks positioned at the seven CONUS naval supply centers, naval training centers, and shipyards are authorized for local issue by the storage activity in support of Navy requisitioners who submit requisitions directly to the storage activity. Issue transactions are reported after the fact to the defense supply center having item accountability in order that the national inventory record can be adjusted to reflect the locally issued quantity.

f. Centralized accountability, requisition processing, and shipment direction to offsite storage locations are accomplished through an interrelation of two fully automated supply systems designed for inventory control point operations and depot warehousing operations. These procedures are the Standard Automated Materiel Management System, which is designed for defense supply center operations, and Mechanization of Warehousing and Shipment Processing, which is designed for storage activity operations. These applications are explained in detail in a subsequent chapter on ADP and telecommunications systems in supply management.

g. A few key statistics will indicate the magnitude of the agency’s logistics support mission at the close of Fiscal Year 1978. Of the approximately 3.9 million items in the DOD portion of the Federal Supply Catalog, DLA inventory is valued at approximately $9.0 billion. Procurement and sales for FY 81 were $18.0 billion and $16.9 billion, respectively.

Section VI
Asset Control and Reporting in the General Services Administration

17-18. General

GSA loses ownership of stocks once they are issued to a using agency; therefore, asset control and reporting is limited to stocks in the wholesale system. (ADP equipment is an exception. This was covered in chapter 8.)

17-19. Background

With the establishment of the first inventory in 1934 in the Washington Federal warehouse under the Procurement Division of the Treasury Department, asset data were maintained on the stock records of the supply distribution facility, which was located in the same building and under the direct control of the central office. During 1943, 1944, and 1945, 10 additional distribution facilities were opened. Each maintained its own stock records. Quantitative balances were reported to the central office semiannually. Monthly reporting was made on items in long supply and on selected items covered by national term contracts. Beginning is 1964, biweekly reporting of selected classes was done. By 1966, all balances were reported to the central office where they were consolidated and listed monthly.

17-20 Current

In 1967, the central office established a computer record, updated daily, containing all stock balances and related data by location. Information is available on an inquiry basis on any NSN, Federal supply class, or Federal supply group. Real-time inquiry is not available; therefore, there is a 1-day delay in securing balances.

Chapter 18
Retail-Level Supply Management

Section I
Retail-Level Supply Management In the Army

18-1. Introduction

a. Stockage of supplies at retail-level installations is based primarily upon demand or, if approved as mission essential, for standby, or for application to the maintenance float requirements. Requisitioning objectives depend upon demand and upon the leadtime required to place goods on the shelves. Stockage quantities are governed by the cost of ordering as related to the cost of holding or storing so that on certain low-cost items the quantity ordered may exceed a year's supply, unless constrained by directives from higher headquarters. A stockage list is designed to accommodate requests for frequently demanded items, commensurate with economic feasibility and mission performance.

b. The ability of retail-level customers to operate effectively is directly related to the responsiveness of the wholesale-level supply activities such as the major subordinate commands (MSC) of the US Army Materiel Command (AMC), the supply centers of Defense Logistics Agency (DLA), General Services Administration (GSA), and local procurement sources. The wholesale-level inventory managers have knowledge of what stocks are on hand in the retail system for those items reported under procedures described in chapter 17. They have limited authority to direct the retail-level redistribution for those items of sufficient importance to be controlled by the Selected Item Management System-Expanded. This limitation does not apply to items reported as excess.

18-2. Basic policies

The supply operations of retail-level installations are based on two principles. They are: items stocked that must be directed toward attaining maximum materiel readiness of supported units; and, stockage criteria that must be based on demand and/or item essentiality. Exceptions are made for stocks relating to certain medical and mission supplies, and supplies authorized by modification tables of organization and equipment (MTOE).

18-3. Responsibilities

The retail-level installation commanders are responsible for the efficiency of installation supply activities, and for the support of all individuals, units, and activities assigned to or under the jurisdiction of that installation unless exempted by higher authority. Installation commanders are responsible for designating officers who maintain accountable property records; furnishing planning data for the individuals charged with providing logistics support; implementation of military standard procedures; assignment of supply responsibility to major subordinate commanders; establishing installation ammunition levels, storage facilities, and issue provisions; furnishing authorization documents; providing technical supply assistance; reviewing demand accommodation rates; establishing liaison with supported units; inspections; and establishment of management controls and other related functions.

18-4. Staff responsibilities

a. Each retail-level installation has a Director of Industrial Operations (DIO), who is the principal staff assistant to the installation commander for supply activities. The DIO exercises staff supervision over logistics operations including supply, transportation, maintenance, procurement, and services functions. The mission, diversity, scope, and volume of supply operations performed at Army installations preclude the establishment of a standardized organizational structure for the supply activities at all installations. However, to the extent possible, the organizational structure for supply activities at all retail-level installations assigns responsibilities to a single individual who reports directly to the DIO. This arrangement prevents fragmentation of supply responsibilities and authority. Generally, this individual is designated as the director or chief of supply and is appointed by the installation commander to direct the operations of assigned activities in supply mission accomplishment. The director or chief of supply provides supply support to units and activities located at the installation and to approve offpost or satellite organizations. The director or chief of supply operates primarily through an installation supply division, which has not been designated as direct support system units. For direct support system activities, the director or chief of supply is responsible for providing logistics assistance. The operations are conducted primarily through an installation supply division.

b. The installation supply officer supervises the installation supply division and insures that formal records of accountability are properly maintained. He directs the activities of the stock control branch; the materiel category managers who control assigned materiel categories of property and equipment; the storage branch; and the self-service supply center.

18-5. Stock control at retail level

a. General. The purpose of stock control systems is to insure that adequate supplies are available at the proper place and time without overstocking. This is done through modern stock control and accounting pro-

cedures. Stock control is used at installations and activities in the Continental United States (CONUS) and oversea commands, in direct and general support units, and in supply and transportation battalions.

b. Prime features.

(1) The three prime features of stock control systems are selective stockage, accurate stock records, and realistic demand data. Each supply echelon is restricted to stockage of those items which were requisitioned a specified number of times during the latest 12-month period and which are necessary to achieve maximum demand accommodation. Items meeting these criteria are entered on the authorized stockage list of the supply activity. Only items appearing on this list are stocked, the objective being an average demand accommodation of 80 percent. All other items are requisitioned from the next higher supply echelon. Since each higher echelon in the field supply system stocks on the same basis, it is likely that a higher echelon can supply an item not stocked at the lower echelon, except under the direct support system each higher echelon does not back up lower echelons, but rather passes requisitions on to the wholesale level. Standby stocks, mission-essential items, and repair parts for equipment newly introduced into the supply system, are exceptions and may be stocked when approved by higher authority.

(2) Stock control systems use demand history as the basis for stockage rather than issue experience. Demand data are accumulated even though an original demand for an item may have been satisfied by issuing a substitute. These records permit replenishment action to be taken on demanded items so that in time a proper stockage level will be reached, thereby making the issue of substitute items unnecessary. The selective stockage feature of stock control systems, predicated on consumer demand, has reduced drastically the range of items being stocked below the wholesale level without appreciably impairing support.

c. Categories of supplies.

(1) For accounting purposes, property is classified as real property or personal property. Personal property is further divided into 10 classes of supply: subsistence, general supplies and equipment, petroleum and solid fuels, construction materials, munitions, personal demand items, major end items, medical materiel, repair parts, and nonmilitary support materiel. General supplies and repair parts constitute the largest portion of all supply items, and retail-level supply managers are primarily concerned with these classes. They usually are procured with Army stock funds; however, some secondary items and repair parts are appropriation financed and issued without charge. (AMC depots' retail inventories are procured and managed through the Army industrial fund). Major end items generally are nonstockage items and are requisitioned by retail-level installations to fulfill requirements stated in authorization documents.

(2) Stockage at unit level consists of the items in prescribed load lists; i.e., items used in organizational maintenance and those items which qualify for stockage under frequency of use criteria. Excluded are those items available from quick supply stores.

(3) There are many items for which demand data are not sufficient to allow stockage at the installation. Such items, sometimes authorized as allowances for units but not meeting the demand criteria for installation stockage, are called "nonstockage items." A "non-stockage item" demand record is maintained to justify new additions to the authorized stockage list, and to provide demand history for items which may be considered for stockage because of mission essentiality. The nonstockage item demand record is screened periodically to determine if sufficient demands have accrued during the previous 12-month period to qualify the item for stockage.

(4) A nonstockage (excess) asset record is used for the temporary control of items which are on hand but not normally stocked. These items accumulate as a result of directions from the authorized stockage list or turn-in of nonstocked items. The record is screened monthly with disposition action initiated for items onhand over 60 days.

(5) Authorized stockage lists contain items for which demand experience has proven sufficiently active at the installation to qualify the items for stockage under selective stockage criteria. Generally, installation authorized stockage lists contain the following types of items:

(a) All demand-supported items except as specified in pertinent supply publications, and all items contained on the prescribed load lists of supported units.

(b) All items, except those supplied under the direct support system, are contained on the authorized stockage lists of field support units have a supply mission, except when major commanders consider that stockage of such items is not in the interest of efficiency.

(c) Items listed in technical manuals, which are necessary to insure continued operation of supported equipment.

(d) Authorized repair parts and standby items.

(e) Items initially provisioned to support new equipment, and items contained on an installation's direct exchange list.

(f) Items contained on the installation's maintenance shop list.

d. Stockage concepts. Stocks on hand at retail-level installations or organizations are kept to a minimum consistent with the assigned mission. Normally, stockage will not include supplies for which there are no anticipated requirements. Four different concepts are

used. They are the economic inventory policy, noneconomic inventory policy, economic order quantity, and quick supply store. These concepts are discussed in the following paragraphs.

e. Economic inventory policy. The economic inventory policy consists of three principles- the economic stockage principle, the economic order principle, and the variable safety-level principle.

(1) *Economic stockage principle.* The economic stockage principle governs which items are selected for stockage. This principle first considers the quantities of an item needed to attain a specific economic order frequency and needed for safety stock to insure a high supply rate for demands. Then it compares the cost of stockage (the operating and management costs of holding and ordering the items) against costs of nonstockage (treating the item as a nonstockage item, which would entail ordering costs each time the item is requested). If the cost of stockage is less than the cost of nonstockage, the item is selected for stockage and added to the authorized stockage list. If the reverse is true, the item is handled as a nonstockage item. Generally, the stockage criteria under economic inventory policy is more liberal for items with a unit cost of $25 or less, and is more restrictive for items costing more than $25. The economic stockage principle extends the range of stockage for low-cost items with low-dollar investment and limits the range above this cost to the faster moving items. This increases supply effectiveness and, at the same time, reduces the cost involved by less frequent ordering. Stockage tables are used for selecting items for the authorized stockage list and for determining if the number of demands warrants continuation. The tables, where possible, are entered into the data base used by automatic data processing (ADP) systems for supply activities.

(2) *Economic order principle.* The economic order principle provides specific rules on how frequently and in what quantities stocks should be replenished. It considers the cost of ordering and maintaining replenishment stocks. As the larger quantities are ordered, the cost of maintaining inventories increases. However, since fewer orders are placed, the ordering costs for a given period are decreased. The basic principle used is that an item is ordered in such quantities that the annual cost of maintaining the inventory is equal to the cumulative cost of placing replenishment orders for the item over the same period of time. Order frequency tables reduce this principle to a series of varying operating-level factors or order frequencies based on the total dollar value of annual demands. Use of order frequency tables has materially reduced the workload in review and replenishment actions, particularly for those items having annual demand of little dollar value. Furthermore, greater quantities of operating stocks of lowcost, fastmoving items, procured as a result of decreased investment in the high-dollar value items, are resulting in improved supply efficiency. These tables are likewise entered into ADP applications.

(3) *Variable safety-level principle.* The variable safety-level principle considers the operating-level factors, the number of demands, item essentiality, and the order and shipping time for the item. Since the number of demands and the time required to order and receive items vary, the method for computing a safety level must be flexible enough to allow for the deviations. Reorder point factor tables incorporate factors used to allow for these deviations. In addition, the reorder point factor tables distinguish between the demands for nonreparable and demands for reparable items. This distinction is made because many of the demands for reparable items may be satisfied by the repair and return to stock of unserviceable items. These tables are also computerized.

f. Noneconomic inventory policy.

(1) Under the noneconomic inventory policy concept of inventory management, requisitioning objectives are based upon a fixed amount in terms of days of supply which may be on hand or on order at any one time. This inventory policy applies to those direct and general support units and installations not authorized to use economic inventory policy procedures.

(2) Generally, the stockage objective for activities using noneconomic inventory policy has been established at 30 days operating level plus 5 days safety level for items on the authorized stockage list, with certain exceptions. For example, the normal stockage objective for medical supplies is established at a 90-day operating level plus a 30-day safety level. Direct support units in CONUS normally have stockage objectives of 30-day operating levels plus 5-day safety levels. Present regulations allow the operating level of direct support units to be expanded to 120 days of supply for those lowdollar value stockage list items which meet economic order quantity criteria. Major commanders are authorized to reduce stockage objectives, as necessary, based upon such criteria as the requirement for direct support units to remain mobile. The stockage criterion for direct support units and installations operating under noneconomic inventory policy is six demands in 360 days. Three demands in 360 days justify retention of an item on the authorized stockage list. These criteria were designed to achieve acceptable demand accommodation, but major commanders can vary the frequency standards, if necessary, to obtain more satisfactory results.

g. Economic order quantity concept.

(1) The economic order quantity concept is used to compute replenishment orders and relates the cost of ordering to the cost of the item. Larger quantities of items qualifying for stockage under this concept are

requisitioned less frequently if demands are not subject to excessive fluctuations.

(2) The requisitioning objective for economic order quantity items is the sum of the operating-level quantity and the reorder point quantity. This concept materially reduces the number of requisitions and the cost of processing low-dollar value stockage list items. Installation commanders can establish economic order quantities for those supply activities not authorized to use the economic inventory policy stockage tables listed in Army Regulation (AR) 710-2.

h. Quick supply store.

(1) Quick supply stores operate at direct support unit level and feature over-the-counter issue of selected parts on a "free-issue basis," using summary accounting techniques. Grouping of these items in the same storage area promotes accessibility, control, and supervision, but rewarehousing is not mandatory. Mobile quick supply stores may, at the option of the commander, be operated on established routes to better serve customers.

(2) Authorized stockage list screening for suitable quick supply store additions and deletions is done semi-annually. Items converted to quick supply store listings are deleted from the prescribed load lists of using units, and usage records are not maintained. Preprinted requests for the needed items are presented to the clerk at the issue point. These request forms can be used repeatedly; the customer simply fills in the needed quantity. Quick supply store stocks are physically inventoried whenever the reorder point is reached.

(3) Each item selected for conversion from normal procedures to quick supply store must meet the following criteria: Be a demand-supported authorized stockage list item; have a price of less than $7.50 per unit of issue; and have an economic order quantity of 3 months or more (stockage-level quantity greater than or equal to the last 3 months' demands).

18-6. Supply management in oversea areas

a. Introduction. Under current Department of the Army (DA) doctrine, oversea supply activities are organized to meet the needs of the assigned forces. Each theater of operations has a component Army commander who commands all Army activities in the theater. The organization of theaters varies due to the nature of their operations; however, the overall system for supply and maintenance support generally is similar in scope and plan in all oversea theaters. Therefore, the following information will pertain to oversea supply operations in general, and not to a specific theater of operations. For details on oversea supply operations, see Field Manual (FM) 100-10.

b. Theater Army headquarters. In the theater Army headquarters, the Deputy Chief of Staff for Logistics (DCSLOG) is responsible for theater logistics. The DCSLOG's main functions are to assist and advise the theater Army commander in chief and staff on all logistics matters; develop and coordinate plans, policies, and procedures to insure the logistics support of US troops and other forces within the responsibility of the theater commander; develop theater logistics plans to support allied, joint, and other war and contingency plans; and develop and supervise the theater logistical organization and system. The theater Army headquarters accomplishes its supply management responsibilities through its materiel management center, using data which interface with the wholesale systems in use in CONUS and with those of subordinate materiel management centers.

c. Theater Army area command. The theater Army area command provides direct and general support supply to noncorps units, joint elements, allied forces, and units passing through the communications zone. In addition, the command provides storage and maintenance facilities for materiel held as prepositioned war reserves. Then the theater Army commander positions stocks forward the corps area in accordance with theater contingency plans, control of certain affected general support units passes to the corps; however, the theater Army retains control of the stocks. General support units of the theater Army area command provide backup supply and maintenance support for the corps, when directed by the theater Army.

d. Corps support command. The corps headquarters is a tactical and logistics headquarters. The corps support command provides combat service support for the corps force. Its direct and general support units provide supply support to nondivisional units within the corps zone and backup general support to divisional elements. Garrison support functions are managed by either the corps or the staff of the corps support command, as directed, but in the latter case, the corps support command remains primarily concerned with providing responsive combat service support to the corps force. The size and composition of units of the corps support command are not fixed; each may be tailored and augmented, depending upon the size of the supported force and the workload.

e. United States theater Army transportation command terminals. Terminal operations at the theater Army command level consist primarily of loading, unloading, and handling of materiel intransit from origin (CONUS) to destination (theater of operations). All or some of the following types of terminals are located in the command area: water terminals including ports, harbors, and other portions of the coastline used for or reserved for loading or discharge of materiel by commercial or military shipping; air terminals of the Military Airlift Command (MAC) including the movement

management, materiel transfer, loading and unloading of materiel; and Army air terminals in the corps areas.

f. Materiel management center. The materiel management center is a composite organization that operates directly under the control of theater Army, theater Army area command, corps support command, or division support command. The materiel management center provides overall stock management for all supplies. This responsibility includes computing requirements, requesting supplies for supporting communication zone units, managing the Army supply distribution system, and monitoring stock levels. The center provides the supply data and other information required for logistical planning and decisionmaking. Materiel management centers use ADP equipment and auxiliary equipment for current status information and to process supply transactions. Centers are connected to each general support/ direct support group, and theater depot and stock control activity by transceiver network. Field transceiver sites are located throughout the theater to supply signal transmission capability.

g. Division support command.

(1) The division support command (DISCOM) is a major divisional support unit functionally organized for logistical support. The composition of a DISCOM varies in the supply, transportation, and maintenance elements according to the type division or divisions supported. The support includes storage and distribution of subsistence, secondary items, fuels and repair parts; control of ammunition; and direct support maintenance and backup organizational maintenance support of all divisional units except medical.

(2) Supply and maintenance support is furnished on an area, task, or unit basis. Normally, DISCOM elements employ a combination of unit and area support, with unit support as the foundation. Each tactical brigade is supported with supply, services, and maintenance elements tailored to meet the brigade’s needs. Two days’ supply of operating stocks, along with selected reserve supplies, are maintained at the DISCOM level. The command uses mobile ADP equipment to maintain supply records, compute requirements, compile demand history, prepare transactions, and furnish statistical reports to the commander.

h. Requisition and materiel flow.

(1) With the exception of items controlled by the theater Army, the requisition flow is from the direct or general support units, to the materiel management center of the corps support command, to the wholesale system in the CONUS (AMC, DLA, GSA, etc.). Similarly, requisitions from units of the theater Army area command are passed from direct and general support units, through the materiel management center of the theater Army area command, to the wholesale system. For those items designated by the theater Army for intensive management and allocation, requisitions are routed through the theater Army materiel management center. This list of critical items is flexible, in order to satisfy the needs for repair of deadlined equipment or other high-priority requirements, and is relatively few in number; ideally, it contains 3,000 lines or less. Upon the receipt of requisitions for critical items, the theater Army searches its materiel asset file and directs intratheater redistribution or passes the requisition to the appropriate inventory control point (ICP) in CONUS. By this means, the theater Army commander exercises management and control of selected critical items which influence readiness in peacetime and aid in the dynamic support of combat forces in wartime.

(2) This is accomplished through the staff with priorities being established by the theater Army’s DCSLOG and the coordinated action of his two management centers the theater Army materiel management center and the movement control center. This management control is achieved through:

(a) Selected intransit item visibility.

(b) Control of theater reserves.

(c) Visibility of selected items in general support units of the theater Army area command and the corps support command.

(d) Control of requisitions for critical items through the materiel management center of the theater Army.

(3) Maximum throughput to the lowest user governs the flow of materiel. Supplies shipped from CONUS are routed by air or sea directly to the direct and general support units of the theater Army area command, the corps support command, with throughout extending to divisional and nondivisional direct support units whenever possible. The materiel management center and the movement control center provide the coordinated management capability for controlling this flow. Theater supply and distribution management is designed to move supplies at the lowest practical cost to support elements in forward positions. The direct support system, which employs selective use of military and commercial carriers, provides rapid and economical response to supply requirements, bypasses intermediate supply storage sites, and delivers directly to general and direct support units. Short order and shipping times and a highly reliable communications and transportation system result in stocks being reduced to minimum operating safety levels. Further, as a refinement of the direct support system, an airline of communication is now used to deliver all air-eligible repair parts (class IX) by airlift to specifically designated units in oversea theaters. Those critical supplies managed by the theater Army materiel management center, whether stored in theater or received from CONUS, are also moved directly to the direct and general support units.

Section II
Retail-Level Supply Management in the Navy

18-7. Fleet customers

a. The Navy's inventory of active ships includes 224 classes, ranging in size and kind from the 1,123-foot, 85,350-ton, nuclear aircraft carrier Enterprise to the 50-foot, 3-ton "Swift" river patrol boat. They employ sensitive and highly technical weapons, communications, and target acquisition systems with which to fulfill their missions.

b. The varied characteristics of these ships conspire to create various supply requirements. Satisfying these requirements demands different degrees of attention.

c. The fuel that keeps the ships moving and the items that sustain their men and provide for their administration (the food and clothing, personal needs, medical supplies, office equipment, cleaning materials, and paint) are consumed at a rapid but predictable rate. A regular procedure for resupply of this kind of material is a normal part of shipboard, and supply system, routine.

d. Other consumables like the common repair materials such as nuts, bolts, welding rods, pipe and tubing, and some of the other repair parts are also predictable, but less rigidly so. Their place in the supply flow reflects a certain amount of computation and study.

e. The complex technical systems that the ships support require constant supply surveillance. These systems work under the sustained potential threat of malfunction, forming a requirement for components and repair items of many kinds that must be filled on demand, a requirement calling for continuing application of engineering experience factors to the forecast of future needs.

f. Moreover, to perform the mission expected of them, many of these ships with their varying and simultaneous supply needs operate thousands of miles from bases in different parts of the globe. The Second and Third Fleets normally are positioned near CONUS, in the Pacific and Atlantic Oceans respectively; the Seventh Fleet in the Western Pacific Ocean, and the Sixth Fleet in the Mediterranean. Generally, they operate with repair parts and equipment-related consumable needed for 75 days average endurance and 30 to 75 days for nonequipment related consumable, except such bulk items as fuel and ammunition.

g. These then are the fleet customers-the varied, far and fast-traveling, widely separated customers for more than 1.7 million different items necessary to keep afloat and do their jobs. The task of replenishing them is complicated by the fact that they have differing endurance requirements, the period of time a ship operates without resupply. A Navy policy of giving maximum flexibility to the operating forces in obtaining material complicates the task even further. They can acquire what they need from a supply ship serving their unit, from oversea bases or from stock points in CONUS. The basic problem is to determine which items are most likely to be required and which are considered the most essential, and then position those items where they will be readily available under any condition.

18-8. Shore customers

a. Naval shore activities in CONUS and overseas which serve as operating and repair bases for fleet ships and aircraft make up the second group of customers for Navy suppliers.

b. They are of many types and sizes. They include such diverse activities as shipyards, ammunition depots, weapon stations, air station, submarine bases, supply centers and depots, construction battalion centers, training centers, communication stations, laboratories, and hospitals.

c. The needs of the shore customer vary with the size, complexity, and mission of the activity. For example, a naval shipyard will consume large quantities of structural steel plate, sheet metal, industrial supplies, electrical wiring, piping, valves, etc., while a training center will consume large amounts of food, clothing, educational material, and housekeeping supplies.

18-9. Mobile logistics support forces

a. Repair ships, ammunition ships, oilers, stores ships, fast combatant support ships, and food supply ships compose the mobile logistics support forces, which replenish seagoing combat forces, carrying cargoes of items tailored to the forces they support. An individual ship relies for supply support primarily on the mobile logistics support forces ships in its particular task force or fleet.

b. These mobile logistics support ships, whose stocks supplement a ship's endurance by providing a source for fuel, ammunition, provisions, frequently used repair parts, general consumable items, and certain insurance items not carried aboard combatants, can keep combatants on station for extended periods of time by means of transfer at sea (underway replenishment). The range and depth of the material they carry is prescribed by load lists.

c. Ships of the mobile logistics support forces rely primarily on CONUS stock points for replenishment. Fleet oilers and ammunition ships normally replenish from stock pre-positioned in the area of operation. For example, the Naval Station, Subic Bay, has extensive storage for petroleum products and ammunition from which stocks can be moved to the fleet in ships of the mobile logistics support forces.

18-10. Oversea bases

Material is stored in three oversea supply depots: at Yokosuka, Subic Bay, and Guam. Storage facilities for ammunition and fuel are located throughout the world. The material stocked at the oversea supply depots is tailored both to support fleet units in the vicinity and to support shore facilities in the immediate area. Fleet supplies at oversea bases are stocked primarily on the basis of expected usage, mobilization or combat needs, and special operational requirements.

18-11. United States stock points

a. The major US stock points include naval supply centers, naval ammunition depots, naval weapons stations, naval shipyards, naval and Marine Corps air stations, construction battalion centers, and naval fuel depots. From these activities, material moves to the operating forces, either directly or through the mobile logistics support forces and the oversea bases. The shore activity customers in the United States requisition supplies they need to perform their tasks from designated US stock points, the appropriate central inventory manager or by local purchase. Smaller shore activities normally receive their supplies from a major stock point in their geographical area. Oversea shore activity customers receive their supplies from the naval supply depots in their vicinity.

b. The major stock points receive most of their material directly from commercial sources as a result of local purchase or contract made by the central inventory managers or by requisitioning stocks from DLA or GSA. Many of these activities are themselves customers of the supply system as well as material reservoirs in the pipeline between industry and other military suppliers and the fleet.

18-12. Fleet supply channels

a. Ships operating off CONUS normally requisition their requirements from the nearest stock point. Forces positioned in the Sixth and Seventh Fleets obtain as many supplies as possible from mobile logistics support forces, with minimum direct dependence upon oversea bases. In general, deployed combatants are replenished intervals depending upon the item concerned; for example, operations may require replenishment of fuel oil every 4 days; ammunition every 6 days; and food and repair parts every 20-30 days. In any event, the fleets are replenished routinely at least every 30 days and, because of the flexibility of the mobile logistics support forces, they can take on supplies at any frequency required by the fleet commander.

b. If an emergency requirement develops which cannot be satisfied from onboard stocks, the ship first screens accompanying ships. If the requirement cannot be met in this way, the ship notifies the fleet logistics agent who in the Sixth Fleet is the supply officer of a stores ship of the mobile logistics support forces and in the Seventh Fleet is an officer on the staff of the commander, Service Group Three (the Seventh Fleet Mobile Logistics Support Forces). This fleet logistics agent conducts an expanded fleet search. If the item cannot be located, the requirement is forwarded to Naval Supply Center Norfolk (Sixth Fleet) or Naval Supply Center Oakland (Seventh Fleet). This situation places a fast-response requirement on the supply system. Rapid communications, airlift from CONUS, and carrier onboard delivery aircraft are particularly vital elements in the support of combat units during extended periods at sea. Carrier onboard delivery is a transportation technique that involves air delivery of material from a shore point to an aircraft carrier. If the item is needed by one of the other ships in company, it is then transferred at sea by helicopter or by a transfer rig between ships.

18-13. Sixth fleet replenishment

Ships in the Sixth Fleet in the Mediterranean submit requirements at 20-to 30-day intervals to the Sixth Fleet Issue Ships (combat stores ship). Such a ship carries food and a range of approximately 16,000 consumable items and repair parts listed in her load list. The load is updated periodically and reflects those items most frequently required. Ships' requirements for those items not carried by the fleet issue ship are ordered from the Naval Supply Center at Norfolk. Routine requisitions are filled and sent by "fleet freight" (Navy or commercial ships). Commercial ships sail twice monthly from Norfolk to Naples, via Rota, Spain. One combat stores ship departs Norfolk each month carrying food and resupply material for the Sixth Fleet.

18-14. Seventh fleet replenishment

a. Like the Sixth Fleet, ships positioned with the Seventh Fleet are replenished by a fleet issue ship every 20-30 days. The load carried by the Seventh Fleet issue ships consists of approximately 12,000 items. *b.* Unlike the Sixth Fleet, Seventh Fleet ships' requisitions for material not carried aboard the issue ships normally are submitted to a fleet representative at the supply depots at Yokosuka or Subic Bay. If the items are not available there, requisitions are passed by the depots to Naval Supply Center Oakland.

18-15. Automated requisitioning procedures and communication networks

a. The operating forces and the system stock points obtain material through use of the Military Standard Requisitioning and Issue Procedures (MILSTRIP) and the Uniform Materiel Movement and Issue Priority Sys-

tem UMMIPS).

b. To assist major vessels involved in the supply support network, data processing equipments are installed in tenders, repair ships, supply ships, and carriers.

18-16. Special support systems air squadrons

a. Aircraft squadrons based ashore are supported by the supply department of the air station to which they are attached. Repair parts and support equipment stockage is based on an outfitting or allowance list tailored to the specific number and type of aircraft concerned. These allowances are changed to reflect actual usage.

b. Each aircraft carrier transports the necessary stock of repair parts and support equipment peculiar to the aircraft types that are based aboard. The items stocked aboard ship are those specified in the ship's Aviation Consolidated Allowance List. This list is prepared for each carrier to support the mix of aircraft in its assigned air wing/group.

c. The Navy provides supply support to Marine Corps aircraft in a fashion similar to Navy aircraft.

18-17. Fleet ballistic missile submarines

a. Supply support of fleet ballistic missile submarines does not follow the support patterns for other combatants. Submarines in the Atlantic and Mediterranean are supported by submarine tenders at Holy Loch, Scotland, and King's Bay, Georgia. Submarines in the Pacific are supplied by Trident Refit Facility, Bangor, WA. The tenders are resupplied by point-to-point Military Sealift Command shipping and airlift from Charleston, SC. To maintain their support effectiveness, with mobility, tenders do not depend on support from oversea bases.

b. Because fleet ballistic missile submarine resupply is limited to short periods of time between patrols, support depends more heavily on replenishment by air than is true of the surface combatants. All high-cost, lowdemand reparables are transported by air. (Reparables are equipments or components which, upon failure, can be economically restored to a serviceable condition). Normally, airlift is provided by MAC but cargo occasionally is sent by commercial air to meet delivery dates.

Section III
Retail-Level Supply Management in the Air Force

18-18. Introduction

The Standard Base Supply System is a highly responsive automated inventory accounting and control system designed to provide total supply support to base-level activities. The system uses a second-generation computer for storage and maintenance of records and for generation of management reports. Although the system is fully automated, it should be understood that it consists of both manual procedures and interfacing computer programs. These procedures and programs govern the operation of retail-level supply, equipment, fuels, munitions, and clothing accounts. The system also includes a host/satellite concept of operation. Under this concept, the host base is designated as the computer support base and operates the main computer. Each satellite retail-level account (e.g., an Air National Guard Supply Account) is equipped with a remote input/output device. The smaller satellite accounts are identified by their own stock record account numbers and are separate accounts, even though serviced by the main support base computer. The retail-level supply computer is the main communicating vehicle between base units supported and the wholesale-level distribution system. Once a customer request transaction is entered into the system, all actions that are logically generated by that input are completed. At a minimum, if the requested asset is available, financial, sales, usage data, and all associated inventory control records are updated in line. To complete the transaction, an issue document is prepared on the responsible warehouse remote for selection and delivery to the customer. The customer is also notified that issue action is completed. If the asset is not available, a requisition to the responsible wholesaler is prepared and the customer is notified that the requested item is not available.

18-19. Base supply management

a. In order to accomplish their mission, Air Force bases have a system of supply that is capable of providing logistical support for all units assigned to the base. The responsibility for establishing and maintaining this system rests with the base or wing commander. To assist the commander in carrying out the program, the commander designates a Deputy Commander for Logistics and a Chief of Supply, who monitor and direct the base logistical program. The Chief of Supply is the base focal point for the retail-level supply system and provides all authorized assets to base customers.

b. As the accountable officer, the Chief of Supply manages the supply division complex and profiles technical assistance and guidance on supply matters to all activities supported. He or she plays a vital role in the overall task of supporting assigned and operational units. Activities include the requisitioning, receipt, storage, issue, safeguarding, accounting, reporting, and disposition of all base supplies and equipment.

c. The Chief of Supply provides item usage data which are used to derive the worldwide requirements and assets distribution system.

d. The major operating functions of the Chief of Supply are organized into six branches, as follows:

(1) *Management and Procedures Branch.* This branch makes operational studies as directed by the Chief of Supply, controls funds distribution, analyzes dollar data, prepares budget estimates and financial plans for supplies and equipment. In additions they accumulate statistical data, which allow the capability to identify and resolve account deficiencies. This branch also insures that on-the-job-training requirements are met, provides base supply, customer training and insures that personnel assigned to the Standard Base Supply System are provided qualification training. Semiannually, they visit all other branches within the Chief of Supply complex, insuring that operation procedures are being complied with.

(2) *Supply Systems Brunch*. This branch is responsible to the Chief of Supply for the effective use of ADP equipment and punched card accounting machines. It handles the automated accounting for all supplies and equipment charged to the chief of supply. The ADP equipment/punched card accounting machines operations section is responsible for the actual operation of the UNIVAC 1050-II computer and supporting punched card accounting machines. The records maintenance section maintains the basic item record files through use of the stock number user directory and stock list changes; and serves as the central repository for all supply manuals, stock lists, and other technical publications. Another section performs all functions related to document control. This branch also conducts the account inventories using a closed warehouse procedure which requires a sample inventory technique. Under this method, a small lot of items out of a relatively large lot of items are inventories. The sample inventory is designed to provide a 95percent statistical confidence level that 85 percent of the items within a lot is free from major variance.

(3) *Customer Support Branch.* This branch is responsible for the effective and efficient management of supply functions involved in direct customer support. This single point was established to provide customer assistance in the resolution of complaints, questions and status. Computer-produced management products necessary for responsive support to customer inquiries are maintained. In addition, this branch has a retail sales section, which performs direct sales or issues of individual equipment, totals, and expendable supplies to authorized customers.

(4) *Materiel Management Branch.* This branch is responsible for the affective and efficient management of all supplies and equipment. Acts as the supply division war reserve materiel monitor and provides timely and positive support to all supported activities; is responsible for all functions requiring special accounting, monitoring, and storage. Sections under this branch are the stock control, not operationally ready supply management, engine management, and special asset management section.

(5) *Materiel Storage and Distribution Branch.* This branch is the storage and issue component of base supply. As such, it performs all of the many functions associated with the inspection, receipt, storage, and issue of supply and equipment items. Sections under the materiel storage and distribution branch are: inspection, receiving, pickup and delivery, and storage and issue.

(6) *Fuels Management Branch.* This activity is responsible to the chief of supply for the management of all items in the fuels account. The sections that perform the necessary functions are: accounting and administration, fuels operations, quality control and inspection, and mobility support (when authorized). Automated accounting procedures allow the fuels function to process the majority of its data through the UI050-II computer. Automated reports and listings provided to the fuels management officer allow tracking of all transactions, inventories, and gains/losses which affect this account. At some locations, an automated service station system eliminates the requirements for a pump attendant and the manual preparation of dispensing documentation except for occasional sales to other service agency vehicles. At all other locations, forms are completed and processed through the computer for ground fuel sales. For aviation fuel sales, identaplates are used for identification and billing data. Issue forms are imprinted with these essential data, and the forms are subsequently processed through the U1050 computer.

18-20. Air Force standard base supply system

a. ADP has had a profound influence on supply administration and control because it provides a means of achieving centralized accountability and control with dispersed storage. The Air Force has standardized the base supply system with respect to equipment and programs, discussed further in chapter 23.

b. The system is completely compatible with all Department of Defense (DOD) standard military systems and uses their data element codes and standard forms where applicable. Also, the management of supplies and equipment at each base, together with the related functions of financial accounting, are interfaced and operated in line with the computer. This permits single point control of all resources, accuracy and speed of reporting, and improved supply reaction time.

c. The standard system uses remote input-output devices that communicate directly and concurrently with the central processor, without manual intervention or offline conversion. All item and financial information is internally stored, and input to the system (e.g., receipts. issues. etc.) are processed randomly as they oc-

cur. Inputs, such as supply orders, are transmitted to the computer by way of remote devices located strategically about the base. The computer notifies the warehouse of the item needed, and informs the requester of the availability of the item. If not available, the computer automatically provides a list of substitute items and onhand quantities which may be used to satisfy the requirement. If suitable stock is not available it prepares a requisition on the appropriate source of supply, prints a due-in/due-out record, obligates the proper funds, notifies the requester of status, and takes any necessary followup action.

d. As a regular part of its operation, the computer aromatically adjusts inventory balances, accumulates transaction data, and takes any other action for which it has been programed. For example, backordering issue requests, releasing back orders, requisitioning, computing stock levels or excesses, accumulating financial data, and issuing interchangeable items are all routinely performed.

18-21. Stock control

a. The primary purpose of stock control is to provide the most effective support for a given amount of resources consumed. The Air Force Logistics Command, through its air logistics centers (depots), buys and distributes centrally procured items of supply used on missiles, aircraft, other essential equipment. Each depot buys and stocks items in designated Federal supply classes and serves as a primary source of supply for Air Force bases. (Centrally procured items which are budgeted and paid for by the Air Force Logistics Command are provided free to Air Force bases.)

b. Items financed by the system support division of the Air Force stock fund are provided free to Air Force bases but their management is controlled by intraservice funds transfers processed by the Air Force Logistics Command. Bases also use DLA, GSA, and other military services as sources of supply for items managed by these agencies. Under certain conditions, bases may manufacture or purchase local items which are not available from the assigned DOD source of supply.

c. Effective control procedures enable the base to limit the number of items on hand to those needed for immediate and projected requirements. A principal difficulty is that of forecasting future requirements with a degree of accuracy. Determination of the quantity of any given item required to meet future needs is affected by such considerations as cost, rate of use, reparability, rate of obsolescence, and the records of past usage. Essentially, inventory control involves the analysis and interpretation of these data, the recognition of trends, and the determination of the desired stock level. Base stockage requirements for selected recoverable items will be determined and automatically fulfilled by the Air Force Logistics Command, based on a technique known as "marginal analysis." Employing the theory of probability, the marginal analysis distribution technique positions assets at those bases which will produce the greatest reduction in the expected worldwide backorder rate. Requirements for all other Air Force-managed items are determined by the base and, subsequently, requisitioned.

18-22. Nuclear ordnance commodity materiel management

a. Nuclear ordnance commodity materiel items were converted (where the capability existed) from manual records to automated records on the UNIVAC 1050-II computer incorporating the accounting for items into the standard base supply system. Nuclear ordnance commodity materiel items, previously accounted for by a munitions accountable supply officer on manual records, were uploaded either on a type stock record account K (munitions) if categorized as an item of "supply" (with the accountability remaining with the munitions accountable supply officer) or on type account code E. if categorized as an equipment item (with the accountability transferred to the base chief of supply).

b. It remained, however, that due to hardware/programing limitations, not all nuclear ordnance commodity materiel items in the Air Force could be uploaded. Items at bases with more than one munitions account and all remote offbase munitions accounts remained in a manual accounting situation for nuclear ordnance commodity materiel equipment. In June of 1973, instructions to effect the transfer of these items to a "host" computer for accountability by a base equipment management officer with the munitions officer functioning as an organization custodian were provided to the K accounts affected.

18-23. The repair cycle concept

a. The objective of repair cycle control is to provide a positive method of gathering and recording maintenance data on replacement (recoverable) supplies. Repair cycle action applies to aircraft missile, motor vehicle, communications-electronics, and armament-electronics maintenance. More precise computation of materiel requirements is achieved through better management of unserviceable items. Repair cycle control starts at the source of the data, where the work begins; it provides the necessary documentation and facilitates transmission of data to insure accurate accounting throughout the total life of each item. These data enable the chief of supply to control and account for specific unserviceable items and to provide the materiel manager of the Air Force Logistics Command with a source

of information needed for realistic procurement action.

b. The repair cycle concept is designed to control recoverable items which qualify as repair cycle assets. Control starts when the user requests a serviceable item from supply to replace one that is unserviceable, and ends when the unserviceable items are repaired, shipped off base, or condemned, and appropriate supply records are updated. The removal of an unserviceable item and its replacement with a like serviceable item is called "maintenance replacement removal." Items that cannot be repaired immediately due to lack of parts or essential repair equipment are stored in maintenance holding areas and identified as articles awaiting parts or articles awaiting maintenance.

c. The operational effectiveness of the repair cycle concept depends upon the coordinated efforts of base supply and the maintenance activity being supported. Base supply is responsible for the issue, receipt, storage, requisitioning, and release of repair cycle assets. However, the functional responsibilities of materiel planning, control, determination of requirements, toolcrib operation, supply liaison, operating the unserviceable processing center and storage of articles awaiting parts are under maintenance control.

d. Repair cycle items are divided into two groups. One group consists of items requiring inspection calibration, buildup, or other maintenance action prior to installation; these items are routed to the supply point for issue to the appropriate maintenance activity. A second group consists of those items that can be installed off the shelf. For ready reference and identification, a listing of repair cycle assets is kept in the supply point, base supply, and maintenance as required.

e. Repair cycle time is expressed as the average number of days from the date of demand or removal, whichever is later, until the item is made serviceable by maintenance action. Repair cycle time is computed only on those items which create a positive demand on the supply system. For stock control purposes, it is computed each 90 days by dividing the total number of units for each item repaired on base into the total repair time for the unit repaired. For example, if 30 units are repaired on base with a total maintenance repair time of 90 days, the repair cycle time for that item would be 3 days. The two abbreviations used to indicate base repair capability are reparable or repaired this station (RTS) and not reparable this station (NRTS).

18-24. Economic order and stockage policy

a. In addition to the repair cycle concept for managing maintenance supper, the Air Force has developed a policy fair controlling the issue and stockage of low-cost items of supply. This refined method of inventory control-not applicable to repair cycle assets-is called the economic order and stockage program. For stock control purposes, this policy is referred to as economic order quantity. In brief, it represents "that quantity to be ordered which keeps the combined cost to order and hold inventory at a minimum." In establishing the economic order quantity concept, Headquarters, US Air Force has determined basic policies and decisions to achieve the best balanced support at the least system cost. Items managed under the economic order quantity policy usually are expendable in nature, have a high rate of turnover, and are procured in large quantities for storage and redistribution. Some lowcost nonexpendable items are also managed under the economic order quantity policy.

b. Past practice in Air Force inventory management has been to order small quantities on a frequent basis, thereby holding inventory to a minimum. However, the cost of submitting a requisition for an item costing $1.50 is about the same as for an item costing $500 or more. Experience indicates that infrequent orders for larger stock of low-cost expendable items will save money. The important point is that inventory must be held to a minimum consistent with demand.

c. Sometimes special levels are established for certain items which, because of lack of movement or regulated status, do not justify a normal stockage but do require a standby quantity to insure uninterrupted operation of base facilities, safeguard health, protect personnel or property, or meet other emergency requirements. In such instances, either demand data are lacking or past usage data are inadequate for the job at hand. Such special stock levels must have the approval of both the chief of supply at base level and the inventory manager at depot level, provided the special level is applicable to an Air Force investment item.

18-25. Base procurement of supplies

a. While the Air Force Logistics Command depots are the primary source of weapon system equipment needed by a base, many supplies of a common-use nature are obtained for other sources.

b. These supply sources include local purchase from commercial firms, GSA, DLA, service distribution depots, and local manufacture.

c. Many stock numbers for common items are coded with a local purchase source of supply when they may be readily obtained from local commercial firms. Air Force policy is to eliminate stocking these items within the depot system by decentralizing procurement to using activities if this can be done economically without impairing essential supply support. Air Force Logistics Command depots and DLA/GSA centers have implemented procedures to support base requirements when these items are not locally available. Nonstock listed items with a technical order reference or Air Force-managed items will be requisitioned from the applicable

end item Air Force Logistics Command depot. Requirements for nonstock list items not in these categories will be requisitioned from the applicable integrated materiel manager.

d. Items authorized to be locally procured as the normal means of supply are, in most instances, purchased at base level without reference to higher headquarters. Items authorized to be purchased with base funds are identified in Air Force stock lists and Federal supply catalogs. Computation of requirements, budgeting, and funding are the responsibilities of each command. Funds needed for base purchase are made available through command channels.

e. When local procurement is initiated, the requisition is generated from the standard base supply system in punchcard format and is processed by procurement using the customer integrated automated procurement system.

f. Another method of obtaining supplies is by field manufacture. This term applies to parts which field maintenance activities are capable of manufacturing when procurement is not justified due to low-usage or peculiar storage and installation factors. This method may be used when emergency requirements exist or when small quantities of items having simple design characteristics are required

18-25. Centralized versus decentralized management

a. Common commercial items pose a continued question relative to centralized versus decentralized management. For an individual installation, it may be cost-effective to manage and procure these items on a decentralized basis; however, for oversea or remote stateside installations, a central source of supply is often needed. A central system for deployed forces is also needed for emergency situations.

b. For automotive and real property maintenance, the concept of the contractor-operated parts store has been developed, primarily by the Air Force, as a most acceptable means of support at installations with a substantial peacetime mission. While still under study as to overall value, the elimination of inventory owned by DOD, the release of these parts from stock fund constraints, and the quick response time have resulted in this concept being favored by many as an effective local purchase technique.

Section IV
Retail-Level Supply Management in the Marine Corps

18-26. Supporting establishment

a. Supply management within the supporting establishment is carried out in accordance with uniform policies and procedures promulgated by Marine Corps Headquarters. Each activity in the supporting establishment maintains a local procurement capability. The normal source of supply for the supporting establishment is through interservice support agreements, and through procurement from integrated materiel managers or local commercial sources. Stock-level guidance is provided by Marine Corps Headquarters. Within budgetary limitations, the activity commander is responsible for insuring that authorized materiel are obtained in sufficient quantity, accounted for, maintained in a serviceable condition, and disposed of as authorized. This responsibility includes all supply management functions incident to requisitioning, accounting, receiving, storing, maintaining, issuing, recovering, and eliminating excess.

b. At Marine Corps bases, where tenant Fleet Marine Force activities normally are located, the base operates a direct support stock control. The direct support stock control subsystem operates as a subsystem in the Marine Corps unified materiel management system. It is designed to record and accumulate all data required for routing, recordkeeping, requisitioning, reporting to the ICP and the stores accounting subsystems of the Marine Corps unified materiel management system. The accounts within the direct support stock control subsystem are: self-service centers; shop stores; retail clothing outlets; subsistence accounts; commissary stores; petroleum, oils, and lubricants accounts. The ICP accounts for these materiel by dollar value only. All stock management functions, such as computation of requirements, positioning of materiel, maintenance of stock levels, replenishment, disposition actions, and item accounting are performed locally on a mechanized basis. Customers obtain materiel from the issue points by informal demand. Issue point stocks are replenished by requisitions submitted to the integrated materiel manager or from local procurement. The base maintains all necessary item records, receipts, issues, adjustments, and change transactions. It sends to the ICP weekly an item/money value report of issues, receipts, and adjustments. Quarterly status of issue point item assets are produced for reconciliation with ICP records.

c. Items authorized for stockage in the retail outlets are automatically requisitioned "by recommendations," based on requirements codes and supply codes in the item record/balance files. The quantitative levels established for individual items stocked at the self-service center and shop stores are based on recurring demand. A 60-day operating level plus procurement leadtime is authorized for all items other than those which are locally procured. A 90-day operating level plus procurement leadtime is authorized for all locally procured items. A Sunday safety level is authorized for nonperishable subsistence and a 15-day safety level is authorized in the area of clothing.

d. At the end of each quarter, an excess review is accomplished to determine if all items presently held in stock qualify for retention in direct support stock control. The usual criterion for stocking an item is establishment of a recurring demand with at least three movements in 180 days. As new items meet established stockage criteria, they are subsequently procured for stock.

18-27. Fleet Marine Force

a. The Fleet Marine Forces are the combat elements of the Marine Corps. They are designed to be self-supporting in supply matters, and have integral combat service support units for this purpose. In supply matters, the prime motivation of the Fleet Marine Forces is readiness. Their mission dictates that the range and depth of items carried be kept to a minimum to preserve mobility in the amphibious role; at the same time, items of ever-increasing complexity must be kept operational in a combat environment. Management of secondary items is, therefore, performed in an arena of self-imposed austerity. Supply management is governed by standard procedures and policies emanating from Marine Corps Headquarters. Supply procedures are as simple as can be designed, so that maximum effort can be applied to the combat role and minimum effort to the complexities of supply. Requisitions are submitted by combat service support units to the integrated materiel manager. The Fleet Marine Forces have a capability to obtain common supplies by interservice support agreements, and to effect limited commercial purchases and leases where appropriate. Repair parts are positioned at organizational levels where appropriate maintenance capability to use the parts exists. For example, fourth echelon parts and assemblies are not authorized to be stocked or used by organizations having only firstor second-echelon maintenance capability. Equipment needing repair beyond authorized maintenance capability is evacuated to the next higher level for maintenance; the Fleet Marine Forces have organic capabilities ranging from first through fourth echelons of maintenance. For fifth-echelon maintenance, which is the level at which the item is overhauled or rebuilt, the Fleet Marine Forces evacuate the items to an organization having fifth-echelon maintenance capability through either the replacement and evacuation program or the recoverable item program.

b. Supply management is performed at both the service unit level and the organic unit level or using unit level.

18-28. Combat service support unit

a. Marine Corps combat services support functions are colocated in the force service support groups and Marine wing support groups. The intermediate supply function is located in the supply battalion of the force service support group. The objectives of this organization include but are not limited to:

(1) Providing a system to facilitate efficient and expeditious supply support to Fleet Marine Force using units.

(2) Reducing the manual handling and processing of documents to a minimum.

(3) Providing a system which will be flexible enough to absorb changes in policy without disrupting normal procedures, and permit latitude at the local level in adjusting to different situations and conditions without having to change the basic system.

b. The stockage criteria for items at the intermediate level are from two to six movements in the previous 12-month period based on standard unit price range. The requisitioning objective and reorder points are computed as prescribed in JCS Publication 1, using a safety level of 30 days and the actual order/ship time. Each item is assigned a requisition objective and reorder point. Issues are made based on customer requisitions.

18-29. Organic supply

a. Each Marine air group, battalion, separate squadron, separate company, or separate battery has a property account and is administered as a supply element. Requisitioning, controlling, accounting, and disposing of materiel are accomplished at the unit supply level. Materiel required by subordinate units is reflected on property records and custody records prepared and maintained by the supply element. In a Marine division, each regiment has a property account which is administered as a supply account for the purpose of providing immediate support to the headquarters elements only. The regimental commander has responsibility for command, control, and supervision of supply functions within the regiment.

b. Specific allowances of items have been established for all Fleet Marine Force air and ground units. The quantities contained in the individual tables of equipment are mandatory allowances for units to have on hand. Items of supply are issued to using units according to authorized allowances, or on an "as-required" basis, as appropriate.

c. Stockage objectives of organic supply units are based on recurring demand and must meet the criteria of having at least six movements in a 6-month period. Such objectives are a summation of a 30-day operating level and procurement leadtime.

Chapter 19
Acquisition and Supply Management

Section I
Acquisition and Supply Management in the Department of Defense

19-1. Introduction

The purpose of this chapter is to provide an overview of the relationship of the various acquisition functions to the overall accomplishment of supply management. Additional details of the general topics discussed in this chapter are contained in the Defense Acquisition Regulatory System and the various departmental procedures.

19-2. Definitions

a. Acquisition. Acquisition means the acquiring by contract with appropriated funds of supplies or services (including construction) by and for the use of the Federal Government through purchase, lease, or barter, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated. Acquisition begins at the point when agency needs are established and includes the description of requirements to satisfy agency needs, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract.

b. Contracting. Contracting (formerly procurement) means purchasing, renting, leasing (including leasing of real property under 40 USC 472), or otherwise obtaining supplies or services. Contracting includes description (but not determination) of supplies and services required, selection and solicitation of sources, preparation and award of contracts, and all phases of contract administration.

c. Defense Acquisition Regulatory System. This is a system of policies and regulations to guide managers in the conduct of Department of Defense (DOD) acquisition activities and also to provide the detailed functional regulations required to govern DOD contractual actions in accordance with applicable laws and the need for efficiency. The Defense Acquisition Regulatory System focuses on the business management needs at the operating levels and on the Government’s actions at the interface with the marketplace in the acquisition of services and materiel. Defense Acquisition Regulatory System policy and procedures are published in the Federal Acquisition Regulation (FAR) and the DOD FAR supplement, in DOD directives, instructions, circulars, and manuals as appropriate to the action.

19-3. Authority

a. Government contracting is unique. All contractual authority stems from the US Constitution or Federal statutes.

b. The Armed Services Procurement Act of 1947 repealed many archaic laws and consolidated in one statute the contractual authority for all of the military departments. In 1956, Congress further updated this authority, making only minor changes, and codified all military contracting authority into Chapter 137 of Title 10 of the United States Code. Congress recognizes the special needs to meet military emergencies and has granted DOD many special privileges and exemptions from certain limitations on Government contracting authority.

19-4. Implementation

a. The Defense Acquisition Regulatory System is the DOD implementation of this legislative authority and through the FAR and DOD FAR supplement and other DOD publications sets the governing rules for military contracting. Each military service publishes its own contracting supplement to give additional guidance and directives. These publications provide commands and their contracting of ficers the fundamental authority and instructions for carrying out contracting.

b. Deviations from the Defense Acquisition Regulatory System may be authorized by a military department pursuant to the FAR and the DOD FAR supplement where justified by special circumstances.

19-5. Citation

Within this chapter, certain references may be cited followed by a paragraph number; for example, FAR 1-103. Such citations will refer users of this book to a more comprehensive coverage of contracting subjects as detailed in the FAR and the DOD FAR supplement.

19-6. Competition

All procurements are to be made on a competitive basis to the maximum practicable extent.

19-7. Contracting team

a. Contracting officers.

(1) One of the principal controls on military contracting is exercised through the appointment of contracting officers. The authority to execute and administer contracts is derived from the basic authority vested by statute in the Secretaries of the military departments. These Secretaries are authorized to delegate contract functions within their respective departments, and, by agreement among the Secretaries concerned, among departments. Contracting officers are desig-

nated in accordance with the regulations.

(2) Only persons who have been determined to possess the required attributes, including training, experience, judgment, and maturity, are designated contracting officers. No one, including the commander, may interfere with or attempt to influence the contracting officer's actions. Contractors have won court cases resulting from contract disputes on the grounds that the action taken resulted from a decision by someone other than a contracting officer.

(3) A contracting officer whose primary responsibility is to enter into contracts is called a procuring contracting officer (PCO); a contracting officer whose primary responsibility is to administer contracts is called an administrative contracting officer (ACO). Additionally, a contracting officer responsible for the termination and/or settlement of terminated contracts may be referred to as the termination contracting officer (TCO). A single contracting officer may be responsible for duties in any or all of these areas.

b. Specialists. The contracting officer actually functions as the leader of a team of experts whose advice and counsel cover the entire contract area. The team members include engineers, auditors, price analysts, lawyers, quality assurance (QA) specialists, transportation specialists, negotiators, and others as necessary-all specialists in their particular fields. With the advice and counsel of these specialists, a contracting officer is able to bring to bear on the contract involved the expert knowledge of the best qualified personnel available.

19-8. The contracting cycle

The contracting cycle may be broken down into three distinct phases:

a. Presolicitation phase-begins with contract planning and culminates in the preparation of the solicitation package.

b. Solicitation award phase-begins with the distribution of the solicitation package and culminates in contract award.

c. Post award contract administration phase encompasses the entire period of the contractual obligation, from award to final retirement of the contract file.

19-9. Presolicitation phase

a. Acquisition planning. Acquisition planning coordinates the efforts of all personnel responsible for the acquisition of defense materiel by contract as early as practicable in order to obtain required items of the requisite quality, on time, and at the lowest sound price. The acquisition planning process integrates technical business, policy, and contract factors and considers performance goals, timing, and potential costs. The FAR and the DOD FAR supplement require a formal plan for research and development contracts estimated at $2 million or more and production contracts estimated at $5 million or more for any fiscal year or $15 million for all years. While formal acquisition planning applies to the more complex contract programs, its principles may be used in all contracting.

b. Methods of contracting.

(1) The two principal methods of Government contracting are formal advertising and negotiation. Congress has established a policy that all contracting must be by formal advertising whenever possible, but it has granted authority to negotiate under specified conditions. Negotiation does not preclude competition.

(2) Contracting begins when a military activity which needs a certain product or service describes the item or items in a purchase request. The requiring activity is held responsible for referring to all applicable specifications, plans, or drawings, or, if nothing better is available, for providing a purchase description which adequately specifies all the essential features of the item needed. It is the individual contracting officer's responsibililty to insure that the terms and conditions included in the schedule of the solicitation (invitation for bids (IFB) in the case of formal advertising; request for proposal (RFP) or request for quotation (RFQ) in the case of negotiation) fully and completely describe the needs of the Government.

19-10. Solicitation award phase

a. Formal advertising.

(1) IFBs are circulated as widely as possible, in order to obtain maximum competition. Mailing lists of bidders are kept at purchasing activities to provide ready information on current sources of supply. All known suppliers who appear to be qualified and eligible to fill the requirements of a particular contract are carried on the appropriate mailing list. Additional methods of soliciting bids include the displaying of copies of the invitation at the purchasing office and at other appropriate public places; publishing brief announcements of proposed purchases in trade journals; and, in some instances, by publishing the essential details of a proposed purchase in newspapers. In addition, subject to certain exceptions dictated by practical considerations, all unclassified contracts in excess of $10,000 are given widespread publicity in the Department of Commerce publication, "Synopsis of United States Government Proposed Procurement, Sales, and Contract Awards."

(2) Each IFB sets forth a specific place, date, and hour for the opening of bids.

(3) Except in the case of a mistake in bid alleged and conclusively proved-in accordance with a most detailed procedure-no bidder may be permitted to withdraw or change a bid once bids have been opened.

(4) The contracting officer next faces the considerable and often extremely difficult job of evaluating

the bids received. This is the process of determining whether each bidder's offer meets the requirements of the invitation, both as to what is offered and as to the solicitation terms as well. During evaluation, the contracting officer may be faced with the necessity of eliminating some bids from consideration or even in some circumstances of rejecting all bids and readvertising the contract. Ordinarily, any bid which does not conform in every respect to the essential requirements of the IFB must be rejected. The basic principle applied in determining whether a bid meets the essential requirements of the invitation is whether any deviation in what is offered by the bidder affects the quantity, of quality of the item or the contracting officer must reject the bid. The bidder is not permitted on opportunity to cure such a deviation after the bids have been opened.

(5) To be eligible for award of a contract, a bidder whose bid has been determined to be "responsive" to the invitation must also be determined to be "responsible." This means that the contracting officer must establish that the prospective contractor is a manufacturer or regular dealer in the supplies sought; has adequate financial resources; can comply with the delivery schedule; and has satisfactory record of performance and integrity and is otherwise qualified and eligible to receive an award under applicable laws and regulations. This is done by a pre-award survey when required.

(6) Finally, the contracting officer must determine which bid actually offers the Government the lowest price. To do this, the contracting officer must take into account the actual prices bid and additional factors such as price escalation provisions, transportation costs, and there like. Award of a contract will made to the lowest responsible bidder who survives all of the evaluation, whose bid conforms to the essential provisions of the IFB, and whose price is found to the fair and reasonable, all factors considered.

(7) A variation of formal advertising provides flexability where available specifications are not adequate to permit full competition. Called twostep advertising, this procedure was originally developed for use in acquiring supply items involving research and development. In the first stage, the Government evaluates them solely from the technical standpoint, judging whether the proposal is satisfactory or not. Since the bidders do not show prices, the Government and bidders can negotiate details of the technical proposal if they wish.

(8) After the Government has completed its technical evaluation, it then asks each bidder submitting a satisfactory technical proposal to submit bids covering price, delivery, and other factors. Only those bidders who submitted acceptable technical proposals may take part in the second step.

(9) In addition to equipment contracts, two-step advertising is also authorized for construction and maintenance projects, if they meet certain criteria. This has made it possible to obtain ideas and reduce the workload on engineers responsible for developing specifications.

b. Negotiation.

(1) As mentioned before, negotiation is available to DOD as an exception to the general requirement for using formal advertising. Congress authorized negotiation to provide the flexibility essential in meeting requirements and emergency conditions. The FAR and DOD FAR supplement contain all of the specific circumstances permitting negotiation.

(2) Advertising is the most effective procedure where: an adequate number of qualified suppliers compete for work; definite specifications are available to describe the items required; suppliers are willing to bid competitively; and time is adequate to permit the formalities of advertising. If one of these is lacking in a particular case, negotiation may be used, provided the situation meets one of the 17 exceptions permitting negotiation.

(3) Negotiation requires the highest degree of skill, because the contracting officer must determine whether the proposed price is a fair and reasonable one. This requires knowledge of industrial processes, considerable experience in negotiation techniques, sound business sense, and a high degree of intelligence.

(4) Most people commonly think in terms of negotition for the lowest price. However, in many instances, contract terms can be even more important than a given amount of price change. Therefore, the contracting officer must know the importance of many related factors, such as urgency of need for early delivery, performance, quality of product or services to be acquired, patent protection, and the like.

c. Types of contracts.

(1) Because the type of contract affects the resulting price to the Government, use of an appropriate type of primary importance in obtaining a fair and reasonable price. The FAR and DOD FAR supplement contain a detailed treatment.

(2) The firm fixed-price contract is the preferred type for harnessing the profit motive because the contractor accepts full responsiblity, and the relationship between cost control and profit dollars is established at the beginning of the contract. Accordingly, whenever a reasonable basis for firm pricing exists, the firm fixed-price contract shall be used, because

its use under these circumstances will provide the contractor with maximum incentive to control the cost of performance. However, the contracting officer must be alert for situations in which use of special contract incentive provisions may be more appropriate. While maximum incentive to a contractor exists in a firm fixed-price contract, the basis for the application of firm fixed-price is the knowledge that the price has been arrived at either through competition or through sound pricing techniques which keep pricing uncertainties to a minimum. In those situations in which price competition is not present, and either: where the cost or pricing data available do not permit sufficiently realistic estimates of the probable cost of performance; or where uncertainties surrounding the contract performance cannot be sufficiently identified to evaluate their impact on price, the use of a type of contract other than firm fixed-price should be considered.

(3) Other objectives besides cost may dictate the best contract to use. For example, early delivery of a new weapon system or better performance than the contract specifies (or both) almost always will be beneficial to the military services. Thus, some contracts will provide the contractors an incentive in the form of increased profit if specified requirements are improved. Similarly, failure to meet requirements will reduce the contractor's profits. The contracting officer must carefully balance the various incentives to insure maximum benefit to the military services.

(4) Such incentives may be a part of fixed-price or cost-reimbursement contracts. Again, the relative confidence in cost estimates dictates which form of the incentive contract to use. The incentive features of each contract type are similar. In the case of fixed-price contracts, a target cost, target profit, target price, ceiling price, and profit adjustment formula are negotiated. The cost-plus-incentive-fee contract establishes a target cost, target fee, maximum and minimum fees, and a fee adjustment formula. The actual profit or fee received by the contractor is increased or decreased from the target amount according to the adjustment formula based upon whether the final negotiated cost is less or more than the target. The cost-plus-awardfee contract provides a means of applying incentives in contracts not susceptible to the exact measurement of performance necessary for structuring incentive contracts.

(5) To meet other special situations, the contracting officer may use a cost contract (no profit), a cost-sharing in which the contractor absorbs part of the cost because of benefits he may enjoy from the work performed, a fixed-price contract with economic price adjustment to guard against the effects of certain specified contingencies, two kinds of fixed-price with price redetermination, a cost-plus-a-fixed-fee contract in which the particular military service agrees to pay all costs up to a specified limit but only a firm fee (or profit), a fixed-price level of effort contract, a time and materials contract, or a labor-hour contract. Each has advantages and disadvantages which the contracting officer must weigh before making a decision.

(6) Indefinite delivery contracts are hybrids which cover situations in which the exact time of delivery is not known at the time of contracting. These provide for payment under the procedures for firm fixed prices, economic price adjustment, or price redetermination. A requirements contract provides for ordering all of a particular agency's requirements during a specified period. In other words, if the particular military service needs any of the specified items or services, it must obtain them from the contractor under the contract term. The indefinite quantity contract calls for ordering at later times during the contract life within the limits of a stated minimum and maximum quantity. The definite quantity contract calls for a specified quantity of supplies or services but leaves the dates for performance open. Later delivery orders against the contract complete the arrangement. All provide flexibility which the military services frequently need.

(7) Other specialized contractual-type instruments include letter contract, basic agreement, and basic ordering agreement. Neither the basic agreement nor the basic ordering agreement is a contract; they are merely instruments of understanding executed between a contracting office and a contractor, which contain the negotiated contract clauses which shall be applicable to future contracts entered into between the parties during the term of the basic agreement.

d. Small purchase.

(1) Small purchase procedures are simplified and cost-effective. Whenever possible, oral placement of orders is practiced.

(2) Base, post, camp, and station contracting offices usually handle a rather limited variety of contracts. Purchases under $150 ($300 in emergencies) can be made with cash using impress fund purchasing procedure. Small purchases not exceeding $1,000 may be accomplished without obtaining competitive quotations if the prices are considered reasonable. Purchases in excess of $1,000, but not more than $25,000, are made by soliciting quotations from a reasonable number of qualified sources. Purchase orders may be issued for purchases not exceeding $25,000. Another method authorized for repetitive small orders in the blanket purchase agreement. This works much like a charge account with a department store. The buyer merely calls or otherwise informally orders supplies and services up to $10,000 in any order. (Buyers at inventory control points (ICP) may order up to $25,000). Calls for subsistence are unlimited to dollar value. The vendor delivers items and sends a bill monthly. When ordering

from out-of-town sources or from a vendor used only occasionally, the contracting office usually will issue a purchase order.

(3) Contracts over $25,000 generally require the preparation of a formal contract signed by both the contractor and the contracting officer. However, a contracting officer may sign and issue a delivery order over $25,000 on a DD 1155 against a requirements-type contract. This is a common device for obtaining quantity discount prices reflecting the large total purchases by the Government, even though individual base orders may be relatively small.

e. Pre-award surveys of prospective contractors.

(1) A pre-award survey is an investigation of a prospective contractor to determine the ability to perform under a proposed contract in accordance with the offer. Pre-award surveys are conducted by contract administration offices at the specific request of the PCO to assist in determining the prospective contractor's responsibility in accordance with the FAR and the DOD FAR supplement.

(2) The contracting of officer may request a complete or partial survey depending on the nature of the proposed contract. The factors most frequently designated for investigation are the prospective contractor's technical and production capabilities; performance record; plant facilities and equipment including purchasing and subcontracting; quality assurance capabilities; and financial capability, including the contractor's accounting system. Other factors that may require investigation are: plant safety, security, labor resources, transportation, and other factors as specified which may pertain to the proposed contract.

(3) Each survey is documented in report form in accordance with the FAR and the DOD FAR supplement. The completed survey is reviewed by a Pre-Award Survey Review Board Comprised of senior specialists from the contract administration office. The result is recommendation for complete award, partial award, or no award. The ultimate decision rests with the PCO.

(4) The Defense Contract Audit Agency (DCAA) assists the contract management teams, whether they are at plants assigned to the military services or handling contracts assigned to Defense Contract Administration Services (DCAS). Their auditors inspect contractor records so the contracting officer may be rendered assistance when contracts or contract changes are negotiated. The contract auditor is the authorized representative of the contracting officer for provisionally approving payments of vouchers submitted by contractors for the reimbursement of costs. The contracting officer is the approval authority for final/completion vouchers.

19-11. Post award contract administration phase

a. Contract administration.

(1) It is the policy of DOD to make maximum use of contract administration offices established both by DCAS, a component of the Defense Logistics Agency (DLA), and by the military departments under the Plant Cognizance Program. FAR designates more than 60 contract administration functions as the responsibility of the contract administration office when a contract is assigned for administration. The contract administration team, located at the contract administration office, consists of an ACO who is aided by specialists in price analysis, industrial security, production, Government property control, quality assurance, labor relations, accounting and finance, engineering, law, transportation, and data processing.

(2) DCAS is also responsible for QA programs, industrial security programs, data and financial management activities such as the payment of contractors, and for providing support to small business, labor surplus area, and minority business concerns.

b. Quality.

(1) The QA program has a definite influence on the efficiency and effectiveness of supply operations.

(2) Both Government and industry have determined from experience that overall administration and control of quality assurance functions should be centralized to maximize benefits and insure program objectives. DODD 4155.1 and the Defense Acquisition Regulatory System both reflect this requirement. Overall DLA policy formulation and policy review of the QA program is vested in the Quality and Production Division, Executive Directorate, Contracting, except for the DCAS mission which is vested in the Executive Directorate, Quality Assurance, Headquarters, DLA. The principal staff elements are responsible for management of those program functions under their cognizance. The QA program for DLA-acquired/-managed supplies and services is applicable in six mission areas; e.g., materiel contracting/ management, contract administration services, storage operations, depot maintenance, manufacturing, and logistics services.

c. Production. Production support is a major mission area under the DCAS. It is of paramount importance that goods and services contracted for by the Government be delivered on time, and of equal importance that the public has the right to expect that contractors dealing with the Government have the ability and resources to produce an acceptable product. Thus, production surveillance and pre-award surveys are prime functions under the Directorate of Production. The Defense Acquisition Regulation and DLA Manual 8300.1 amply describe procedures for carrying out these functions. DLA policy formulation and review for production support is vested in the Executive Di-

rectorate, Production, Headquarters, DLA. In addition to production surveillance and pre-award surveys, other major mission areas are: engineering and systems support, industrial resources and preparedness planning, transportation and packaging, and industrial labor relations.

d. Termination for convenience.

(1) To protect itself against having to accept outmoded equipment, materials, or supplies that have revealed deficiencies, or where goods may become excess between the time they were ordered and contract completion, the Government has the right to terminate a contract for convenience. Such a termination occurs when the contracting officer determines that, for reasons other than the default of the contractor, it is in the best interest of the Govenment to discontinue all, or some part of, the work remaining under an uncompleted Government contract.

(2) To terminate a fixed-price contract for convenience, the contracting officer is required to send a written notice to the contractor and any known assignee, guarantor, or surety informing him or her that the contract is being terminated.

(3) The prime contractor must comply with the notice of termination which generally requires work stoppage on the termination portion of the contract, performance of the continued portion, and prompt submission of any settlement proposal.

(4) A settlement proposal is a termination claim submitted by a contractor or subcontractor. It is permitted by the terms of the contract for compensation for the termination. A settlement agreement in the form of an amendment to the contract settles all or a part of the contractor’s claims for compensation. The settlement agreement includes any setoffs and counterclaims against the contractor and all claims of subcontractors against the contractor. The contractor cannot be reimbursed for costs beyond the termination date nor for anticipated profits.

e. Termination for default.

(1) The express right of the Government to terminate a fixed-price contract for default is found in the Default Clause cited in the FAR and the DOD FAR supplement. The exercise of this contractual right takes place by reason of the contractor’s failure, actual or anticipatory, to perform his obligation under the contract.

(2) If, after notice of termination for default, the contractor can establish that the failure to perform was beyond his or her control and without his/her fault or negligence, the termination may be treated as one for the convenience of the Government, but the burden of proof rests with the contractor.

(3) When the contractor has been allowed to continue work beyond the delivery date of the contract, it may be held that the Government has "waived" its right to default. Thus, such terminations may be treated as for the convenience of the Government rather than for default.

f. Small business.

(1) As required by FAR and the DOD FAR supplement, all proposed acquisitons in excess of $2,500 are reviewed by small business specialists for possible total or partial set-asides for small business firms. This action by small business specialists is an integral part of the contracting process and is included within the framework of normal contracting procedures.

(2) The Small Business Administration (SBA) has the power to make loans for plant construction, conversion, expansion, purchase of equipment, and working capital. It has the authority to certify competency of small business concerns to satisfactorily perform specific Government contracts. The Certificate of Competency involves all elements of responsibility, including capability, competency, capacity, credit, integrity, perseverance, and tenacity. It approves small business defense production pools.

(3) It is DOD policy to enter into contracts with the SBA to foster and assist in the establishment and growth of small business concerns when the administration certifies to the Secretary concerned, in accordance with Section 8*(a)* of the Small Business Act, that the SBA is competent to perform a specific contract. This policy is implemented in the FAR and the DOD FAR supplement. The SBA, in turn, places subcontracts for such requirements with small business concerns which are owned or controlled by socially and economically disadvantaged persons which have been approved for participation in the Section 8*(a)* contract program. Thus, the minority-owned small business becomes a subcontractor to the SBA.

Section II
Contracting and Supply Management In the Army

19-12. United States Army Materiel Command (AMC) contracting structure

a. The contracting agencies of the Army, from the local post to the PCOs, are the points of immediate contact between the demand generated by the troops and their activities, and the available national resources. The responsive and continuous control of input into the system is fundamental to the execution of any supply management plan and cannot be achieved without cooperation between all purchasing activities. Supply management involves the use of contracting information, experience, and judgment in making supply policies and decisions. The total Army contracting in FY 1978 was approximately 9.50 billion, consisting

of 2,878,644 transactions.

b. Most supply contracting in the Army is accomplished by activities of AMC. This command has assigned contracting responsibility to 13 major subordinate commands, 12 of which are known as research and development commands and materiel readiness commands and have primary contracting responsibility for a large number of interrelated items or programs, including research and development, and follow-on materiel readiness. The nature of these programs are suggested by command designations; e.g., Troop Support and Aviation, Missile, Armament, Research and Development Commands, and US Army Depot System Command (DESCOM).

c. Test and Evaluation Command has contracting functions limited to its mission.

d. The mechanics of supply contracting are carried out by two types of offices. The command procuring office specializes in procuring the item or services currently required by its parent command, laboratory, installation, or activity.

e. The detachments and agencies render their services at the request of any major subordinate command, and are expected to possess current information that reveals the overall industrial potential in their respective geographical area.

f. The principal AMC contracting activities are:

(1) *Research and Development Commands.* Armament, Aviation, Communications, Electronics, Missile, Tank-Automotive, Mobility Equipment, and Natick.

(2) *Materiel Readiness Commands.* Armament, Troop Support-Aviation, Communications-Electronics, Missile and Tank-Automotive.

(3) *Depots*. Anniston, Corpus Christi, Letterkenny, New Cumberland, Red River, Sacramento, Sharpe, Tobyhanna, and Tooele.

(4) *Other*. Army Electronics Materiel Readiness Activity, Army Materiel and Mechanics Research Center, Army Research Office, Army Procurement Activity-Hawaii, the Test and Evaluation Command, the United States Military Academy, and the American Forces Radio.

Section III
Contracting and Supply Management in the Navy

19-13. General

a. Contracts in the Department of the Navy totaled approximately $29.5 billion during FY 1981. The 2.5 million individual contract actions during this period covered a range of material and services from fresh provisions to complete weapons systems such as missiles, planes, and ships. Both military and civilian contract personnel, as well as the necessary legal, technical, auditing, and clerical support personnel, were engaged in this task.

b. By statute, the basic authority to execute and administer contracts in the Navy is vested in the Secretary and delegated by trim within the department. Contractual policy is the responsibility of the Assistant Secretary of the Navy (Shipbuilding and Logistics). Policy guidance provided by this official is implemented by the Chief of Naval Material who is responsible for coordinating and directing the departmental acquisition program.

c. The major portion of the Navy's contract dollars is spent by the five systems commands of the Naval Material Command. Contracting authority is delegated to the Secretary of the Navy to the Systems Commanders with authority to redelegate it within their commands. Contracting authority has also been delegated to the Office of Naval Research the Naval Military Personnel Command, the Bureau of Medicine and Surgery, and Military Sealift Command; however in relation to supply management, the systems commands, which account for over 95 percent of total Navy acquisition, are of principal concern.

d. Prior to World War II, most Navy contracting was centralized in Washington, DC, and performed by the Bureau of Supplies and Accounts, the predecessor of the Navy Supply Systems Command. The increased level of contracting during wartime necessitated its decentralization and resulted in the delegation of contracting authority to the Bureau of Ships Aeronautics, and Ordnance; the forerunners of today's systems commends. This decentralized operation, which provided high degree of flexibility and a capability for rapid expansion, was retained after the war. Another factor favoring decentralization was the ever-increasing technical complexity of the material being procured which made close liaison between contracting and technical personnel a necessity throughout the entire acquisition cycle.

e. Four technical systems commands (Facilities Engineering, Air, Sea, and Electronics) account for approximately 72 percent of the total value of Navy contracts. The supply management responsibilities of these commands in their various material areas have been discussed in chapter 4. Within their assigned areas, these commands procure complete ships, complete weapon systems, major components and equipment, maintenance and repair services and related research and development. These commands perform most of their buying at the headquarters level, except for the Naval Facilities Engineering Command, which does the greater part of its buying through its field activities. The systems commands also provide contracting support to the Navy's project managers.

f. The Naval Supply Systems Command does no purchasing at the headquarters level but instead delegates contracting authority to over 800 field purchasing activities in this country and abroad, and to every Navy ship. These activities comprise the Navy Field Contracting System for which the Naval Supply Systems Command provides policy direction and supervision.

g. The field contracting activities procure a diversified range of material and services and use every type of contract from purchase orders to complex multi-million dollar incentive contracts. The activities, while spending 23 percent of the Navy's contract dollars, performs 84 percent of the Navy's individual contracting actions.

h. The contracting performed by the field activities under the direction of the Naval Supply Systems Command falls into these categories:

(1) Systems buying.

(2) Centralized area buying.

(3) Station support and specialized buying.

i. Systems buying of repair parts is performed by ICPs which are responsible for the acquisition of the material included in their inventory management assignment. ICPs purchase material for supply system stocks in quantities to meet total Navy needs.

j. Centralized area buying is performed by Naval regional contracting centers and certain other large activities (e.g., certain shipyards, supply centers, etc.) which purchase to meet the requirements of the other activities within an assigned geographic area. Generally, they purchase nonstandard supplies or decentralized supply stocks, nonstandard equipments, research and development, and various services such as tug and towing, piloting, and messmen services.

k. Station support and specialized buying is performed at a particular station and covers supplies and services similar to that bought by area buying activities. This buying usually meets the requirements of only the one station.

l. Within the Naval Supply Systems Command, field purchasing activities may also be categorized by the extent of their purchase authority. Major field purchasing activities, including systems buying and area buying activities, with some exceptions, can issue contracts for an unlimited amount. Minor field purchasing activities, with some exceptions, are limited to contracts valued at no more than $10,000 per transaction. In addition, there are several hundred activities such as Navy recruiting centers and Navy training centers which are limited to $500 per transaction. Station support activities may be either major or minor depending on the importance of their mission and the volume of their transactions.

m. The supply officers (commander, if no supply corps officer is assigned) of naval vessels also have purchasing authority but are not expected to use it if there is a shorebased activity available to do the purchasing for them.

n. The Naval Supply Systems Command also provices contractual management services to Navy field procurement system activities on a regional basis through its naval regional contracting centers and naval supply centers with regional management departments. Included in these services are contract techincal guidance, assistance, performance evaluation, and training.

Section IV
Contracting and Supply Management in the Air Force

19-14. The Air Force contracting system

a. Basic contracting authority has been delegated by the Secretary of the Air Force to the commander of the major commands. The two major commands primarily concerned with the central contracting system are Air Force Systems Command, headquartered at Andrews Air Force Base, Maryland, and Air Force Logistics Command with headquarters at Wright-Patterson Air Force Base, Ohio. In general, the Air Force Systems Command is responsible for research and development and acquisition of complete weapon systems, including installed equipments, support equipments, spare equipment, engineering data, and initail repair parts. The Air Force Logistics Command is responsible for contracting of follow-on (replenishment) repair parts and maintenance/modification services, as well as nonsystem equipments, materials, and services.

b. The Air Force maintains two separate contracting channels to support supply requirements. These are centralized contracting and local purchase. Each item entering the Air Force supply system is individually screened and designated for either central contracting or local purchase. Considerations such as availability of the item in the commercial market, acceptability without inspection at source, leadtime, shelf life, and various costs are applied in making this determination.

c. With few exceptions, all central contracting is performed by Air Force Systems Command and Air Force Logistics Command. These exceptions are: Military Airlift Command-air transportation services and processed motion picture films; Air Training Command-factory familiarization training; Air Force Comminication Service-leasing of long distance telephone lines.

Section V
Procurement and Supply Management in the Marine Corps

19-15. Authority

a. The Marine Corps is a procuring activity separate and distinct from the systems commands of the Navy Material Command. Contracting authority has been delegated by the Secretary of the Navy to the Commandant of the Marine Corps with authority to redelegate it within the Marine Corps. This authority has been redelegated to field activities at major installations in the United States and overseas.

b. Headquarters, Marine Corps has retained contracting authority for research and development and major end items of equipment. These contracts are affected by use of military interdepartmental purchase requests to other services if they are assigned integrated management responsibility for the items; otherwise, they are purchased directly from commercial sources.

c. The Marine Corps Logistics Base at Albany, Georgia, has been assigned responsibility for procuring provisioning and supporting repair parts for major items. These items are also obtained by military interdepart-mental purchase request or directly from commercial sources.

d. Field contracting of fires operate under the direct control of Headquarters, Marine Corps and have been delegated unlimited authority to enter into fixed-price contracts. They perform contracting and purchasing functions in support of individual bases and in some cases adjacent units or other military services. In addition, commanders of small posts and stations have been delegated authority to make open market purchases of up to $2,500 and to place orders against requirements contracts in any amount not in excess of the provisions of the contract. Also, commanders of Fleet Marine Forces when deployed, may be granted contracting and leasing authority as the situation dictates.

e. The total value of FY 1981 contracting, excluding military interdepartmental purchase requests, was approximately $335.4 million consisting of 255,000 transactions.

Section VI
General Accounting Office

19-16. Responsibilities

a. Perhaps one of the most essential functions of Congress is its exercise of fiscal control in the Government through the General Accounting Office (GAO). This agency was created in 1931 and is independent of the executive branch It ascertains whether public funds are being properly expended. Congress gave the GAO investigative and reporting powers that are somewhat similar to those of congressional subcommittees.

b. The GAO is under the control and supervision of the Comptroller General who is appointed by the President for a Midyear term. The Comptroller General has the power to investigate all matters relating to receipt, disbursement, and application of public funds. In the execution of these powers, the Comptroller General may recommend legislation necessary to improve the fiscal management of the Government. The Comptroller General also must report to Congress on the adequacy of the fiscal administration in the executive departments. The Comptroller General is extremely independent as the act requires exercise of these functions "without direction from any other office."

c. Another power of the Comptroller General is the statutory authority to "settle and adjust" public accounts and all claims by or against the Government. Consequently, the Comptroller General exerts considerable influence in the area of contracting.

d. The GAO also receives and reviews protests by prospective offerors against award of Government contracts. If the GAO sustains the protest, it recommends corrective action to the executive agency involved.

Section VII
National Priorities, the Defense Materials System, the Defense Priorities System, and Their Relationship With the Department of Commerce

19-17. Priorities and allocations systems

a. The Defense Materials System and Defense Priorities System are officially administered by the Office of Industrial Mobilization, Bureau of Trade Regulation, Industry and Trade Administration, US Department of Commerce. Delegations, regulations, orders, forms, and procedures governing the operation of the system are developed, published, and issued by the Office of Industrial Mobilization. Within DOD, detailed operating rules implementing the office regulations and orders are contained in the DOD Priorities and Allocations Manual.

b. This system provides for the use of priorities to require acceptance and performance of defense-related work. Three significant areas are covered in the operation of the priorities and allocations system:

(1) Application of priority ratings (defense priorities system).

(2) Special priorities assistance (defense priorities system).

(3) Controlled materiel (defense materials system).

19-18. Priority ratings

An industrial priority rating is a symbol applied to a contract or order to establish that this work shall take precedence over unrated orders. All defense contracting may be rated, with a few minor exceptions (Schedule II, Defense Priorities System Regulation 1 and Section 2, Priorities and Allocations Manual). Two types of ratings are normally used, the DO rating and the DX rating.

19-19. The Master Urgency List

a. The Master Urgency List provides a list of important defense and nondefense programs and their military and national urgency categories. The two urgency categories presently used for industrial priority ratings are:

(1) *The BRICK-BAT category (DX rating).* The DX rating is an industrial priority rating applied to programs of the highest national priority.

(2) *The CUE-CAP category (DO rating).* The rating is an industrial rating subordinate to the DX rating and is applied to programs of the highest DOD priority.

b. The authority to apply industrial priority ratings is delegated by the Secretary of Commerce to the Secretary of Defense with further delegation and redelegation through channels to the headquarters of materiel commands or agencies.

c. DO ratings must be assigned to defense contracts or purchase orders in excess of $2,500, unless qualified for the DX rating or classified as nonratable.

d. A clause is inserted in each contract requiring the contractor to comply with regulations by using the rating to obtain materiel and components. All DO-related orders have equal status; precedence in delivery is established by the date sequence in which orders are placed on the supplier.

e. DX ratings take precedence over DO ratings, and may be assigned only to those items related to programs of the highest national priority as established by the Master Urgency List. All DX-rated orders have equal preferential status.

19-20. Defense Materials System and Defense Priorities System

a. The Defense Production Act of 1950, as amended, provides for establishment of a system of priorities and allocations for materiel and facilities, requisitioning of materiel and facilities, and financial assistance for expansion of productive capacity and supply required for the national defense. The defense materials system and the defense priorities system maintain systems in-being for controlling production facilities and availability of controlled materiel needed for the national defense. Maintenance of the these two systems permits rapid expansion of defense production during mobilization.

b. Special priorities assistance is provided to the military services, DLA, and their contractors, if required, to obtain delivery of materials and components for urgent requirements when the materiel cannot be obtained on a timely basis through normal channels. Such requests may be initiated by contractors or the military services. Requests are forwarded to the appropriate command headquarters for resolution. If the command headquarters cannot resolve the problem, the "Request for Special Priorities Assistance" is forwarded to the Office of Industrial Mobilization of the US Department of Commerce for resolution. The Department of Commerce then negotiates with the supplier for delivery and can direct delivery of the needed materiel if necessary.

19-21. Industrial preparedness

a. Industrial base.

(1) If military readiness is to be achieved and maintained, there must be an industrial base capable of timely response in support of the military forces in both peacetime and wartime. Both the facilities of the production base and the management of the facilities must be versatile enough to accommodate sudden increases in production demands and both minor and major changes in combat equipment design. The production base must be kept current, i.e., tools and facilities must not only be maintained but must be modernized to keep pace with advances in technology. Major advances in military equipment designs generally require coordinated advances in manufacturing technology. Hence, the problems of establishing and maintaining a production base require continuous analysis. Maintaining an adequate base is expensive but the cost to the United States of being unable to move rapidly into full surge/mobilization production is incalculable.

(2) Ideally, a production base should be capable of providing and maintaining critical materiel and of quickly expanding output and sustaining the demands of the military forces. The "warm production base" concept is useful for some end items. Under this concept, facilities producing essential items having a long production leadtime operate at minimum sustaining rates. This means that they will produce the economically minimum number of items necessary to sustain their capability. Since a small increment of production equipment can frequently yield a high increase in capacity, large expenditures for additional equipment may not be required to bring the warm base up to full production.

(3) Present production base concepts place high reliance on layaway plant equipment packages. A large part of the machine tool inventory of the military departments is in layaway packages which can be withdrawn, assembled, and put in production with little delay.

b. Industrial preparedness planning program.

(1) It has become increasingly evident that a system is necessary to aid in planning for the extremely wide variety of military items which must be obtained from industry in an emergency. Industry sector studies and dynamic planning techniques are used in order to keep production and acquisition readiness abreast of changing conditions. The military departments select the items for which industrial preparedness planning is necessary and publish an industrial preparedness planning list.

(2) Privately owned manufacturing facilities provide the major support for establishing the industrial base. Government-owned industrial facilities are included in the base whenever private industry does not provide the required capability.

c. Production in Government-owned facilities.

(1) The Government owns and the military departments operate a number of production facilities. The principal output of these facilities are systems, ammunition, spare/repair parts, and renovated equipment. Clearly defined justification is developed for each production facility. Typical justifications are:

(a) The items are peculiar to military applications and the small production runs would not be accepted by commercial factories (e.g., specialpurpose weapon barrels).

(b) The production facilities cannot or will not be provided by the private sector.

(c) The classification of the items produced is sufficiently sensitive to make production in Government-owned facilities necessary.

(d) The use of the facility will contain essential, up-to-date production capability for materiel which has little demand during peacetime but is highly essential in wartime (e.g., ammunition loading plants).

(2) Even though operation of production facilities by the military departments is approved, each proposal to start a production run in a plant is reviewed on its own merits, weighing the advantages and disadvantages of producing or buying. The need for developing private industrial production capabilities is compared with the necessity of preserving the work flow in a military department production facility. This comparison may outweigh factors of cost consideration.

d. Government-furnished facilities. It is the general policy of DOD that prospective contractors will furnish all facilities needed for performance of Government contracts. On an exception basis, facilities may be provided by the Government for use by contractors when such action is considered necessary to meet essential production or program schedules. Facilities are normally provided through a facilities contract; a separate contractual instrument which records accountability when a contractor possesses $50,000 or greater in Government-owned equipment. A lease is sometimes used to provide the contractor with facilities in lieu of a facilities contract if commercial use on the Government-owned machinery exceeds 25 percent of time used.

e. Special tooling and materiel.

(1) Special tooling and materiel may be furnished to the contractor. When supplies or services are contracted for on a cost-reimbursement basis, other materiel may also be furnished to the contractor. Again, anytime after a cost-type contract has been entered into, it may be amended to furnish materiel or to increase or decrease the amount to be furnished. Under fixed-price contracts, materiel to be furnished by the Government are set forth in the IFBs for advertised buys or in the RFPs for negotiated contracts.

(2) Special tooling is tooling of such a specialized nature that its use is limited to production of supplies or performance of services peculiar to the needs of the Government, and it would require substantial modifications before it could be used by another manufacturer or by the same contractor to make other items. It includes jigs, dies, fixtures, molds, patterns, and special taps. Special tooling is often designed for a specific end product to be manufactured on the specific machines of the contractor. Such special tooling items may in many cases be of little use to another contractor even if he or she is turning out the same item for which the special tooling was initially provided.

19-22. Production management

a. If supplies are to be available in a timely manner and acquired at reasonable cost, the production facilities and manufacturing methods required for each type of item must be given appropriate consideration in the planning phases of supply and acquisition management. Mechanisms must also be available for tracking contract progress to provide some assurance that contract delivery requirements will be met and to detect problems which may cause slippage. Production personnel are available to investigate problems and to recommend or implement appropriate corrective actions.

b. The production management staffs at DOD contracting offices perform the following functions:

(1) Review and evaluation of current and future acquisition plans to insure compatibility with economic production runs, economic buys, leadtimes, contractor capabilities, and other production considerations.

(2) Review and analysis of acquisition data packages as required, to ascertain that they are current and realistic in terms of production, to insure the adequacy of specifications for productibility and other technical recommendations which affect production and contract delivery schedules.

(3) Analysis and evaluation of pre-award surveys and contractor information for determining production

capability and responsibility. They participate on survey teams as required and conduct production situation analysis studies. They act as a focal point and provide technical guidance and liaison on production matters.

(4) Conducting production studies to determine additional sources of items previously acquired from single source and making sole-source breakout studies to maximize competition.

(5) Evaluation of requirements for Government-furnished property (equipment, special tooling, and materials). They determine availability and status to insure delivery.

(6) Participation in the value engineering/analysis program and to the production cost-reduction programs.

(7) Maintenance and evaluation of contractor performance records.

(8) Maintenance of liaison with contract administration services production elements.

(9) Monitoring contract performance and developing contract status through appropriate contract administration services elements.

(10) Determination of he impact of impending or existing labor strikes and other adverse circumstances.

(11) Providing advice on production aspects in connection with deviations, waivers, defaults, or termination for convenience.

19-23. Offshore contracting

a. In order to reduce unfavorable trade balances between the United States and those foreign countries in which the United States has sizable defense installations and personnel, DOD has established a Balance of Payments Programs. It is applicable to all contracting for supplies and services required for use outside the United States, except petroleum, to Security Assistance Program contracting, and to scientific and technical knowledge resulting in dollar expenditures outside the United States and Canada.

b. Real property, construction, maintenance, and repair projects outside the United States are subject to the limitations of the Balance of Payments Program. To further this program, the use of US contractors, materials and end products, Government-furnished materiel and equipment, US flag vessels, prefabricated structures, and competent troop labor will be used as much as possible. Maintenance and repair will be done only to the extent necessary to prevent excessive depreciation. All such projects are subject to approval by higher authority in accordance with DODD 7060.4.

c. In the case of supplies and services, the general policy is to require that US end products be used. Perishable goods, emergency situations, items not available in the United States, significant price advantage, treaty stipulations, surplus foreign currency, and locally available services are examples of authorized exceptions.

Chapter 20
Distribution and Movement of Materiel

Section I
Defense Transportation

20-1. Introduction

The transportation system, as discussed within this chapter, will address not only the obvious requirements of a portion of the Department of Defense's (DOD) physical distribution system, but also the agencies that are within the transportation network and the missions assigned to each. The challenge of the logistician is to know the capabilities and limitations of the Defense Transportation System (DTS) and organize and plan the accomplishment of the mission accordingly. The transportation network is not only a means of moving people and things, but is also the principal buffer of the physical distribution system with the potential for providing elasticity in the time required for delivery of materiel. This elasticity comes about based on the assignment of a required delivery date (RDD). Based on the time available for the shipment, cargo can be consolidated and routed to provide the materiel to the customer on time, at the least cost to the Government. It must be realized that not all the modes of transportation are capable of moving materiel at the same speed. The logistician cannot always select the fastest mode of transportation because with speed comes increased cost (see DODD 4500.9, Transportation and Traffic Management for Policy). The use of less costly modes of movement results in additional considerations. For example, as the time expands between consignor and consignee, the cheaper cost of transportation is offset by a requirement for more materiel in the pipeline to maintain an even flow of materiel to the customer. The task of the logistician is to effect a balance between materiel acquisition and transportation modes for the least cost to the Government while increasing the materiel readiness of DOD and not compete with commercial carriers.

2-2. Organizations outside DOD

a. The DOD transportation organization and management are influenced by many external organizations, agencies, and associations. The more important of these are:

(1) Department of Transportation (DOT).
(2) Civil Aeronautics Board (CAB).
(3) Interstate Commerce Commission (ICC).
(4) Maritime Administration (MARAD).
(5) Federal Maritime Commission (FMC).
(6) National Transportation Safety Board (NTSB).
(7) Department of Treasury.
(8) Department of Agriculture.
(9) General Services Administration (GSA).
(10) Federal Emergency Management Agency (FEMA).
(11) Air Transport Association (ATA).
(12) Association of American Railroads (AAR).
(13) Federal Railroad Administration (FRA).
(14) International Air Transport Association.
(15) Intergovernmental Maritime Consultative Organization (IMCO).

b. DOT is responsible for the development of national transportation policies and programs conducive to the provision of fast, safe, efficient, and convenient transportation at the lowest possible cost. It coordinates many transportation services and encourages the cooperation of Federal, State, and local Government transportation activities as well as pertinent industry and labor groups. The Federal Aviation Administration (FAA), Federal Highway Administration (FHWA), FRA, and MARAD are important elements of DOT. These elements, among other responsibilities, make rules and establish systems to insure the safety of these modes of transportation. The US Coast Guard, Saint Lawrence Seaway Development Corporation, and Urban Mass Transit are also operation elements within DOT.

c. CAB is the agency responsible for granting authorizations and issuing permits to air carriers, regulating rates and fares, granting subsidies, granting loans to purchase aircraft, and assisting in establishing or developing international air routes and services.

d. ICC is responsible to each of the three branches of Government for the regulation of interstate commerce and in foreign commerce to the extent that it takes place in the United States. The authority of the ICC encompasses transportation economics. It regulates rates among competing and like modes of transportation, and transportation services; grants rights to operate transportation services; and approves applications to construct/abandon railroad lines.

e. MARAD conducts research of shipbuilding and operations, prescribes and administers ship operations and repair standards, maintains the reserve fleets and reserve shipyards for emergency use, and operates the US Merchant Marine Academy. MARAD is part of the Department of Transportation.

f. FMC, an independent agency, regulates common water carriers in offshore commerce in administrative areas generally analogous to those of the ICC and CAB.

g. NTSB is an independent agency which has its own statutory responsibilities and executive authority. Its

functions, powers, and duties are to determine the cause or probable cause of transportation accidents.

20-3. The DOD transportation system

Each of the agencies and individuals discussed in this paragraph play key roles in providing guidance, direction, and support to the Army transportation system.

a. Secretary of Defense. The Secretary of Defense (SECDEF) has two primary sources of advice on matters affecting transportation. The Assistant Secretary of Defense for Manpower, Installations, and Logistics (ASD(MI&L)) advises him on general logistics policy and the Joint Chiefs of Staff (JCS) advise him on matters affecting multiple support operations. In addition, single managerships have been established for the management of land, sea, and air modes of transportation. DOD relies almost exclusively on the commercial transportation industry to meet defense transportation requirements within the Continental United States (CONUS). Consequently, the availability of a diverse, efficient transportation industry is fundamental to national security.

b. Transportation management agencies.

(1) *Office of Director of Logistics (J4, JCS).* This JCS agency concerns itself with the capability of deploying and sustaining military forces worldwide. Within J4, the Deputy Director for Strategic Mobility uses subordinate staff elements to evaluate current movement capability and analyze future requirements fear strategic mobility.

(2) *ASD(MI&L).* The ASD(MI&L) is a staff assistant to the SECDEF in several functional fields, one of which is transportation. To assist him in this area, he has a Deputy Assistant for Logistics and Materiel Management who has a staff assistant in the Director for Energy and Transportation Policy.

(3) *Director for Energy and Transportation Policy.* General transportation policies for the ASD(MI&L) are developed by this director. The directorate is delegated broad responsibilities for transportation in the domestic, foreign, and international areas. These responsibilities include developing, recommending, and evaluating policies, systems, and procedures incident to both current operations and mobilization planning. This office also formulates policy for the single manager/operating agencies in transportation and traffic management.

c. The Joint Transportation Board (JTB). The JTB is an agency of the JCS responsible for insuring that common-user movement resources assigned or available are used to achieve the maximum benefit in meeting objectives. When a situation exists in which requirements exceed movement capabilities and the services cannot resolve conflicting interests, the JTB is responsible for the allocation of transportation resources.

20-4. DOD single manager transportation operating agencies (TOA)

a. General. The Three TOAs desiginated to support DOD transportation requirements are the Military Traffic Management Command (MTMC), Military Sealift Command (MSC), and Military Airlift Command (MAC). It should be noted that MSC and MAC are primarily mode oriented, while MTMC acts as the interface between defense shippers and commercial and defense carriers.

b. MTMC

(1) MTMC is a major command of the Army, and is the operating agency through which the Secretary of the Army executes his responsibility as the DOD single manager for military traffic, land transportation, inter-modal containers, and common-user ocean terminals. Its mission is to provide responsive, flexible supply peace and war to the operating forces of the US Army, Navy, Air Force, and Marine Corps. MTMC provides the HOW of movement management when the military shipper decides WHEN, WHERE, and WHAT is to be moved. As a port operator, MTMC provides ocean terminal services and cargo bookings to DOD. As a transportation manager, MTMC manages freight and passenger transportation in CONUS and manages the worldwide personal property movement and storage program. As a transportation adviser, MTMC evaluates defense transportation activities and recommends system improvement to the SECDEF and to the military services.

(2) Field activities commanded by HQ, MTMC are: eastern and western area commands in CONUS; Transportation Engineering Agency; and MTMC Transportation Terminal Command, Europe (TTCE).

(3) The eastern area, in addition to its responsibility for traffic management it the 34 Eastern and Central States and for terminal operations on the Atlantic and Gulf coasts, Panama, and Azores, controls and routes petroleum, oil, and lubricant (POL) products throughout CONUS and manages the Defense Freight Railway Interchange Fleet (DFRIF).

(4) The western area, in addition to its traffic management functions in the 14 Western States and its ocean terminal operations on the Pacific Coast, Okinawa, Japan, Alaska, and Korea, operates a Military Air Traffic Coordinating Office (MATCO) at each CONUS aerial port of embarkation (POE).

(5) The Transportation Engineering Agency (TEA) provides traffic and safety engineering services for DOD, conducts transportability studies, and publishes land transportability guidance for the military services.

(6) TTCE exercises command and control over military water terminals throughout central Europe. This mission includes receipt, handling, documentation, and port clearance of DOD-sponsored cargo and privately owned vehicles. TTCE is also responsible for four transportation terminal units throughout the Mediterranean.

c. MSC.

(1) The single manager for ocean transportation is the MSC. The Secretary of the Navy has been given the responsibility for this phase of the military transportation system. The MSC, a major operating force of the Navy, is organized as a worldwide command. As the single-manager operating agency for ocean transportation, MSC performs a fourfold mission:

(a) Provides an immediate sealift capability in emergencies.

(b) Plans for expansion in emergencies.

(c) Provides peacetime ocean transportation for DOD and other authorized agencies.

(d) Provides ships for oceanographic exploration, range instrumentation, missile tracking, etc.

(2) MSC coordinates closely with the shipper services (Army, Navy, Air Force, and Marine Corps), and with the other single-manager transportation agencies (MTMC and MAC). The relationship with MTMC is especially close in the CONUS area commands because military cargo flows to MSC through the traffic management channels of MTMC.

(3) MSC has four sources of sealift capability by which it can meet shipping requirements: the MSC Controlled Fleet, the US Merchant Marine, or the National Defense Reserve Fleet, and, in times of national emergency, foreign flag shipping and Effective US Control (EUSC) ships.

(a) The active US Merchant Marine, the main resource for augmenting military sealift, is composed of berth liners, which are regularly scheduled on specific routes, and tramps, which are not regularly scheduled or routed and which operate on an opportune-lift basis.

(b) The National Defense Reserve Fleet is that body of inactive ships which are not required in peacetime by either maritime industry or the military. During emergencies, these ships can be activated and used by MSC and operated by commercial companies under General Agency Agreements.

(4) Special projects form another aspect of MSC operations. MSC ships have been involved in such diverse programs as oceanographic and hydrographic research; missile range instrumentation and tracking; helicopter maintenance and repair; and tracking and communications for National Aeronautics and Space Administration (NASA).

d. MAC.

(1) The Secretary of the Air Force is designated the single manager for airlift service. He performs this mission through the MAC which provides common-user airlift service for all components of DOD and as authorized, for other agencies of the US Government, between points in the US and oversea areas, and between and within oversea areas. MAC became a specified command in 1977. As a specified command MAC reports to the JCS during declared emergencies. Further, MAC is charged with maintaining, in a constant state of readiness, the military airlift system necessary to perform all airlift tasks, under emergency conditions, as assigned by the JCS in approved war plans and appropriate JCS and Air Force guidance documents Peacetime training insures the ability to carry out the wartime deployment mission. A valuable byproduct of this training is the airlift capability used to support forces throughout the world. Airlift requirements, established by various Government agencies are fulfilled by MAC in accordance with JCS-directed priorities. The MAC organic airlift force consists of C-130 Hercules, C-141 Starlifters, and C-5 Galaxies.

(2) MAC active military force is augmented by the wartime mobilization assignment of its Reserve forces (Air Force Reserve and Air National Guard). The capability of this augmentation force is supplied on a continuing basis to support routine logistical operations. These readily available resources are an integral part of the total strategic airlift force and are exercised periodically to test their effectiveness.

(3) More than 20 US civilian airlines have committed their most suitable airlift requirements of a military contingency. The commitment enables these airlines to share in the MAC peacetime transportation business.

(4) MAC is also responsible for the provision of specialized airlift wings to perform the following missions:

(a) Provision of air transport to the President of the United States and US and foreign dignitaries.

(b) Provision of aeromedical evacuation of sick and wounded DOD personnel within CONUS and overseas.

(c) Provision of specialized aircrew training for the C-141 and C-5 aircraft.

(5) MAC also meets global requirements for complex support activities through three technical service organizations:

(a) The Air Weather Service plans, programs and provides operational aerospace environmental support to the Air Force and Army. Using computerized systems, satellites, and a variety of specialized aircraft, Air Weather Service furnishes environmental services used in military decisionmaking processes.

(b) The Aerospace Rescue and Recovery Command fulfills the global need for search, rescue, and

recovery of personnel and US aerospace equipment on land and sea.

(c) The Aerospace Audiovisual Service compiles and maintains a pictorial record of Air Force combat and support activities worldwide, provides optical instrumentation for engineering analysis, and products to satisfy Air Force requirements for training, motivation, information, technical reporting, and special projects.

20-5. Theater transportation

a. An efficient transportation system is a key factor in supporting armed forces activities in a theater of operations. In time of war, it must be capable of providing accelerated support for deployment plans and operations. In restricted warfare, the transportation system supports theater forces and also assists in the mobility plans of tactical forces in areas where friendly forces are not yet deployed. During the exploitation phase of any type of war, it provides support as required and assists in aeromedical evacuation.

b. To do these things, a theater transportation system must be flexible enough to allow diversion while intransit from CONUS and divert, concentrate, or allocate the transportation resources available to each service as the strategic and tactical situation demands. Centralized control is essential so that transportation networks in different areas can be operated to meet the needs of the theater as a whole. This section describes how these services are controlled by the theater command and the joint staff, and how staff transportation officers achieve flexibility and integration of action.

c. Policies of JCS regarding the organization of transportation in a theater of operations are based on the assumption that there will be a unified commander and that he will organize a joint staff to operate the theater. Transportation responsibilities of the Army, Navy, and Air Force are coordinated through the theater commander and are subject to his authority. Appointed by the President, the theater commander is the senior officer of the US forces in the theater. Under his direction, the transportation officers on the theater joint staff coordinate the requirements of US forces in the theater.

d. In combined operations, there may be a still higher commander. In this case, the US theater joint staff, acting for the commander, arranges a system for coordinating, at the level of allied headquarters, the transportation requirements for US forces and those of allied nations.

e. When support operations are based in a territory under a sovereign friendly government, the transportation mission is usually accomplished through agreements made between that government and the United States. In allied territory, military demands for transportation continually compete with national requirements (civil and military) over which our Armed Forces have no control. Under such circumstances, the joint transportation staff draws up requirements for strictly military movements and presents these requirements to the agencies controlling the allotment of Facilities. When support operations are conducted in a territory formerly held by the enemy, all transportation agencies and facilities are operated under direct military control. Transportation requirements are then more easily coordinated.

f. The theater transportation officer is the member of the joint staff who establishes, for the theater commander, the policies for operating the various theater transportation services and coordinates these services with the theater logistics officer. Certain transportation, such as that supplied by the MAC and MSC, is not under theater control. Units of the MAC are assigned neither to the theater commander nor to the theater Air Force commander; since their mission transcends the theater boundaries.

g. The theater transportation officer may be an Army, Navy, or Air Force officer, depending upon which service is responsible in the theater. His responsibilities are both advisory and supervisory and include long-range planning, issuing broad objectives, and assuming overall control of the theater transportation organization for the joint services. In addition to his responsibilities as the transportation officer for his own service. In any case, a theater transportation officer must be familiar with the transportation systems of the other services to be able to coordinate the systems for the theater as a whole.

h. The theater Air Force transportation officer is responsible for providing adequate transportation of all kinds to the theater air forces and air transport to all theater forces. His duties include planning, programing, supervising, and coordinating the transportation activities of all forces under the theater Air Force commander. He needs to know what policies and directives are established by the commander for the employment of Army and Navy transportation services and civil air transport.

i. Performance of the transportation function in a theater of operations requires a great variety of specialists: aircrews, seamen, ship’s repairmen, navigators, marine and locomotive engineers, scuba divers, port operators, convoy commanders, and specialists in documentation, loading, and movement control. Depending on the area of assignment, a transportation officer may find himself operating a fleet of buses, sedans, and light and heavy cargo trucks; an airline with its backup maintenance facility; a railroad; a major ocean port or beach terminal; or a fleet of harbor craft. No single mode can be ruled out if transportation is to provide the degree of logistical flexibility required to sustain an

uninterrupted flow of personnel and materiel.

j. For practical purposes, the transportation cycle for an oversea theater can be broken down into three distinct phases: domestic (POE), transocean, and from port of debarkation to ultimate destination. The domestic phase usually involves movement from stateside depots by way of common carriers or contract airlift to ocean or air terminals for transshipment overseas. The domestic common carrier movements are routed and controlled by the MTMC.

k. The transocean phase (i.e., from the air or ocean POE in the United States to the port of debarkation on the far shore, moves under control of the MAC, MTMC, or the MSC in organic or contracted commercial lift. The agency used depends upon the urgency of delivery, the type of cargo, and availability of lift.

l. The oversea phase involves the onward movement from the port of debarkation either by transportation organic to Army, Navy, or Air Force units or by way of foreign commercial carriers; e.g., HNS and SOFA. In this phase, the routing and controlling of supplies become the province of the transportation officers assigned to the oversea command.

20-6. Transportation planning

a. Effective transportation is so vital to the success of military operations that thorough planning is essential to insure the proper allocation of available resources to meet the demands of each of the military departments. Transportation requirements must be determined, the capacity of all means of transport analyzed, priorities established, and a movement program prepared. Since the ultimate payoff of logistics effort lies in the sustained support of combat forces, transportation officers constantly work to fit capabilities to demand and to see that movements are made by priority. To effect timely response to critical combat needs, they frequently make professional judgments based on intensive studies of military essentiality and on estimates which tend to compensate for the uncertainties and fluctuations in the flow of supplies.

b. An efficient transportation system will do much to compensate for such uncertainties. Priorities and allocations for land, sea, and air transport must be responsive to the critical timing and nature of combat needs. It is essential to plan in such a manner that shipments move from points of origin to destinations without pause and with minimum of handling. The closer a transportation system comes to achieving sustained movement, the more integrated and efficient its operations become.

c. The transportation planner anticipates requirements and fills them in order of urgency. This is especially true when transportation is insufficient. The movement capacity must then be distributed to users according to overall requirements and established priorities.

d. To plan effectively, the transportation officer must be familiar with interrelationships of organizational elements such as: Air Force, Navy, and Army terminals, the MAC, the MSC, the MTMC, supply depots and control points, oversea terminals, and numerous user units. Precise information must be known on shipments en route to air and ocean terminals, space required for oversea shipments, time periods involved, shipments awaiting distribution, costs incurred, and other data for planning, which need to be coordinated at the several levels of command and functional responsibility.

e. Thus, a highly complex set of management tasks becomes apparent. To aid in the effectiveness accomplishment of these tasks, the Military Standard Transportation and Movement Procedures (MILSTAMP) were devised and have been in effect since October 1963. The purpose of this system was standardization and the objective was automated document flow.

f. This streamlining of transportation of procedures is but one aspect of the DOD concerted effort to provide the type of logistics support that matches the mobility, speed and flexibility of our striking forces. Today, logistics planning revolves around automation. The availability of modern data processing equipment enables commanders to keep abreast of the interaction of today’s complex military systems and their impact on the environment in which logistics operates. This procedure uses the products of Military Standard Requisitioning and Issue Procedures (MILSTRIP) to create and exchange standard shipping data in order to control materiel movements in the DTS and to record and report their status.

g. Other military standard procedures, discussed in chapter 10, are currently in use or under further development. Many aim at the integration of supply and transportation actions to insure the responsiveness of supply distribution systems.

h. Most of these systems are of recent application and their evolution is a continuing process. While it would be difficult to assess their full impact on the transportation process, there is no doubt that the common language of codes and the speedup of data compilation will be accomplished by the faster response of transportation systems to the demands placed upon them.

20-7. Determining capabilities and requirements

a. In transportation planning, the capabilities of the different media of transportation within the area are considered. Railroads, highway transport, inland waterways, pipelines, and air transport, have differing capabilities. Transportation officers match these capabilities with requirements.

b. Requirements for transportation are determined

by the number of personnel, tonnage, mode of transport, and character of materiel (commodities) to be transported, phasing and rate of movement of personnel and materiel, and the points of origin and destination. Attention is given to harbor depths, unloading facilities at destination, loading and shipping schedules, and current and projected troop bases in the theaters to be supported. Detailed planning requires familiarity with both domestic and foreign commercial transportation equipment, routes and terminal capacities. Also required is a thorough knowledge of the documentation procedures and classification and rate structures of all transportation modes included in the planning process. Since many of these factors are subject to change, plans must be flexible.

c. When transport planning is for the support of combat forces operating in underdeveloped areas, the logistician is confronted with problems quite different from those originally anticipated. In such regions, there is likely to be limited railroad trackage and rolling stock, a less than adequate highway system with a limited number of all-weather roads, and air and ocean terminals of limited capability. The magnitude of the transport problem is intensified by difficulties of terrain, which are frequently unfavorable for conventional military operations. Where guerrilla activity is prevalent, it is likely to be directed against the entire logistics system and in particular against ground transportation.

d. Planning factors are continuously reevaluated to reflect political events, military capabilities, and the uncertainties and constraints that can be anticipated in areas only partially under Government control. These reevaluations include revised requirements for transportation equipment, repair parts resupply, maintenance, and manpower for the protection of transport lines and facilities. Where the cost of maintaining and protecting rail and road networks becomes prohibitive, due to guerrilla action, contingency planning usually calls for increased air transport as a partial solution.

20-8. Containerized (and unitized) shipments

a. Since World War II, DOD has made continuing strides toward increased use of containers for intertheater movements of resupply and ammunition. This has been due in large part to the continuing trend in the United States and foreign merchant maritime fleets away from break bulk and toward the more efficient container operations.

b. Whereas it was once considered as solely an ocean carrier system, containerization is viewed today as a total system of transportation offering uninterrupted total movement of cargo from point of origin to ultimate oversea destination using serveral modes. This concept as been advanced to a large degree by the ocean carrier’s use of standard commercial intermodal containers, the most commonly available being 20and 40-foot lengths, designed for rapid interchange between railcars, trailer chasis, and ships. The advantages of this method of operation are reduced cargo handling, reduced loss and damage, reduced packing requirements, greater ship utilization, and increased port/terminal capability. Speed of delivery, particularly critical during contingency operations, is also increased due to the reduced need for cargo handling and the shorter load/discharge times for container vessels. It has been estimated that today nearly 80 percent of DOD peacetime cargo is containerized.

c. However, containers also pose additional challenges to the transportation planner. Rapid turnaround is of vital importance to avoid costly detention charges and maintain container availability within the system; thus, movement controls are required to insure rapid unloading and return of containers to carriers. Empty containers must be positioned to match cargo generation (both outbound and retrograde) and ship sailings; cargo staffing operations must be carefully planned; and there must be a coordinated interface between ocean carrier and port operator since, in effect, the container must be considered as an extension of land movements into ocean movements. Additionally, international arrangements are needed to permit timely movement of containers into and through foreign countries.

20-9. Warehousing

a. Inventory reductions and improvements in warehousing practices have enabled DOD to significantly reduce the amount of warehouse space in operation.

b. The utilization of storage space is reported by all components of DOD on a uniform basis using a standard reporting form (DD Form 805). Reports are received semiannually from all major supply installations. The reports are submitted to the Office of the Deputy Assistant Secretary of Defense (Logistics and Materiel Management) (DASD(LMM)) for analysis of occupancy trends and identification of problem areas.

c. To permit a more meaningful analysis, cubic space utilization has been incorporated into the reported data.

Section II
Joint Chiefs of Staff

20-10. Responsibilities

a. Within the organization of JCS, the Logistics Directorate is responsible for and provides information and appropriate staff assistance on strategic movement matters to the Secretary of Defense and JCS.

b. Strategic mobility is the capability to deploy and sustain combat-ready military forces anywhere in the world in support of national strategy.

c. To accomplish the assigned missions, the Logistics Directorate is charged with:

(1) The analysis, evaluation, and monitorship of all aspects of strategic movement planning and operations with the objective of attaining an overview whereby the identification and solution of strategic movement problems and the achievement of an effective strategic movement posture will receive optimum consideration.

(2) Joint transportation plans, policy, and guidance, including matters pertaining to joint and international transportation operations.

(3) The administration and support of the JTB and its elements.

d. As a focal point for mobility matters, the Logistics Directorate maintains close liaison with the Office of the Secretary of Defense, its agencies, the services, unified and specified commands, and the TOAs.

Section III
Distribution and Movement of Materiel in the Army

20-11. Introduction

a. Once quantitative materiel requirements have been determined and the necessary quantities procured, supplies become the responsibility of the Army distribution system until issued to the ultimate user. The functions of this system are:

(1) Receipt. The process of accepting supplies into the Army supply system.

(2) Storage. The process of holding and caring for supplies prior to their issue.

(3) Transportation. The movement and control of supplies within the DTS.

(4) Issue. The release of supplies to consuming or using activities.

b. Supplies ordinarily remain in the hands of Army users until they are consumed, become unserviceable, or become obsolete, unserviceable supplies usually are restored to serviceable condition by maintenance activities and returned to the user or to the distribution system.

c. The purpose of the Army distribution system is to move supplies from the grower, producer, fabricator, or manufacturer to the user. This is accomplished in as nearly a straight line as possible with a minimum number of stops. The goals of the distribution system are to be responsive to the user, sufficiently flexible to adapt to rapidly changing conditions, economical in terms of physical and manpower resources, and resistant to disruption by either the forces of nature or the enemy.

d. The Army depots in CONUS are established primarily to collect supplies from manufacturers. However, materiel may be delivered by a manufacturer directly to a user or to any other point in the distribution system where it is needed. If direct delivery were always feasible, depots in the United States would be needed only for reserves and would not enter into the normal distribution process. This is, in fact, the case of distribution of most bulk petroleum products. However, the Army maintains insignificant bulk petroleum storage in the United States. For most other materiel, the Army finds that in order to overcome the uncertainties of production leadtime, to compensate for fluctuations in demand, to permit procurement of economical order quantities, and to develop reserves for contingencies, depots in the United States are necessary. When feasible, however, materiel are shipped directly from producer to requisitioner.

e. For oversea theaters, shipping time becomes the major factor in determining the need for stockage points. When air shipment is used, supplies are delivered to an oversea theater in a matter of a few days. If adequate landing strips are available in the vicinity of using units, or if helicopter transshipment is feasible time for shipment from the United States to a unit might not be much greater than time for shipment from a major depot in the theater to the unit. On the other hand, shipment by sea usually requires a month or more, including loading and unloading acing time. If the requirements for items are not predictable over a long term and if the consequences of shortages are serious, a fast mode of delivery must be employed or stockage points in which sufficient supplies are maintained must be established to give commanders a reasonable assurance that items will be available when needed. If requirements are predictable or shortages are not of great consequence, minimum or zero stockage, together with sea delivery, might be acceptable.

f. Each combat unit carrier its basic load and prescribed load list, which consist of enough supplies and repair parts to enable a unit to sustain itself for a limited time until it can be resupplied. Combat units normally draw their supplies from direct support units that maintain stocks of items essential for continued combat operations. These stocks are kept to a minimum, according to authorized stockage lists to enable direct support units to maintain the same degree of mobility as the units which they support. In a conceptual view of distribution, the highly mobile supply unit is unnecessary during normal times when the units supported are in fixed positions with access to other sources of supply. Since direct support units cannot carry all items required by combat units, another supply level, called general support, is established. General support units maintain a somewhat lesser degree of mobility but respond rapidly to requisitions for items not stocked by, or out of stack in, direct support units. Once again,

the general support unit may be superfluous if supported units or their direct support units have access to wholesale inventories.

g. A number of other considerations govern establishment of sources of supply, one or more of which may take precedence. To be considered are US relationships with the country in which (or from which) operations are conducted. Other considerations are security, suitable stockage areas, transportation networks, and the possibility of long-range offensive operations.

20-12. Headquarters (HQ), US Army Materiel Command (AMC)

Responsibility for physical distribution within AMC has been delegated by the Commander to the Directorate for Materiel Management. Within the Directorate for Supply, Maintenance, and Transportation, the Deputy Director for Policy, Plans, and Procedures performs the physical distribution functions that pertain to warehousing management. The Directorate for Supply, Maintenance, and Transportation not only develops physical distribution policies and procedures for application within AMC depots, but also for worldwide applications at wholesale and retail supply levels. Much of this type work is performed outside the AMC headquarters at special-mission activities. Three such activities concerned with the physical distribution systems development are the Logistics Systems Support Activity located at Letterkenny Army Depot, Pennsylvania; the Packaging, Storage, and Containerization Center located at Tobyhanna Army Depot, Pennsylvania; and AMC Automated Logistics Management Systems Activity located at St. Louis, Missouri.

20-13. Army materiel readiness commands (ARC)

The organization and functions of the MRCs are portrayed in chapter 3. The MRCs are not directly involved in the actual performance of physical distribution, but they do influence this function through their management actions.

20-14. The depot system

a. The Army’s major CONUS supply activities are organized as distribution depots (supply) and maintenance depots (repair/ overhaul) under the control of the US Army Depot System Command (DESCOM). Starting in 1962 with over 50 CONUS depot complexes, the Army took steps to combine, consolidate, and eliminate duplicative functions and to transfer certain supplies to the DLA, thus reducing the number of depots. By 1978, the number of Army depots had been reduced to 19. This reduction and the establishment of national inventory control points (NICP) have resulted in a distribution system that is responsive to combat requirements, even though inventory investment is significantly smaller.

b. The Army has a host of plans for effective support to combat forces. The specific plan that is implemented in a particular situation depends, for the most part, on the size of the combat force; the type of terrain encountered; and the nature of the combat operations. Flexibility is a prime objective.

20-15. Army transportation services and organizations

a. The Assistant Secretary of the Army (Installations, Logistics, and Financial Management)(ASA(IL&FM)) includes, among his responsibilities, the distribution and transportation functions. In this role, he monitors the transportation service activities of the Army and establishes certain broad policies. *b.* Under the General Staff supervision of the Deputy Chief of Staff for Logistics (DSCLOG), the Director of Transportation, Energy, and Troop Support is the focal point for the control and coordination of Army transportation services. He insures integration of transportation concepts, doctrine, and related employment of equipment into the total doctrine for operations of the Army in the field. He also influences the initiation of new concepts and provides active support for the improvement of mobility worldwide.

c. The Directorate for Supply, Maintenance, and Transportation, AMC, is responsible for plans, programs, and doctrine; and the coordination of certain traffic management and freight movement activities within AMC.

d. The AMC Logistics Control Activity (LCA) is tasked with monitoring supply and transportation actions relating to Army-sponsored requisitions placed on the wholesale supply system and reporting on the performance of the total logistics pipeline. The LCA maintains a computerized data bank known as the Logistics Intelligence File (LIF). The LIF contains supply and shipment status and other information on requisitions, transportation receipts, and transportation lift data. The LCA also serves as the Army’s air clearance authority for all Army-sponsored, CONUS outbound air shipments. Additional data on LCA/LIF are outlined in FM 38-704.

e. Installation transportation officers/ depot transportation officers (ITO/ DTO) are members of the military activity to which they are assigned and are the commander’s staff advisors on all transportation matters. They participate in the transportation aspects of installation/depot master planning, traffic control, supply management, procurements, and other activities in which transportation is a factor. They, in effect, are the

installation/depot traffic managers, and their mission is to provide transportation services in support of the installation/depot mission in consonance with the desires and policies of the commander. In performing this mission, the ITO/DTO must insure compliance with laws, tariffs, and regulations (applicable to military installations at all levels of command) governing the shipment of personnel and materiel by way of commercial carriers, including those of DOT, ICC, American Trucking Association, AAR, CAB, and US Coast Guard. The ITO must also insure compliance with laws and regulations relating to the official use of motor vehicles in support of the installation or activity. Since most military shipments begin or end at a military installation, the ITOs/DTOs are probably the most essential link in the Army transportation system. Their functions, responsibilities, and authorities are addressed in AR 55-355, MTMR.

20-16. Military Traffic Management Command

a. With announcement by the SECDEF in 1964 of the designation of the Office of the Secretary of the Army as the single manager for military traffic, land transportation, and common-use ocean terminals, the Army became the responsible operating agency for defense traffic management within CONUS. The MTMC which reports to the ASA (IL&FM) was activated in 1965, and assumed the traffic management responsibilities of the Defense Traffic Management Service, formerly a part of DLA. These responsibilities include guidance for the procurement and use of commercial transportation services needed for movement of DOD cargo and passengers within CONUS; and the movement of personal property and the movement and storage of household goods both stateside and abroad. The MTMC is solely responsible for each shipment from the point of origin to the terminal in the case of air shipments, and through the terminal in the case of ocean shipments.

b. Mobilization and emergency preparedness mission assigned to MTMC includes:

(1) Determination of commercial transportation capability, analysis of emergency military requirements, and preparation of comprehensive CONUS commercial transportation movement plans.

(2) Guidance and assistance to the military services in the preparation of other specific, joint, or unilateral plans, where CONUS movements are involved.

(3) Assistance to carrier associations and carriers in the development and coordination of their emergency plans as they affect the military services.

(4) Development and maintenance of up-to-date agreements with carrier associations that provide basic understanding for the efficient use of CONUS commercial transportation by all the military services.

20-17. Defense freight railway interchange fleet

a. A unique responsibility in the freight operations area involves control and use of DOD-owned or -leased railway freight and tank cars assigned to the DFRIF. The Commander, MTMC, is responsible for the actual control, distribution, use, and maintenance of the equipment assigned to this fleet.

b. The DFRIF exists to support mobilization and development requirements of US forces in wartime, as well as various peacetime departmental programs which may require specialized transport equipment. It currently consists of over 2,800 railcars of various types. DOD-owned tank cars are used for the carriage of petroleum products, acids, and other bulk liquids and gases, while heavy-duty flatcars are employed for transporting wheeled and tracked vehicles as well as other heavy materiel. Damage-free boxcars, originally obtained primarily for the shipment of ammunition explosives, are also used for shipment of other materiel. Some of these specialized railcars are prepositioned at critical CONUS installations to support the outload of early deploying units in the event of a contingency.

20-18. Major traffic responsibilities of MTMC

MTMC has the following major traffic management responsibilities:

a. Negotiate joint military passenger agreements and arrange group passenger movements when not specifically delegated to the installation transportation officer in the Joint Military Traffic Management Regulation.

b. Analyze and negotiate CONUS surface freight rates, classification ratings, and transit arrangements; develop freight classifications; and route freight traffic in CONUS.

c. Provide liaison with military departments in traffic management actions.

d. Conduct multimode transportability analysis of new and existing items of equipment.

e. Administer the DOD worldwide personal property movement program.

f. Operate common-user ports in CONUS and overseas and book/manifest oceangoing cargo.

g. Develop improved traffic management methods and new techniques.

h. Plan and exercise CONUS transportation feasibility analyses to support major operations plans.

20-19. Army transportation services overseas

a. Military-operated land transportation (including highway, rail, inland waterways, and pipelines) outside CONUS is provided by the Army on a commonservice basis to other services. As an exception to this arrangement, the theater commander may direct that a transport element remain the responsibility of the Navy or

the Air Force, but for common-service use.

b. Functions related to commercial land transportation are also performed by the Army for the other services when the theater commander so directs. Since these functions do not include detailed local arrangements with carriers or payment of transportation charges, there is no hard-and-fast rule as to overall Army responsibility, and it varies in different oversea theaters.

c. Basically, land transportation is controlled by priorities and policy established by the theater commander. Responsibility for highways and for traffic control is assigned to the service operating the common-use military and commercial land transportation facilities. Movement control is coordinated between the services using the transportation and those providing it.

d. The Army furnishes water terminal services to the Air Force and other agencies as assigned in oversea areas where there are appreciable ground force operations, and it furnishes port detachments to operate water ports for the Air Force in areas in which the latter has primary interest.

20-20. Army transportation management systems

a. Application of automatic data processing (ADP) and communications in management of transportation.

(1) *Automated system for transportation data.* Various subsystems designed to provide automation support to all aspects of MTMC transportation movement management and terminal operations responsibilities.

(2) *Terminal operation and movements management system (TOMMS).* TOMMS is comprised of two major subsystems:

(a) DA movements management system (DAMMS). DAMMS is designed to assist the theater Army Movement Control Center in performing its functions of total movement management. DAMMS also performs evaluations.

(b) DA standard port system (DASPS). A system for management and operation of oversea ports. This system performs three basic functions for the user; import, export, and activity processes. This system, when upgraded to DA standard port system-enhanced (DASP-E), will interface with the LIF and the MTMC terminal management systems.

(3) *Aerial port documentation and management systems (ADAM I) and (ADAM II).* ADAM I includes all airlifted DOD receipt and lift data for the oversea theater and is included in DAMMS. ADAM II provides air movement data to the LIF for CONUD outbound and retrograde MAC channel movements.

(4) *Defense intransit item visibility system (DIIVS).* Currently in the initial stages of development and approval, DIIVS will receive intransit data from DAMMS regarding movement status of cargo in the theater of operations (visibility intransit).

(5) *Transportation operational personal property standard system (TOPS).*

b. Logistics-over-the-shore (LOTS) operations. A means of providing vital support to a theater of operations when established ports are not available or adequate. LOTS operations involve discharging ships anchored offshore and bringing the cargo in-country over the beach.

c. Watercraft and materials handling equipment (MHE). This involves the development of an improved family of lighterage of harbor craft, and related MHE.

d. Barge-carrying ships. Ocean cargo vessels especially designed to load and discharge their own barges offshore away from congested or shallow ports (Seabee and LASH).

e. Intermodalism. The integration of several modes of transportation using standard containers and container systems to facilitate the direct, efficient movement of cargo from point of origin to final destination.

f. Direct support system. Transportation plays a significant role in this physical distribution system. The system is designed to move materiel from the wholesale system to the using units in the shortest possible time and includes the Airline of Communication (FM 38-725).

g. Shipment of classified and sensitive materials. Movement of classified and sensitive materials requires special transportation considerations. AR 55-355 provides guidance for shipment of this type of materiel. Compliance with DOD 5200.1-R and AR 380-55 for classified shipments and chapter VI of DOD 5100.76-M for sensitive material is required.

h. Shipments of hazardous materials. The movement of hazardous or dangerous materials requires special transportation considerations. AR 55-355 deals exclusively with the transportation of explosives and other dangerous articles. The movement of chemical surety material is covered in AR 50-6; the transportation of nuclear weapons and components is contained in AR 50-5.

Section IV
Distribution and Movement of Material in the Navy

20-21. Introduction

a. The Navy distribution system is centrally controlled and directed by inventory control points (ICP) but operates decentrally to permit issue of material by stock points without prior reference to ICPs. Major distribution activities for fleet support are naval supply centers at tidewater locations in CONUS, and naval supply

depots located at principal ports overseas. Limited fleet support is also provided by selected naval shipyards and naval stations.

b. The Navy, unlike the other military services, requires a distribution complex with local issue authority. Although decentralization increases problems associated with central inventory control, it does provide for a more flexible response to highly mobile combat forces. Ships range in size from smaller vessels with less than 100 men aboard to large aircraft carriers with 6,100 men aboard. The logistics support problems then can be equated to supply of a small city which has the capability to move, and does so, on an irregular schedule operating several hundred miles at sea for periods up to 90 days. Therefore, careful coordination in the control of issued and physical distribution is best accomplished at the local level to insure expeditious delivery to the fleet unit through the intermediate distribution point nearest his operating position.

c. The source of supply consists of high-usage and low-demand stocks carried aboard each individual combatant ship. Backup stocks of high-usage items (except high-cost reparables) are carried aboard the Mobile Logistics Support Force ships which support the fleet when deployed in oversea areas. High-cost reparables and resupply stocks requisitioned by ships operating in CONUS waters are provided by the nearest Navy stock point.

d. Material is positioned at major stock points by Navy inventory managers and, in some instances, by defense supply center bases on individual item transaction reports received from stock points daily. Naval supply centers and ICPs have random-access computers. These have been interfaced so that records of the inventory manager are as similar as possible to those maintained locally. Smaller stock points obtain material by submitting requisitions directly to the cognizant inventory manager.

20-22. Shipboard allowances

a. The Navy’s programs for selective stockage concentrate primarily upon the stocks carried by, and in support of, the fleet. Under combat conditions, the only insured supply to the fleet may be limited to the material carried by individual ships, representing the first echelon of supply, and the mobile logistics support forces and oversea bases, which together represent the second echelon of supply. The range and depth of material carried is designed to provide the fleet with the endurance required by current operating and contingency plans and is positioned as close to the end user as practicable. Thus, primary reliance for support of deployed fleets is placed on afloat capabilities. Overseas and CONUS bases are used to supplement the fleet organic support capability when this function cannot be performed by mobile logistics support force units.

b. Each ship is furnished allowance documents which provide for a listing of applicable repair parts for each equipment installed in the ship and various categories of operating spares required for ship operations. These lists, called Coordinated Shipboard Allowance Lists are developed by considering the total population of each stock number application in a particular ship and applying essentiality and replacement factors in a mathematical formula to produce a protection probability specified for each particular class of supply. The primary goal of the Coordinated Shipboard Allowance List is to insure that the scientifically balanced load given a ship will be adequate for specified endurance periods while conforming to the ship’s storage limitations and funds available. In addition, the flexibility of the allowance permits adjustment to meet varied support concepts and varied missions of the ship, while at the same time economies are effected through avoidance of an excessive and unbalanced range and depth of items carried.

20-23. Mobile logistics support forces

a. These forces are the primary means of providing replenishment opportunities to deployed fleet forces. The inventories carried by these units serve in part to balance the varying depths of endurance represented in shipboard allowances and stocks by providing a backup source of the consumable, repetitive use items that are loaded in restricted depth in fleet units. Tenders and repair ships carry industrial and other stocks of material which may the required to complete assigned repair, overhaul, or support tasks.

b. The utilization of these mobile support forces often varies substantially due to the many changing and distinct support requirements that arise. Therefore, a requirement in design of mobile support loads is that they be reasonably versatile and flexible in application, yet tailored principally to the particular support missions of each mobile support ship.

c. Load lists are used as the basic tools of management in establishment of a predetermined range and depth of items which will he maintained on hand or on order at all times. These lists represent the pre-positioned war reserve stockage objective for the mobile support forces. To provide reasonable assurance that load list material will be available for mobilization, an additive peacetime operating level is also carried. This is used to meet demands for items regularly issued during resupply intervals.

d. The range of fleet issue load list items for each fleet is computed to satisfy 70 percent of the predicted total fleet demands while the depth is calculated to meet 85 percent of the demands expected in a 90-day period.

The ICOs are responsible for coordinating the development, maintenance, and review of load lists. Policies are established by the Chief of Naval Operations. Logistics data and supported requirements, provided by the fleet commanders and other sources, are considered.

20-24. Oversea bases

a. Oversea bases issue stocks to supplement mobile logistics support force capabilities when required. They provide regional support to other activities and commands in their areas and to certain ships and small craft homeported in their waters.

b. Bases are replenished from CONUS stocks. Items normally in demand are stocked and controlled under stock-turn-ratio criteria established by the Chief of Naval Material. Additional levels are justified by establishing prepositioned war reserve stock, in quantities recommended by the fleet commanders in chief and authorized by the Chief of Naval Operations.

c. When operating conditions dictate, oversea bases may also stock fleet program material, consisting of specified items positioned for direct support to a specific unit or segment of the operating forces to permit accomplishment of assigned missions. Such positioning action is governed by the acquiring forces location and readiness requirements.

20-25. Air resupply

The high cost of air transportation and reduced budget resources for transportation have resulted in a cautious approach in the designation of airworthy cargo. Air and other high-speed transportation is the normal mode for materiel demands with issue priority designators 01-03 and all materiel required to satisfy demands for not operationally ready due to supply and casualty repair requisitions. Materiel demands with issue priority designators 04-08 may be shipped by air, but will normally be transported by the most economical mode consistent with stated urgency of need and the required delivery date. Navy's Improved Reparable Asset Management Program identifies both resupply and retrograde reparables for airlift which contributes to efficiency by increasing item availability and reducing overall inventory investment on high-cost/critical materiel.

20-26. Navy transportation capability

The Mobile Logistics Support Force ships carry repair parts, provisions, ammunition, and fuel for supporting deployed task forces as an assigned mission. All other Navy shipments are made under DOD regulations using singlemanager operating agencies and commercial transport capability.

a. Military Sealift Command

(1) The MSC is a Navy organization with fleet status and is the operating agency for the Secretary of the Navy who is the DOD single manager for sea transportation. It is a worldwide Navy command with headquarters in Washington, DC, and area commands in Bayonne, NJ; Oakland, CA; Yokohama, Japan; and Bremerhaven, Germany. Subarea commands are located at New Orleans, LA; Naples, Italy; and Subic Bay, Philippines. Offices and smaller units are located around the world, where sealift traffic warrants. The MSC also designates cross-service representatives who handle its business in ports where no organized unit is located.

(2) The MSC, formerly Military Sea Transportation Service, was established in August 1949 when assets of the Army Transport Service and Naval Transportation Service were combined and the Secretary of the Navy was designated defense single manager for sea transportation.

(3) The command performs a fivefold mission. MSC:

(a) Provides sealift for deployment and support of US forces and material in an emergency or contingency.

(b) Develops plans, procedures, and capability for expansion of sealift capability in emergency or wartime.

(c) Provides peacetime logistical support by worldwide sealift of military supplies, equipment, and materiel.

(d) Mans and operates or charters ships used for nontransportation purposes such as oceanographic and hydrographic research, support of the space program, and cable laying and repair.

(e) Provides, mans, and operates Navy mobile logistics force ships. Included are oilers, oceangoing fleet tugs, fleet and combat stores ships, ammunition supply ships, and fleet ballistic missile supply ships.

(4) As a member of the staff of the Chief of Naval Operations, the MSC commander also has a special responsibility for naval control of shipping activities.

(5) As a Navy fleet commander, the MSC commander reports directly to the Chief of Naval Operations, except for procurement matters, where guidance is provided by the Assistant Secretary of the Navy (Manpower, Reserve Affairs, and Logistics), and on financial matters where guidance is provided by the Assistant Secretary of the Navy for Financial Management.

(6) The MSC coordinates closely with the Chief of Naval Operations staff, Navy fleet commanders, the shipper services (Army, Navy, Marine Corps, and Air Force), and other defense single-manager transportation operating agencies, MAC and MTMC. Allocation of sealift resources is provided, as necessary, by the JCS.

(7) The MSC is the Navy s primary contact with the maritime industy, a primary source of assets and services required for MSC fulfillment of DOD sealift requirements. The command coordinates closely with the JCS, JOA, and with the unified and specified commands in the development of contingency plans and sealift operations. It coordinates with the DOT Maritime Administration in the incorporation of defense features in new merchant ships. The MSC coordinates closely with the MTMC since that command manages the movement of military cargo and operates ocean terminals in its capacity as defense single-manager agency for traffic management.

(8) The military services and the Defense Fuel Supply Center submit requirements for movement of dry cargo and petroleum products of the MSC. The command has four sources of sealift capability to meet these requirements. It operates a nucleus fleet of Government-owned cargo ships, Government-owned and bareboat-chartered tankers, and Government-owned special project ships. It also ships military cargo on scheduled US flag liners in less than shipload lots and charters US flag ships to deliver full shipload lots of cargo. The chartered ships and the nucleus fleet make up the MSC-controlled fleet. In time of emergency or war, MSC can be augmented by ships withdrawn from the National Defense Reserve Fleet. A number of ships in the National Defense Reserve Fleet are designated as Ready Reserve Force Ships and are maintained in a state of readiness which would allow them to be put in operation within 5-10 days. As a last resort, the MSC can employ the services of foreign flag ships, including US-owned ships registered under foreign flag which are known as Effective United States Control Ships. However, the MSC-controlled fleet is the resource immediately available for an emergency, and the Ready Reserve Force Ships are a primary source of immediate emergency augmentation.

(9) To move cargo on scheduled liners, the MSC negotiates rates with commercial carriers which carry military cargo over scheduled routes. The MSC also contracts with carriers and with tug and barge companies to provide intermodal, door-to-door delivery systems. When commercial service is not available, the MSC charters ships for defense needs, both for the movement of cargo and for nontransportation purposes.

(10) Augmentation also is available to MSC under its Sealift Readiness Program. Carriers which carry military cargo in peacetime commit a portion of their fleets for callup to meet contingence requirements. Containers, trailers, and chassis also are available under contractual agreements between MSC commercial carriers who move peacetime military cargo.

(11) MSC is a Navy industrial fund activity and military services pay the command for transportation provided in accordance with defense-approved rates which compensate for cost of services plus the command overhead. Historically, more than 80 percent of annual command revenue has been paid to commercial interests for services provided; a significant contribution since revenues have approximated $1 billion annually over the past several years.

(12) The MSC has performed its varied tasks in support of US Armed Forces for 28 years. Operating in most of the world’s oceans, owned and leased vessels have delivered ammunition, foodstuff, helicopters, wheeled vehicles, fuel, construction equipment, tanks, field artillery, railroad stock, exchange supplies, clothing, and many other necessary materials, equipment, and supplies.

(13) The importance of the command’s strategic and logistical sealift missions was demonstrated during the war in Southeast Asia. MSC-controlled ships delivered 86 million measurement tons of cargo to Southeast Asia between FYs 1965 and 1972, and 16 million long tons of petroleum products. During the 1973 crisis in the Middle East, despite the contributions of US airlift, more than 73 percent of the strategic materials required by Israel were sealifted. These experiences indicate that airlift and sealift play complementary roles in the implementation of United States policy and maintenance of US power.

(14) The role of sealift in fulfilling high-volume logistical requirements was illustrated during the war in Southeast Asia. During 1965, at the peak of the troop buildup, about 21 percent of all Vietnam-bound troops were moved in ships. Transports sealifted 86,000 troops primarily in unit lifts, for the initial buildup. In addition, 96 percent of all military cargo lifted to Southeast Asia went by sea. As the Saigon Government was falling in 1975, nearly 180,000 Vietnamese, refugees were evacuated to safety in vessels controlled by the MSC. During the same period, when a Cambodian gunboat pirated the US merchant ship SS Mayaguez, she was boarded and reclaimed by the US Marine and MSC volunteers, all civil service mariners.

(15) To lift the petroleum required by the Armed Forces, the command operates, a small fleet of tankers supplemented by commercial ships chartered on the open market.

(16) Primary advantages or the Navy of civil service manning of some MLSF ships include lower cost of operation, high productivity, and the freeing of skilled Navy manpower for City aboard more sophisticated combatants.

(17) Special project shies now represent about a third of the command’s controlled fleet. Command ships are involved in such diverse programs as oceanographic and hydrographic research; missile range in-

strumentation and tracking; and tracking and communications for the NASA space projects.

(18) A major problem confronting the command is the reduced size of the US Mechant Marine. Further, the National Defense Reserve Fleet, which has been an important augmentation resource, now contains only 143 ships with military potential-including 132 World War II victory ships.

(19) However, capability of the National Defense Reserve Fleet has been increased by Navy/Maritime Administration sponsorship of the Ready Reserve Force-maintenance of some ships in a 5to 10-day readiness state. Legislation introduced in 1977 allowed newer ships to be traded into the Maritime Administration and put into the National Defense Reserve Fleet. Maritime companies trading in these ships would be given ships now in the National Defense Reserve Fleet whose scrap value is comparable to the potential scrap value of the ships they trade in.

(20) The command relies, to a significant extent, on the US Merchant Marine in peacetime as it would in an emergency situation.

(21) In addition to shipping cargo on scheduled liners and chartering ships to meet military requirements, the command also provides complete delivery systems. One such example is a contract under which commercial companies provide tug and barge service to more than 40 Government sites in Alaskan waters. Just as MSC pioneered development of the roll-on, roll-off ship, it also inaugurated the first complete intermodal delivery system under which cargo moves from its point of origin to the user under a single shipping document. A major percentage of command-booked military cargo now moves in the intermodal mode-with resulting advantages to the services being lower cost, less damage, greater security, and shorter delivery time.

(22) However, as a source of emergency augmentation, the merchant marine poses some problems for the command. The merchant marine now is well below the post-World War II inventory. However, they are bigger and faster and many are five to six times as productive as their World War II counterparts. One of the reasons for their high productivity is that modern ships are primarily specialized; for example, large carriers such as the LASH and Seabee, container ships, very large crude carriers, oil-bulk-ore ships, liquefied natural gas carriers, and roll-on/roll-off vessels.

(23) To learn how to use the modern vessels, which to a large extent are part of closed-loop intermodal systems, the military services have been conducting a series of tests. MSC has chartered container ships, barge carriers, and barges for these tests. Used in conjunction with commercial cranes mounted aboard ship and on landing tank ship or barges or other ships, and with fixed and mobile causeways, a variety of lighterage and even helicopters and tethered balloons, they have helped military planners learn how to effectively load and unload intermodal carriers in situations where docks, sophisticated cargo handling systems and other port facilities will not be available.

(24) To modernize its own capability, MSC has relied upon a concept known as build and charter procurement. Ships are built by private investors on the strength of an MSC commitment to charter them when available.

(25) In another move to increase its contingency capability, the command has procured 14 over-the-stern refueling rigs. Some have been mounted on command-controlled tankers and the remainder are maintained in pre-positioned war readiness stocks for use in an emergency. All command-controlled tankers are capable of providing opportune replenishment to any Navy ship that can pass a refueling rig to the command tanker. As a part of their regular training, these tankers provide opportune replenishment to Navy fleet ships which intercept them on their scheduled routes. During Indian Ocean Deployment of a Navy task force, MSCs chartered tankers were a primary source of support for the fleet as they delivered and consolidated fuel loads with Navy fleet oilers.

(26) Another program designed to increase immediate response capability of the command, as previously noted, is the Ready Reserve Force. Under this program, a number of ships in the National Defense Reserve Fleet controlled by the Maritime Administration, are maintained in a state of readiness that would allow them to be put into operation within 5-10 days. Navy provides funding for this program and also has funded for maintenance of some MSC ships in reduced operating status, when not needed to carry military cargo. Ships in reduced operating status could be put into operation almost immediately. They are rotated in and out of regular command operations to maintain their readiness capability.

(27) MSC is both an important element of the US strategic mobility team capable of moving a large volume of military equipment and supplies to sustain deployed troops, and a vital elements of the Navy fleet which insures the freedom of the sea and represents a large portion of US strike power. In helping provide combatant ships with fuel and supplies, the MSC adds new dimension to the mobility and flexibility of the Navy fleet.

b. The Navy's own capability

(1) Resources of the fleet commanders in chief include Navy-controlled sealift and airlift essential to normal fleet operations.

(2) The primary reliance of deployed fleets on the Mobile Logistics Support Forces has already been dis-

cussed. Other fleet ships with cargo lift space such as attack cargo transports, amphibious transport docks, helicopter amphibious assault ships, and landing ships are used to carry large quantities of supplies for amphibious operations and other operations if they can be used advantageously. Navy airlift resources include tactical transport squadrons supporting intratheater fleet operations, reserve air squadrons, carrier onboard delivery aircraft, and vertical onboard delivery which provide the vital link between carrier groups and land bases.

(3) The Navy's cargo handling capability consists of one cargo handling and port group capable of worldwide deployment in its entirety or in detachments. The current capability of the unit is limited to five hatch teams on a commercial cargo ship, on a round-the-clock basis, with reduced freight terminal and port control operations. When augmented, the group has full capability to load and discharge one ship, round the clock, with associated terminal operations and port control functions. Further augmentation will add a second and third ship operational capability. In addition, 6 Naval Reserve units are staffed to activate the first 6 of the 15 cargo-handling battalions required for planned advanced bases.

c. QUICKTRANS.

(1) QUICKTRANS is a Navy-managed, commercial contract cargo airlift and truck service system that provides fast, flexible, and responsive transportation for high-priority Navy and Marine Corps cargo moving between points of manufacture or overhaul, and points of consumption within CONUS. It further provides rapid delivery of air eligible cargo between points of generation and MAC aerial ports of embarkation.

(2) Material moving for the account of other DOD activities will be accepted in QUICKTRANS and moved with, but after comparable Navy and Marine Corps transportation priority 1 and 2 cargo. If annual point-to-point airlift requirements for other DOD-sponsored cargo are submitted for QUICKTRANS lift, they will be given the same consideration as Navy/Marine Corps cargo.

(3) The MAC is the contracting agency for the airlift segment of QUICKTRANS. The Navy Regional Contracting Center contracts for the air freight terminal services segment of QUICKTRANS, and MTMC arranges for the truck service over QUICKTRANS motor routes. All QUICKTRANS contracts and operations are administered and controlled by the Naval Supply Systems Command through the Navy Material Transportation Office (NAVMTO). NAVMTO develops airlift requirements and, under the provisions of the QUICKTRANS airlift contract, establishes and modifies air routes and flight frequency as needed.

20-27. Navy transportation management

a. Chief of Naval Operations. The Chief of Naval Operations provides guidance for determining the peacetime transportation needs of the operating forces and needs of war, contingency, and emergency operations. In addition, the Chief of Naval Operations appraises the overall effectiveness of transportation services provided to the naval operating forces.

b. Commander, Naval Supply Systems Command. The Commander, Naval Supply Systems Command under the Chief of Naval Material, is designated the Manager of Navy Material Transportation. As such he is responsible for the administrative control necessary to insure timely and efficient movement of Navy freight. This responsibility includes:

(1) Recommending policy changes for promulgation by the Chief of Naval Operations.

(2) Collection and submission of all requirements actual airlift and sealift of Navy freight. This determines what capability will be requested from MAC and MSC. Forecasts of airlift and sealift tonnage are collected by the Navy Material Transportation Office from oversea commanders, material support agencies, and field transportation control offices. The Navy Supply Systems Command correlates the tonnage requirements with budget submissions. Single managers are then requested to furnish the needed lift capability. Requirements collected are compared with part performance, compiled, and submitted to the single managers. Long-range annual forecasts and monthly estimates are submitted to single managers for all airlift channels and for all sealift traffic areas.

(3) Assistance to program or project managers in planning transportation aspects of weapon system development and operation.

(4) Participation with the transportation single managers in improving efficient of traffic management. Traffic management is that portion of transportation concerned with shipment, planning consolidation, scheduling, expediting, handling, delivery, documentation, and some other aspects of physical distribution.

(5) Control of cost through continuous review of procurement practices, inventors procedures, and distribution patterns, to insure that transport cost is considered in logistics decisions.

(6) Participation in the development of DOD policy by providing membership on boards and committees at the Joint Service, JCS and/or DOD level. An example is the participation in the maintenance of joint regulating as such as the MILSTAMP.

(7) Development, promulgation, and publication of Navy material transportation operating procedures. (Volume V, Naval Supply Systems Command Manual,

the Fleet Ballistic Missile Movement Plan, Naval Supply Systems Command NAVSUPINST 4600.69B and other directives providing transportation procedures, technical instruction, and guidance to the Naval Establishment.)

(8) Assistance to field activities in the resolution of unusual shipping problems, including coordination with transportation single managers, commercial carriers, regulatory agencies, and other Government agencies.

(9) Review and evaluate transportation performance and use of resources, including formulation and execution of Navy Second Destination Transportation Funds, and specifically designated first destination transportation funds.

(10) Coordination with MAC, MSC, and MTMC and the monitoring of their performance to insure that Navy gets the service it needs.

(11) Advice to Navy inventory managers and purchasing activities, concerning transportation management and techniques.

(12) Administering the Navy program for the worldwide shipment of personal property.

c. Navy transportation activities. There are several different types of Navy field transportation activities, each with an important service role. They are:

(1) The Navy Material Transportation Office, Norfolk, Virginia, and its branch offices at the eastern and western area headquarters of MTMC are the principal contacts between the Navy and the operating elements of the single managers. They are concerned with transportation by all modes and are the focal point for the collection of movement forecast data. The Navy Material Transportation Office is responsible for clearing CONUS originated cargo into the MAC system and QUICKTRANS. The Navy Material Transportation Office will challenge the requirement for airlift when the shipment exceeds the established weight, cube, or age threshold. The Navy Material Transportation Office is also responsible for contract administration and operational control of QUICKTRANS. The Navy Material Transportation Office reviews practices of Navy shipping activities to insure compliance with DOD and Navy policy. Additionally the Navy Material Transportation Office provides transportation advisory services to Navy inventory managers and Navy purchasing activities, conducts transportation seminars and special studies and reviews all commercial transportation charges incurred by Navy.

(2) Navy seacargo coordinators perform movement service incident to sealift. They are located at major shipping areas Underseas and centralize the offering of Navy seacargo to fleet commands and to the MSC. They also furnish direction to Navy and Marine Corps shippers, and arrange for unloading and delivery services for shipments inbound to their areas.

(3) Navy air cargo terminals and Navy oversea air clearance authorities are located at strategic oversea locations. These activities administer available airlift space and provide routines for material. The Navy oversea cargo terminals also conduct air terminal operations in support of MAC. The Navy oversea air cargo terminals and Navy oversea air clearance authorities control the flow of Navy traffic into the MAC system. They may change precedence of movement or arrange for diversion to surface freight if justified by circumstances such as terminal congestion or information from shippers. They may take immediate action on problems reported by MAC personnel in the handling of Navy freight and report to the fleet commands and the Chief of Naval Operations on the adequacy of MAC space assignments. They serve a vital role in the return shipment of reparables.

d. Navy ocean terminals.

(1) The Navy operates ocean terminals at designated Tidewater Supply activities, such as Naval Supply Center, Norfolk, Virginia. These terminals are responsible for all DOD-manifested cargo moving through the port complex. They are also used to replenish and resupply combatant ships, air squadrons, and ships of the Mobile Logistics Support Force. The Commander, Naval Supply Systems Command provides guidance in traffic management, cargo handling, and packaging and preservation to these terminal activities.

(2) Other Navy terminals such as Naval Weapons Station, Earle, and Naval Weapons Station, Concord, are used to outload ammunition that is moved by the MSC and for all the military services; in these instances, the ammunition is booked with the Military Export Cargo Offering and Booking Office and routed into the terminals operated by the MTMC.

e. Material movement process.

(1) A meaningful way to consider the Navy shipment process is in the division of responsibility which exists in the actual movement of material. The Navy determines the "what, where, and when" of movement but has only limited control of the "how." Navy control over air shipments extends to the aerial port of embarkation because of the existence of the controlled airlift service QUICKTRANS. NAVMTO is the routing authority and moves high-priority shipments by air within CONUS. For surface shipments, Navy control ends with the routing request. The MTMC provides routings for CONUS movement of lots by way of commercial carriers and books freight with the MSC. Oversea lift is performed, as noted by the MSC and the MAC. NAVMTO is authorized to enter air eligible material into the airlift system. Final delivery to the end user, ship, or station which originally requisitioned the material, is again the Navy’s responsibility.

(2) The Navy shipper is responsible for preparing the material for shipment and for requesting a routing. After the routing is received from NAVMTO for air, or the MTMC regional office for surface, the material is no longer subject to Navy control. The priority as stated by the shipper is the determining factor in scheduling for lift.

(3) The requisitioner's priorities and assigned delivery dates translate into transportation priorities, which are the keys to the method of shipment and the handling and processing of cargo at the terminals. The higher priorities constitute authority for clearance into the airlift system unless short shipping distance, traffic congestion, or remoteness of the air terminal from origin or destination, indicates that airlift is not really the most expeditious mode. Military cargo normally is handled on a first-in-first-out basis by priority and destination. Because of this, the requisitioner's priorities into which they translate, become the key by which the more urgent cargo is extracted from backlogged freight, when terminal congestion limits airlift capability. The importance of the requisitioner's proper assignment of priority and its perpetuation on documents is clear. This is the basis on which Navy material competes with other service shipments from available space.

(4) The handling and further shipment of material at and beyond ports of debarkation is a responsibility of the theater commander, who operates within guidelines set by DOD directives and implemented by joint service regulations. The destination receiving officer takes control of the material when he is located at or near the port of debarkation. However, if he is geographically or organizationally removed, the theater commander's organic lift or a common-user arrangement operated by one service may take over intratheater transport. The destination receiving officer then takes over when the freight is released to him by the carrier.

(5) Generally, but not universally, land transportation in oversea areas, from coast to hinterlands, is operated by the Army for all services; e.g., the US Army Transportation Command, Europe, Oherusel, Germany. But when another service has primary interest, the theater commander may direct that service to provide common traffic management support, as at Guam, where the Navy has primary interest.

(6) From oversea air ports of debarkation, intratheater and intertheater air transport usually is provided by theater-controlled common-user airlift administered by joint logistics agencies such as Western Transportation Office which is under the Commander in Chief, Pacific Command.

(7) Support for Navy afloat units operating off-shore is provided by carrier-on-deck aircraft from the onshore aerial port of debarkation or service forces ships operating out of a nearby water port. The carrier-on-deck airlift is coordinated by control points such as Air Sea Coordinating OfficeMediterranean and the local commander, service force squadron, who is responsible for coordinating surface support to fleet units operating in his assigned area.

Section V
Distribution and Movement of Materiel in the Air Force

20-28. The Director of Transportation, Office of the Deputy Chief of Staff for Logistics and Engineering, HQ, US Air Force

a. The Director of Transportation is responsible for overall transportation policy and its implementation. This function includes development of transportation systems for the support of weapon systems, determining policies and procedures for developing worldwide transportation requirements, responsibility for the transportation portion of war and mobilization plans; and providing guidance for packing and materials handling systems and training programs.

b. Air Force policy is to maintain a uniform transportation organizational structure at major command headquarters. Transportation organizations at these commands include components for plans and programs, vehicles and equipment, traffic management, and airlift support.

c. The transportation system, in consonance with national policies, is designed to meet overall defense needs efficiently. Actual operational responsibility is delegated to the operating commands in the field.

d. The mission of three Air Force commands, because of their nature, result in an expanded relationship with the Director of Transportation. These commands are Air Force Logistics Command, Air Force Systems Command, and MAC.

20-29. Air Force Logistics Command

a. The Air Force Logistics Command determines requirements and procedures for controlling, storing, distributing, and disposing of Air Force materiel. Transportation plays a key role in this mission.

b. This command is the transportation operating agent for controlling the flow and monitoring the movement of Air Force traffic through water and aerial ports. It determines and forecasts all airlift and sealift requirements for oversea movement by MAC and MSC. In addition, the Air Force Logistics Command manages the CONUS Logistics Airlift System.

20-30. Logistic airlift system

a. Logistics Airlift System is a scheduled cargo airlift operated by the Air Force Logistics Command over established routes within CONUS. The network is operated under contract and speeds up the movement of high-priority supplies to bases within CONUS and to terminals of MAC for shipment overseas. These contract carriers, combined under the management the Logistics Airlift System, form the largest air-cargo carrier in the United States and provide a necessary link between the air logistics centers, the principal aerial ports of embarkation, and some 52 customer bases and stations. The routes are designed so that more than 80 percent of cargo may be delivered from source to base without transshipment.

b. To provide the best support to using units, the Air Force Logistics Command has two types of Logistics Airlift System routes. The first is the transcontinental or trunk route, which links up with aerial ports on the east and west coasts. The second is the feeder route in which flights originate at the air logistics centers and provide customer bases with daily service from the primary storage and maintenance sites.

c. The Transportation Control Center in the Directorate of Transportation at HQ, Air Force Logistics Command, manages the Logistics Airlift System. It establishes requirements and route patterns, and monitors contractor performance. In exercising this control, the Air Force Logistics Command monitors all flights through its Transportation Control Center which is linked by teletype with 55 stations and contractor sites.

d. The contractors are responsible for aircraft operations, crews, and maintenance (except emergency maintenance required at en route stops), and they must comply with the directives and regulations of the Federal Aviation Agency, the Civil Aeronautics Board, and the Air Force. Ground handling, loading, and servicing and the responsibilities of the installations being served.

20-31. Packaging and materials handling

a. The Directorate of Distribution, HQ, Air Force Logistics Command, develops, implements, and integrates Air Force-wide policies and programs for preservation, packaging, packing, and materials handling systems and quipment. The director also provides worldwide staff surveillance and technical direction for all packing and materials handling in support of weapon systems.

b. A significant breakthrough in cargo handling techniques is the 463L system, which became operational at all MAC terminals in 1965. This fully automated system is based on the unit load concept and is compatible with all modes of transportation normally used in air logistics and tactical airlift missions. The system is designed to exploit the flexibility, speed, and economy inherent in modern aircraft such as the C-141 and the C-5. The combination of data system and modern air transport contributes to meeting demands for global combat mobility.

20-32. Air Force Systems Command

a. HQ, US Air Force has delegated responsibility to the Air Force Systems Command to expand systems capabilities and develop technical improvements for equipment such as the 463L Materiel Handling System. They provide transportation people in the field with technical help for testing and evaluating new equipment.

b. The Air Force Systems Command is the Air Force System and Materiel Acquisition Program Manager. It manages vehicle programing to support new weapon systems acquisition. It develops the first destination transportation budget. It also conducts development programs derived from operational requirements, and manages procurement and production of systems, equipment, and materiel.

c. While Air Force Headquarters works closely with the Air Force Systems Command in the area of transportability, the Air Force Systems Command is the Air Force agent for the DOD Engineering for Transportability Program. The Director of Transportation, HQ, US Air Force, has the responsibility for formulating and issuing policy and procedures for test loading of materiel for transportability in military airlift.

20-33. Military Airlift Command

a. MAC came into being in 1948 as the Military Transport Service, combining elements of the Naval Air Transport Service and the Air Transport Command of the Air Force. In 1956, the Secretary of the Air Force was designated the single manager for airlift service. The Military Air Transport Service was designated the single-manager operating agency and its commander became executive director. These assignments remain to this day. MAC (changed from Military Air Transport Service in 1966) provides common-user airlift service for all components of DOD and, as authorized, for other agencies of the US Government, between points in the United States and oversea areas, and between and within oversea areas. Further, MAC maintains in readiness the military airlift system necessary to perform all airlift tasks as assigned by JCS in approved war plans and appropriate JCS and Air Force documents.

b. MAC comprises an operating nucleus of air transportation capable of providing a large volume of sustained airlift to meet a wide range of peacetime and wartime threats. It can be augmented with aircraft from the Air National Guard, the Air Force Reserve, and the Civil Reserve Air Fleet. MAC provides an immediate airlift capability for deployment, employment,

and resupply of US fighting forces in a limited or general war. Its responsiveness and flexibility can meet the military airlift requirements of any emergency.

c. Channel traffic is the movement of personnel and cargo over established worldwide flow patterns serviced by either military aircraft or civil aircraft under contract to MAC. This is the part of the command's mission that is most suitable for civil air carrier augmentation. Civil air carriers under contract provided over 90 percent of the channel passenger airlift and a significant portion of the channel cargo airlift.

d. It is a diversified command and is responsible for the two distinct functions of global airlift and technical services. The airlift mission includes: joint airborne training with Army units for air-land and air-drop operations in a combat environment; special assignment airlift, such as airlift of outsize cargo, artillery, missiles, or tracked vehicles; strategic mobility for the deployment of fighting forces; aeromedical evacuation; and channel missions performed by military and civil augmentation aircraft. Airlift organizations of MAC are the 21st Air Force, the 22d Air Force, the 89th Military Airlift Wing-Special, the 443d Military Airlift Wing-Training. The technical services are designated the Aerospace Audiovisual Service, Aerospace Rescue and Recovery Service, and Air Weather Service. MAC technical services provide essential scientific and technological support to the US Air Force mission and to other DOD agencies.

e. Special assignment airlift is predominantly supported by military aircraft, due largely to the nature of the missions. Airlift requirements often include outsize or bulky items, cargo or unit movements that are classified, or represent a one-time or low-frequency category of support. Destinations for special alignment airlift may be remote or removed from flow patterns serviced at higher frequencies by channel airlift.

20-34. Strategic airlift

a. Strategic airlift is the continuous or sustained air movement of units, personnel, and materiel from CONUS to oversea areas. Strategic airlift forces may be used, when requirements dictate, entirely within an oversea area to augment tactical forces or to effect air-land or air-drop delivery directly into a combat zone.

b. Strategic airlift involves not only the forces of MAC but also all other long-range cargo and transport aircraft that are available. It stresses utilization based on the priorities established in war plans. It provides the fullest possible use of both aircraft and airspace, precision control of traffic through full employment of all navigational aids, and expedited ground handling and turnaround of aircraft; the objective is to deliver the largest amount of cargo possible within the limits of time and facilities available.

20-35. Tactical airlift

a. Tactical airlift is confined to single theaters, such as the European theater or Pacific theater, and is typified by troop carrier units operating under the control of a theater commander, while strategic airlift is global in nature. Tactical airlift is the means by which personnel, materiel, and equipment delivered directly to fighting units, or to the final user destination, by air-land or air-drop as requirements dictate.

b. Strategic airlift is used for the deployment of fighting forces to oversea theaters and for their resupply. The return airlift capability of strategic airlift forces may be used for such theater requirements as aeromedical evacuation, the evacuation of noncombatant US citizens, or backhaul of critical reparables. Strategic airlift and tactical airlift forces can be mutually supplementary. Aircraft from the strategic force may be used to assist in forward area airlift, and tactical airlift aircraft may be used to reinforce strategic airlift forces.

c. Strategic airlift is controlled at the highest level, because requests for air movement are received from many organizations. The varied and numerous tasks inherent in global commitments call for flexible organization. Airlift aircraft, although designed primarily for fighting force deployment, must nicest the complex requirements of deployment, resupply, and aeromedical evacuation.

20-36. Changing role of the Military Aircraft Command

a. The Mission of MAC has changed considerably since the command was established. At first, it was primarily a military airline type of operation, on a predominantly scheduled basis and without a combat role. In recent years, the trend has been for the command to perform the entire spectrum, including all phases of combat airlift. This trend is illustrated by the increased concentration on joint airborne training, air mobility exercises, and other combat airlift tasks. Emphasis continues not only on crew qualification and currency, but on the development and perfection of techniques enabling it to meet all airlift requirements, from loading troops at bases in the United States to delivery in the combat area. During 1974 and 1975, all tactical and strategic airlift was consolidated under MAC. On 1 October 1976, the C-130s were incorporated into the Airlift Service Industrial Fund joining the C-141 and C-5 aircraft previously covered by the fund. On 1 February 1977, MAC was designated a specified command.

b. A high priority is being given to the development of new equipment to permit even greater flexibility of operation than is now possible. Included in the new equipment are mechanized cargo handling facilities, and equipment suitable for all-weather formation

and air-drop operations.

c. An indispensable element increased flexibility is the use of a vehicle designed for the performance of a variety of tasks. The C-141 was the first such aircraft to enter the MAC inventory. The C-5 provided an improved capability to do all things which the C-141 had done, but with increased range and payload.

d. The C-5 aircraft, with a payload capacity in excess of 200,000 pounds, can provide rapid, massive airlift of essential materiel and equipment which are too big and heavy for other aircraft. Until the C-5 became operational, a complete fighting force could not be airlifted as an integral unit, and certain items of outsize hardware had to be moved by surface. With C-141/ C-5 teams, rapid deployment, employment, and resupply of massive combat forces are possible, thus insuring the integrity of fighting units.

e. A special feature of the C-5 is its high flotation landing gear, which is designed to minimize field damage and permit sustained operations on unimproved airstrips. This characteristic gives it additional flexibiltiy for strategic deployment, since it is able to land Army equipment much closer to the point of intended use. Larger capacity makes the C-5 about three times as productive as the C-141.

f. To be ready to carry out its primary mission in wartime, MAC global airlift force trains constantly, operating around the clock under the same conditions that it would find in war or emergency. Examples of the varying demands are:

(1) Rapid deployment of military strike forces to any part of the world.

(2) Massive employment exercises, airlifting thousands of troops and tons of combat gear from the United States to oversea areas. Exercise Focus Retina, which airlifted fighting forces from the United States to South Korea in 1969, is a good example.

(3) Special missions into remote areas with high-value, delicate scientific equipment, or with urgently needed replacement items; airdropping supplies to US stations near the South Pole, the Artic Circle, and in other areas.

(4) Humanitarian airlifts of supplies, and medical and other equipment, to countries hit by natural disasters or epidemics. Also, aeromedical evacuation missions.

(5) Airlift of grant operational missiles.

(6) Daily resupply to DOD forces throughout the free world.

20-37. Civil Reserve Air Fleet

a. A significant part of the airlift capability available for DOD emergency requirements is in the Civil Reserve Air Fleet. It is composed of US civil air carrier aircraft that are suitable for transporting military cargo and passengers, which can be moved by civil aircraft and crews in wartime. Suitable aircraft are selected by MAC and allocated by FAA registration number to the Civil Reserve Air Fleet by the Office of Emergency Transportation in DOT.

b. The Civil Reserve Air Fleet, established in 1952, is based on Executive Order 10999. This order was implemented in a DOD-Department of Commerce Memorandum, which specifically established the Civil Reserve Air Fleet and prescribed basic guidance for its use in emergencies. The latest memorandum was issued in 1963. (When the DOT was established, these Department of Commerce responsibilities for the Civil Reserve Air Fleet were transferred to DOT.)

c. The Civil Reserve Air Fleet Program is one of three emergency plans involving use of civil airlift resources. The war Air Service Program managed the Civil Aeronautics Board consists of those air carrier aircraft over 12,500 pounds which are not allocated to the Civil Reserve Air Fleet. Its purpose is to insure continuation of essential civil routes and services after the withdrawal of the Civil Reserve Air Fleet aircraft. The State and Regional Defense Airlift Plan, controlled by the FAA, is made up primarily of smaller general aviation aircraft, which are to provide services related to the survival and recovery of the economy, such as communications by courier flights, airlift of urgently needed personnel and supplies, etc.

d. The Civil Reserve Air Fleet is composed of four segments: Long-Range International, Short-Range International, Domestic, and Alaskan. Each aircraft is allocated to one segment, depending upon the nature of the requirements and the performance characteristics needed. The Domestic, Alaskan, and Short-Range International segments are designed to continue the peacetime requirements for the Air Force LOGAIR, Army MTMC, and Navy QUICKTRANS operations, the Alaskan Air Command, and short-range intratheater/intertheater contract airlift.

e. The Long-Range International segment constitutes the bulk of the airlift capability allocated to the Civil Reserve Air Fleet. It is made up of modern narrowand wide-bodied jet aircraft capable of long-range, over-ocean operations. The primary role of the Long-Range International Fleet is to replace similar military aircraft which may be withdrawn to support emergency military operations. Where operationally feasible, Civil Reserve Air Fleet aircraft would also be used for airlift to safe rear areas to support deployed US forces.

f. In 1977, the Civil Reserve Air Fleet consisted of 21 US air carriers (including such airlines as Pan American, Trans World Airlines, World Airways, etc.). There were 314 aircraft allotted to the Civil Reserve Air Fleet, of which 232 were committed to the Long-Range Inter

national segment. The Long-Range International segment had 134 cargo and 98 passenger-only Boeing 707 and 747/Douglas DC-8 and DC-10 aircraft.

g. MAC is responsible for the management and administration of the Civil Reserve Air Fleet program for DOD. HQ, MAC develops and coordinates plans and procedures, to include liaison with the carriers concerned. The air carriers participating in the program also constitute the primary civil airlift sources for peacetime augmentation.

h. While forced use of Civil Reserve Air Fleet resources could probably be obtained in time of war, through exercise of the emergency power of the President or Congress, contractual agreements are made in peacetime between MAC and each participating carrier. These airlift service contracts provide for peacetime airlift, including voluntary expansion as needed and as offered by the carriers. The carriers also commit their aircraft to one or more of three stages of airlift emergencies.

i. The stage of airlift emergency is based on the scope of the requirements, the determination being reserved to the governmental authority prescribed in the contract. On declaration of the stage, Civil Reserve Air Fleet aircraft are called up as needed. The result is an extensive augmentation with civil aircraft, which can be quickly withdrawn from civil operations to maintain or expand the normal MAC missions during emergencies.

20-38. Air Reserve Forces

a. The Air Reserve Forces, consisting of the Air National Guard and the Air Force Reserve, constitute the primary source of quick air-power augmentation of MAC, in the event of emergencies or conflicts anywhere in the world. There Air Reserve Force units provide reserve augmentation of 43,000 authorized personnel and over 300 tactical airlift aircraft. The Air National Guard airlift units are organized under 4 wings, 14 goups, possessing C-130 and C-7 aircraft.

b. The Air Force Reserve tactical airlift units are organized under seven wings containing 18 squadrons, and have 32 C-7, 64 C-123 and 112 C-130 aircraft. An important event has been the establishment of the associate program. The formation of six associate wings with their subordinate squadrons fulfill the MAC objective of having an associate squadron collocated with each of the MAC C-141 and C-5 airlift squadrons.

c. The Air Reserve Forces airlift support units of the MAC include 47 aerial port squadrons, which augment the MAC Worldwide Terminal System. They represent substantial capability, ready and available, to augment the active forces. The Reserve forces are considered to be an integral and necessary portion of MAC under the total force concept.

Section VI
Distribution and Movement of Materiel in the Marine Corps

20-39. The Marine Corps Logistics Support System

a. The Marine Corps Logistics Support System is an integral part of the DOD supply system, extending and adapting the latter in order to accommodate the unique mission and operating environment of the Fleet Marine Force. It is designed for effective operation in both peace and war with the capability of rapid transition from one to the other. Although dedicated primarily to the support of the Fleet Marine Force, the system also is responsive to the needs of the supporting establishment and the Marine Corps Reserve.

b. The Marine Corps System is characterized by centralized management, decentralized distribution, maximum use of advanced digital communications networks and ADP systems. The system, which is compatible with all DOD Standard Logistics Systems, is designed to minimize the administrative and logistics burden on the mobile tactical units of the Fleet Marine Force.

c. Distribution and movements of materiel within the Marine Corps is characterized by:

(1) Combat service support resources in the Fleet Marine Force bring together the primary combat service support capability under a single force service support group for each division/wing team.

(2) Requisitioning channels for the Fleet Marine Force provide for direct requisitioning from the integrated materiel manager if assets are not readily available at the intermediate supply activity.

(3) Intensive weapon systems/equipment support management at the Marine Corps Logistics Base, Albany, GA, is focused on sustaining Marine Corps weapons and equipment at the highest state of readiness at least possible cost.

(4) The Marine Corps Logistics Base, Albany, GA, serves as the Marine Service Inventory Control Point. This responsibility involves those functions delineated in the DOD Integrated Materiel Management Manual for consumable items and DOD integrated materiel manager responsibilities for Marine Corps used secondary items under their cognizance. The Marine Corps Logistics Base controls Marine Corps War Reserve stocks of secondary items and principal items not in the hands of the Fleet Marine Force. The base organization also maintains inventory control capability in order to provide for management of secondary depot-level reparable items.

(5) The Chief of Naval Material, under the Chief of Naval Operations is responsible to the Commandant of the Marine Corps for providing total aviation material support to the Marine Corps. This system is totally

distinct and separate from the Marine Corps Logistics Support System.

(6) The Marine Corps does not operate any transportation facilities of its own, but uses available military and commercial capabilities. All movements in the supply system are made in compliance with military standard transportation and movement procedures. Advantage is taken of all appropriate Government and industry developments in the transportation arts, including containerization.

Section VII
Distribution and Movement of Materiel In the Defense Logistics Agency

20-40. Alinement of the DLA distribution system

a. The DLA Materiel Distribution System is designed for maximum effective support to all military services at the lowest overall cost to the Government consistent with adequate responsiveness. Supplies are stocked in quantities needed for responsiveness and in locations calculated to minimize transportation costs on inbound shipments from producers and on outbound shipments to requisitioning activities.

b. Stocks owned by DLA are received, stored, and issued from a group of DLA-managed and military-managed storage activities consisting of six principal distribution activities, three specialized support depots, and six direct supply support points. These 15 primary storage activities were previously identified by name, location, and type mission in chapter 7.

20-41. Positioning of DLA stocks

a. Stocks are positioned in designated storage activities consistent with requisitioner demand patterns, thereby, insuring responsiveness at lowest overall transportation and handling cost.

b. Items with recurring high-volume demands, which constitute full carload shipments to requisitioning activities, are identified for requirement contracts and direct delivery from the procurement source to the requisitioner. Examples of this type item are packaged petroleum products, and high-volume usage items of nonperishable subsistence such as flour, sugar, shortening, coffee, and evaporated milk. Depot stockage of such items is limited to the quantity needed for emergency shipments for high-priority requirements or to satisfy small quantity demands for which direct vendor delivery action would not be appropriate.

c. Numerous factors influence decisions for stock positioning at storage locations, but the point of production and point of ultimate consumption of the materiel are the basic factors considered. Each commodity is analyzed to determine the primary geographic areas in which the materiel are produced. Demand pattern by geographic area is analyzed and cost favorable sites are selected for positioning of stocks. Certain materiel require specialized storage or handling aids which, because of installation and maintenance costs, are not provided at all storage locations. Examples of this are film and drugs which must be maintained at chill temperatures in storage, heavy electrical cable of a specialized nature which requires reeling machines with cutting and measuring devices, and large steel sheets requiring specialized racks and handling equipment for receipt, storage, and issue. For this type item, the primary factor in stock positioning is depot capability to handle the materiel, and transportation evaluation is limited to only those depots so equipped.

d. Because of the preceding considerations, commodity missions for storage locations vary. One commodity may be stocked in only one distribution depot, while another may be stocked in several. Stock positioning of materiel, reflecting commodity missions assigned at each of the six principal distribution depots and three specialized support depots, is shown in table 20-1.

20-42. Transportation of DLA materiel

a. DLA is responsible for the cost of first destination movement of supplies it manages and for second destination movement costs within CONUS. First destination responsibility involves the movement of materiel from a production point into the distribution system; second destination movements are those from a storage site or distribution point to the military service requisitioner. These costs are included as part of the sales price, and apply to the 50 States. Also included are costs to ports for further movement to oversea destinations. The services pay the second destination costs for transshipment, through CONUS terminals, to oversea destinations for stock fund items except as modified by recent DLA mission changes associated with worldwide management of subsistence and POL as well as shipments to Alaska and Hawa*II.*

b. Indicative of its interactions with the military services, DLA views the Joint Transportation Board as a valuable forum for discussing common problems and gaining insight into the innovations of all transportation systems. In considerations of this, DLA participates in Joint Transportation Board meeting on a standing invitation basis.

Table 20–1.
Stock Positioning of Defense Logistics Agency—Principal Distribution Depots and Specialized Support Points

	Construction	Electronics	General Supplies	Industrial	Clothing and Textile	Medical	Nonperishable Subsistence
DLA Management							
Defense Construction Supply Center, Columbus, OH	X		X	X			
Defense General Supply Center, Richmond, VA		X	X		X		X
Defense Depot, Mechanicsburg, PA	X		X	X	X	X	X
Defense Depot, Memphis, TN	X		X	X	X	X	X
Defense Depot, Ogden, UT	X	X	X	X	X		
Defense Depot, Tracy, CA	X		X	X	X	X	X
Army Management							
Anniston AD, AL	X	X	X	X			
Corpus Christi AD, TX	X	X	X	X			
Letterkenny AD, PA	X	X	X	X			
Lexington, AD, KY	X	X	X	X			
New Cumberland AD, PA	X	X	X	X			
Pueblo AD, CO	X	X	X	X			
Rock Island AD, IL	X	X	X	X			
Sacramento AD, CA	X	X	X	X			
Sharpe AD, CA	X	X	X	X			
Texarkana AD, TX	X	X	X	X			
Tobyhanna AD, PA	X	X	X	X			
Tooele AD, UT	X	X	X	X			
Air Force Management							
Ogden ALC, UT	X	X	X	X			
Oklahoma City ALC, OK	X	X	X	X			
Sacramento ALC, CA	X	X	X	X			
San Antonio ALC, TX	X	X	X	X			
Warner-Robins ALC, GA	X	X	X	X			
Navy Management							
NSC Charleston, SC				X			X
NTC Great Lakes, IL					X		
NSC Norfolk, VA	X	X	X	X	X	X	X
NSC Oakland, CA	X	X	X	X	X		X
NSY Philadelphia, PA				X			
NSC Puget Sound, WA				X			
NSC San Diego, CA				X	X		X
Marine Corps Management							
MCLB Albany, GA	X	X	X	X			
MCLB Barstow, CA	X	X	X	X			
MCAS Cherry Point, NC	X	X	X	X			

8A

Chapter 21
Maintenance and Supply Management

Section I
Department of Defense Maintenance Management System

21-1. Introduction

The maintenance management function at the Department of Defense (DOD) level has been assigned to the Assistant Secretary of Defense (Manpower, Installations, and Logistics) (ASD(M&L)). This responsibility consists of formulation of policy and providing guidelines for the maintenance management of weapon systems and equipment used by the military departments. The subordinates charged with accomplishment of these responsibilities are the Deputy Assistant Secretary for Logistics and Materiel Management, and the Director for Maintenance Policy.

21-2. Maintenance objectives and policies

DOD Directive (DODD) 4151.16 establishes objectives and policies for the conduct of equipment maintenance management and engineering programs within DOD. It describes the broad objective of these programs as being "to sustain weapon and equipment end item systems in a state of operational readiness consistent with the mission requirements of the operating or tactical elements and at least total cost."

21-3. General maintenance policies, maintenance engineering

In addition to policies promulgated by DODD 4151.16, DOD Instruction (DODI) 4151.12 further defines maintenance engineering policies and minimum responsibilities to be carried out by DOD components. This instruction divides the maintenance function into the basic elements of technical (maintenance engineering) and industrial (maintenance production), and emphasizes the importance of the technical element on life-cycle costs. Responsibilities to be carried out by the maintenance engineering organization(s) within each military service pertain to the maintenance support plan, technical criteria and experience data, engineering changes or modifications, feasibility studies, engineering consulting, configuration status accounting, inspection and test procedures, replacement factors, performance data analysis, technical instructions, and programs and budgets. The source of funds (e.g., research, development, test, and evaluation; procurement Army appropriation; operation and maintenance appropriation) used to finance maintenance engineering is determined by the life-cycle location of the item which generates a need for such efforts.

21-4. Maintenance levels

DODI 4151.12 delegates to each military service the responsibility of defining tasks to be performed at the various levels of the maintenance organizational chain to insure effective and economical support of weapons and equipment. Three such levels of maintenance are defined by DODD 4151.16.

a. Organizational maintenance is the responsibility of and performed by a using organization on its assigned equipment. Its phases normally consist of inspecting, servicing, lubricating, adjusting, and the replacement of parts, minor assemblies, and subassemblies.

b. Intermediate maintenance is the responsibility of and performed by designated maintenance activities for support of using organizations. Its phases normally consist of calibration, repair, or replacement of damaged or unserviceable parts, components, or assemblies; the manufacture of critical nonavailable parts; and providing technical assistance to using organizations. Intermediate maintenance is normally accomplished in fixed or mobile shops, tenders, shore-based repair facilities, or by mobile teams.

c. Depot maintenance is the responsibility of and performed by designated maintenance activities to augment stocks of serviceable materiel, and to support organizational maintenance and intermediate maintenance activities by the use of more extensive shop facilities, equipment, and personnel of higher technical skill than are available at the lower levels of maintenance. Its phases normally consist of inspection, test, repair, modification, alteration, modernization, conversion, overhaul, reclamation, or rebuild of parts, assemblies, subassemblies, components, equipment end items, and weapon systems; the manufacture of critical nonavailable parts; and providing technical assistance to intermediate maintenance organizations, using and other activities. Depot maintenance is normally accomplished in fixed shops, shipyards, and other shore-based facilities, or by depot field teams.

21-5. Integrated logistics support (ILS)

a. DODD 5000.39, Acquisition and Management of Integrated Logistics Support for System/ Equipments establishes policy and assigns responsibility for this program. It is an integral part of the acquisition process for the lifecycle support of equipment procured by DOD. ILS is a composite of all the support considerations necessary to insure the effective and economic support of a system for its life cycle. It is an integral part of all other aspects of system acquisition and operation.

b. The ILS concept has been developed in recognition of the interdependence of materiel management functions throughout the life cycle. In the design inter-

face area, for example, ILS employs the systems approach in covering the activities to be accomplished and the procedures to be followed in the definition, design, development provisioning, acquisition, production, test, delivery, and operation of logistics support requirements. Certain outputs of ILS activities (e.g., maintenance concept definition, logistics effectiveness criteria and predictions, support engineering analysis, etc.) provide input to the design engineering process (operational plan, functional analyses, trade-off studies, prime equipment system design data).

c. Detailed implementation guidance for all services and agencies is published in the ILS Implementation Guide for DOD Systems and Equipments.

21-6. Commercial activities

a. DOD has an active Commercial Activities Program. Inasmuch as maintenance activities account for over 40 percent of the total DOD commercial activities resources, it is important that maintenance managers have an appreciation of the Commercial Activities Program.

b. General policy regarding the operation of commercial activities by DOD is provided in DODD 4100.15. This directive reiterates office management and Budget (OMB) policy that Government departments and agencies will rely on the private enterprise system for the provision of required products or services to the maximum extent consistent with effective and efficient accomplishment of their programs; and in some circumstances, it is in the national interest for the Government to provide directly the products and services it uses, and that only under these circumstances will a department or agency continue the operation of a Government commercial activity, or initiate a "new start." It further stipulates that DOD commercial activities may be continued in operation or initiated as "new starts" only when a clear determination is made that one or more of the following circumstances exist:

(1) Procurement of a product or service from a commercial source would disrupt or materially delay an agency’s program.

(2) It is necessary, for the Government to conduct a commercial activity for purposes of combat support for individual and unit retraining of military personnel or to maintain or strengthen mobilization readiness.

(3) A satisfactory commercial source is not available and cannot be developed in time to provide a product or service when it is needed.

(4) The product or service is not available from another Federal agency or from commercial sources.

(5) Procurement of the product or service from a commercial source will result in higher total cost to the Government. Section II Maintenance and Supply Management in the Army

21-7. Introduction

a. The overall staff responsibility for Army maintenance is assigned to the Deputy Chief of Staff for Logistics (DCSLOG), Department of the Army (DA). He establishes basic policies, programs, and objectives for maintenance of materiel worldwide; formulates statements of requirements; proposes conceptual systems design; and requires the development of user documentation and training for maintenance management information systems; and exercises staff supervision over the management of maintenance and associated information systems. Other DA General Staff elements also have a role. The Deputy Chief of Staff for Personnel (DCSPER) has staff responsibility for insuring the availability of trained maintenance personnel, and the Deputy Chief of Staff for Operations and Plans (DCSOPS) insures the existence of tables of organization and equipment (TOE), other manning documents, doctrinal literature, and the consumer funds needed for retail maintenance.

b. Below DA level, the responsibility for developing more detailed concepts, organizations, technical and operating procedures, personnel training methods, and management systems is delegated to such major commands as the United States Army Materiel Command (AMC) and the United States Army Training and Doctrine Command (TRADOC). TRADOC, through the United States Army Logistics Center, is responsible for the development, testing, and integration of logistics concepts, doctrine, manuals, materiel, and organizations for the Active, Reserve, and National Guard installations and units in the Continental United States (CONUS) and forces deployed overseas. The United States Army Logistics Center, as the user’s representative, plays a key role in supply management by insuring proper and expeditious incorporation of approved logistics concepts and doctrine in school programs of instruction and serves as a principal advisor to AMC and TRADOC on logistics matters, to include career development of logistics personnel. Maintenance production is a part of the mission of all major Army commands (MACOM).

c. AMC manages wholesale-level maintenance. The command plans for maintenance support, develops technical information for every type of equipment managed by the command, and computes requirements for the plans accomplishment of depot maintenance programs. The technical information developed includes quantitative and qualitative requirements for maintenance personnel, facilities and tooling, maintenance allocation charts, technical manuals, equipment

inspection and repair or overhaul standards and procedures, and other criteria for care, maintenance and repair or overhaul. The United States Army Depot System Command (DESCOM), a subordinate activity of AMC, coordinates the execution of depot maintenance programs, assigns workloads, and releases funds to the operating depots. AMC Materiel Readiness Activity, another subordinate activity of AMC, operates a centralized Army-wide maintenance data bank which receives and processes reports received by way of The Army Maintenance System, and furnishes summary data on selected items to nationallevel materiel and maintenance managers.

d. TRADOC develops the maintenance support structure for the Army in the field, identifies the categories of maintenance to be performed within particular units, and defines the types of skills and numbers of personnel required by each unit for this purpose. The information then becomes a part of the TOE for that type of unit. The command also develops doctrine for field operations by maintenance activities and provides the training required for individual skills. Technical courses concerning Army equipment are taught at training centers and service schools within the United States. The Logistics Center is responsible for the maintenance of both organizational and intermediate levels of TAMMS and for the development of related functional requirements for the Standard Army Maintenance System, the planned successor to TAMMS.

e. The efforts of AMC and TRADOC are aimed at providing Army field commanders with the framework of organizations, systems, and nonfinancial resources needed for their maintenance missions. Field commanders are responsible for establishing specific requirements for maintenance resources; e.g., skilled personnel, time, facilities, funds, repair parts, support equipment, and other supplies; all of which are essential to their maintenance missions. They supervise and manage maintenance programs and activities, and review results to determine if resources were used efficiently. In essence, field commanders at all levels are responsible for taking proper timely action to insure that equipment within their respective commands is serviceable and mission ready.

21-8. Guidance upon which the Army maintenance system is based

a. Effective maintenance support is vital to the sustained application of military power. It insures that the users of equipment are not deprived of its use for any appreciable length of time, and extends the economic service life of equipment.

b. Maintenance and supply are interdependent. Maintenance alleviates supply problems by extending the useful life of equipment through preventive maintenance practices, by overhaul, and by repair for return to the user or for return to supply stocks. Maintenance is dependent upon supply for the assemblies, kits, repair parts, and bulk materiel needed for repair or overhaul. The necessary tools, and test, measuring, and diagnostic equipment are acquisitioned by supply

c. Maintenance is a command responsibility beginning at the using unit level. Each segment of the chain of command is held responsible for completion of its allocated share of maintenance. This is the framework upon which maintenance programs are built. Preventive maintenance programs are pursued at all levels of command, and their effectiveness is periodically assessed in terms of improved materiel readiness and reduced requirements for corrective maintenance.

d. Planning for the maintenance support of equipment responds first to readiness requirements and next to economics in the commitment of maintenance resources. Maintenance planning allocates maintenance tasks and resources to those maintenance categories and activities where the work can be most efficiently accomplished, while maintaining or improving readiness. To insure cost-effectiveness, level of repair analyses are performed during the maintenance planning process. The resulting plan provides the necessary capability to using units, insuring them a degree of self-sufficiency commensurate with operational needs.

e. Maintenance is performed at the time and in the place that will best accomplish the objective of keeping materiel in the hands of users in a serviceable condition. Maintenance will be performed wherever practical by the lowest maintenance category having the capability and capacity. When practical, maintenance is performed onsite; i.e., at the point of breakdown. Each category is limited to that maintenance which is necessary to return the item to a serviceable, operationally ready condition. Unnecessary disassembly or unauthorized modification or repair is prohibited.

f. The using unit commander must have a reliable, responsive maintenance source upon which he can depend when equipment repair is beyond his capacity or capability. Combat service support units are authorized in the Army force structure to provide this service.

g. Materiel in the hands of using units that cannot be expeditiously repaired are promptly evacuated and action initiated to issue replacement items. Failure to evacuate such materiel results in a degradation of the user’s mobility and delays the return of potentially serviceable materiel to supply channels. Direct exchange of unserviceable, reparable components and assemblies for like serviceable materiel on an item-for-item basis is used to expedite replacement. Maintenance float is used in a similar manner to permit the prompt replacement of urgently needed unserviceable end items in using units, if repair cannot be expeditiously effected

by supporting maintenance activities.

h. To insure prompt repair and return to user or stock, unserviceable materiel to be evacuated is given the same movement priority and attention as serviceable materiel, and controlled as carefully. Unserviceable stocks represent an important source for replenishing the materiel assets of a command. It is imperative that these items be repaired promptly and restored to service or dismantled for reclamation of needed components and parts.

21-9. The Army structure for maintenance production

a. DOD has defined the structure for maintenance production in terms of levels of maintenance: organizational, intermediate, and depot. Organizational maintenance is the responsibility of and performed by an organization on its assigned equipment. This level is normally limited to preventive maintenance and minor repair. Intermediate maintenance is the responsibility of and performed by designated maintenance activities which support using organizations. This level encompasses calibration, repair, or replacement of damaged or unserviceable parts, components, or assemblies; the manufacture of critical nonavailable parts; operation of cannibalization points; and the furnishing of technical assistance to using organizations. Depot maintenance is the responsibility of and performed by designated activities to augment stocks of serviceable materiel and to support organizational and intermediate maintenance activities by the use of more extensive shop facilities and equipment, and personnel of higher technical skill than are available at the lower levels of maintenance. It consists of inspection, test, repair, modification, conversion, overhaul and rebuild of parts, assemblies, subassemblies, components, equipment end items, and weapon systems; the manufacture of critical nonavailable parts; and providing technical assistance to intermediate maintenance organizations, using organizations, and other activities.

b. The Army structure for maintenance production generally parallels that of DOD except that intermediate levels in the Army include both direct and general support. The Army uses four categories of maintenance rather than three levels of maintenance for all commodities except aircraft and floating craft which retain the three-level concept. The Army distinguishes among the categories by the use of maintenance allocation charts applicable to specific end items. The maintenance allocation chart is complemented by repair parts and special tools list.

c. Using units are responsible for the performance of all authorized organizational maintenance operations on equipment assigned to or used by them in accomplishment of their missions. This responsibility begins with the crew or operators who perform tasks such as cleaning, inspecting, lubricating, and replacing minor parts. Maintenance specialists (e.g., mechanics, technicians, and armorers) are authorized each combat, combat support, and service support unit to aid the crew or operators by performing maintenance tasks allocated to the organizational category, but which involves minor repairs or parts replacement beyond the capability of crew or operators. Organizational maintenance is primarily preventive in nature. When properly performed, fewer breakdowns occur and fewer demands are made on supporting supply and maintenance activities. Despite effective preventive maintenance, breakdowns do occur, and repair is effected by supporting maintenance activities if beyond the capability of the using organization.

d. Direct support maintenance activities assist using units to keep their equipment serviceable by advising these units of the proper methods for organizational maintenance. If desired by appropriate commanders, they inspect the maintenance operations of using units to determine effectiveness, and they inspect the equipment to detect potential failure. They repair, recondition, or reclaim unserviceable reparables for return to users. They stock and issue maintenance float items, if authorized, and furnish repair parts to using units. Onsite service, to the extent practical, is the goal of direct support maintenance. Combat service support units in the Army force structure provide direct support maintenance services to the Army in the field. Within each combat division, direct support maintenance is performed by designated units which are a part of the division. Nondivisional direct support units located within the corps support command provide support on an area basis to nondivisional units within the corps support command support area and backup support to divisional direct support maintenance units. Direct support maintenance units assigned to support brigades provide maintenance support to nondivisional units and activities not supported by a corps support command.

e. General support maintenance activities primarily assist area supply systems by repairing or reconditioning unserviceable reparables for return to stock. They perform maintenance work which is beyond the capability or capacity of direct support maintenance units. Unserviceable assets are accumulated at general support activities. Materiel managers at the appropriate command level schedule repair programs to maintain stockage levels or to continue direct exchange programs. Combat service units in the corps are authorized to provide general support maintenance services to the Army in the field.

f. Within each major level of command, direct support and general support maintenance units are normally assigned to support elements whose commanders

have been delegated responsibility for the operation of the logistical support structures of the commands. Materiel management centers or logistics control centers are formed either within staff sections of these elements or as separate entries and they assist these commanders in the management of their support maintenance operations. The distinction between direct support and general support maintenance in the Army in the field reflects today's organization for combat operations. The relatively mobile direct support units provide more immediate support for using activities to include onsite repair while the less mobile general support units support command supply systems and provide backup support for using activities.

g. Direct support and general support maintenance categories are combined in installation maintenance shops, which are fixed facilities employing principally civilians. These maintenance shops operate under the commander of the installation on which they are located. Generally the chain of operational command for installation maintenance shops runs from the installation commander to his Director for Industrial Operations (DIO). The Maintenance Division within the DIO is responsible for the organization, staffing, workloading, production planning, and day-to-day operation of the shop. Funding and manpower levels for these shops are provided to the installation by DA through the parent major commands of the units and activities supported by the shops. They are passed to the Maintenance Division through the DIO. The Maintenance Division is not authorized to deviate from these overall levels without approval by the DIO, who coordinates such actions with the installation comptroller.

h. Missions are assigned direct support and general support maintenance activities either in terms of an area support responsibility or a list of specific units to be supported. The workload of these maintenance shops are based on the equipment or the specific units in the supported area. Equipment authorization and asset data are provided to supporting maintenance units and shops to aid in making support plans. Unserviceable assets are turned in to supporting direct support maintenance units and shops on an asgenerated basis. General support maintenance units also receive overflow work on this basis. In addition, they may be workloaded for the repair of unserviceables for return to supply channels.

i. Upon receipt of unserviceable equipment which is to be repaired and returned to the user, an inspection determines the extent of repairs needed. Part are ordered and man-hour estimates made. Detailed costing of the estimated repairs is not normally performed unless it appears that the cost of repairs might exceed the repair cost limitation which DA publishes in technical bulletins. When the estimated cost of repair exceeds the limitation, the unit owning the equipment turns it in through supply channels and requisitions a replacement.

j. Repair is scheduled in accordance with the supported unit's priority as indicated on the work request. The priority fair requisitioning repair parts to perform the work is scheduled for repair first. A "first-in-first-out" policy applies when priorities are identical.

k. Scheduling is done through production planning based on estimated or standard man-hours and availability of shop manpower, tools, test equipment, and repair parts. CONUS installation support maintenance shops use a standard semi-mechanized production planning and control system. Other maintenance units generally use manual systems. Production flow is controlled by observation and inline inspection and supervision. Job progress status is reported daily.

l. Depot maintenance is the responsibility of the national-level materiel managers and, when specifically authorized by HQDA, designated major oversea commanders. This category of maintenance overhauls economically reparable materiel and reconditions degraded stocks, which extends the service life for equipment and, thereby, delays procurement of replacement items. It is performed by designated industrial activities operated by the Army or other military services, or by contract with commercial firms. AMC assigns and controls worldwide depot maintenance workloads through DESCOM.

m. Depot maintenance workload requirements are forecasted by national-level item managers for a period of 5 fiscal years. These requirements consist of unserviceable assets on hand and those forecast to be returned, if needed, to fulfill the authorized acquisition objectives for serviceable mayor items. The planned distribution of major items is displayed in Major Item Distribution Plans and Programs. Materiel readiness commands and AMC develop, and HQDA reviews and recommends adjustment of, depot maintenance workload requirements and tentative programs. Approved requirements and programs are sent to DESCOM for workloading of the depot maintenance facilities.

n. Depot maintenance activities in CONUS are financed by the Army Industrial Fund (AIF) and are reimbursed by customer projects or service-order funds received through DESCOM. Funds control consists of regulating expenses incurred against each work authorization. Total maintenance costs are accumulated by the crest accounting system under procedures established for costing depot maintenance activities (AR 37-55). A job order cost accounting system is used. The depot maintenance activity accumulates capability data by cost center, including space, equipment, facilities, and man-hour requirements for each end item that may be authorized for overhaul in the depot shops. These

data are reported to DESCOM as input to the depot maintenance capability engineering data bank. This input provides DESCOM with the parameters required for workloading.

o. The work authorization received from DESCOM identifies the work standards to be used, and the action necessary to restore the materiel to the condition specified in the work standards.

p. Pre-positioned repair parts requirements for depot maintenance programs are determined principally by historical mortality data available at the depot, based on past consumption.

q. Scheduling is predicted on the program priority established by the customer's relative position on the DA Master Priority List and is revised monthly dependent upon available shop space, manpower capabilities, and the percentage of repair parts available for the program. Problem areas are identified and reported through the internal depot chain of command if they constitute a potential bottleneck or may result in production slippage. Monthly production completions are reported to DESCOM and identified by program.

21-10. Repair limits

a. Two types of repair limitations are in use. Repair cost limits are used in the process of determining if it is feasible to repair an end item, while repair time limits aid in controlling the maintenance backlog of individual activities.

b. Criteria are developed, then used to assess the economic value of repairs cost limits; i.e., the maximum amount of resources which may be spent on any given repair. Repair cost limits are finalized by the national level materiel managers of the equipment. They are intended to insure that the cost of repair is less than the value of the remaining useful life of the item. These limits are based on life expectancy, age, acquisition, or replacement cost of the equipment, and other factors.

c. Various headquarters below DA level establish repair time limits for their maintenance units. These limits include days of workload authorized to be on hand in a maintenance unit and maximum man-hours that a unit is authorized to expend in the repair of a particular item. Repair time limitations have their greatest use and impact in the direct support maintenance category. They are designed to return the greatest number of items to using units by concentrating repair efforts on the less time-consuming jobs, while evacuating other work to a higher category, even though the requisite repair capability exists at the lower level. Repair time limits in a combat situation are geared to satisfying the most pressing requirements. In peacetime and in slowmoving combat situations, repair time limits may not necessarily be prescribed.

21-11. The Army maintenance management system

a. Maintenance management in the Army is centered around the concepts, principles, and procedures of TAMMS. Input to this system is provided by field units. When maintenance is performed on equipment, data are recorded and collected and selected information forwarded to AMC Materiel Readiness Support Activity. This center provides summaries periodically to HQDA Staff elements and national-level maintenance and materiel managers. Equipment operators and maintenance personnel record pertinent data, such as services and modifications, on equipment forms. These forms are maintained on specified equipment in accordance with Technical Manual (TM) 38-750. The consolidated logbooks are a maintenance history and serve as a source of the maintenance management information needed by commanders, national-level materiel and maintenance managers, and HQDA Staff elements. The system is designed to gather, analyze, and distribute information on repair parts usage, equipment failures, maintenance man-hours expended, fuel and oil consumption, equipment usage, and equipment modifications made at the organizational or intermediate levels. Selected data are forwarded to the national level, generally by sample data collection. Units also maintain and submit quarterly materiel condition status reports. Local commanders may prescribe additional reporting requirements to meet local command needs so long as the Army maintenance system forms are used. These standardized forms and punchcard formats accommodate the conversion of the data for machine or computer processing.

b. TAMMS was designed to provide commanders, staff of firers, and operators with information to manage maintenance. Commanders use it as a management tool for evaluating maintenance performance, for making decisions, and for determining a unit's materiel condition posture. The procedures are based upon the concept of recording essential data concerning equipment operation and maintenance. The objective is to collect data necessary for control, operation, and maintenance of equipment at each level of command.

c. Full benefit of TAMMS depends on timely recording nd processing of accurate data. To be valid, the information must accurately reflect the condition of equipment and the maintenance actions performed or required.

d. Data concerning materiel condition status are submitted on a DA form which is designed to permit consolidation, stratification, and tabulation by electric accounting machines, automatic data processing (ADP) equipment, or manually. Specifically, the form provides:

(1) A standard procedure for transmission of data

(availability and serviceability) by equipment users.

(2) Commanders at lower echelons with equipment status information for planning day-to-day operations.

(3) Installation and organization commanders with information regarding maintenance backlogs, serviceability of equipment, density of equipment, and availability of equipment in the hands of using activities.

(4) Major and intermediate commanders with information on the materiel condition status of equipment in the hands of using activities.

(5) DA with a means of collecting materiel condition status data on those items of equipment which are considered essential for combat operations and which require a significant amount of maintenance to insure operational reliability.

Section III
Maintenance and Supply Management in the Navy

21-12. Introduction

a. Responsibility for the management of maintenance is shared by the Chief of Naval Operations and the Chief of Naval Material. The Secretary of the Navy has assigned the overall responsibility to the Chief of Naval Operations, and specific responsibility to the Chief of Naval Material. These responsibilities include direct control of depot maintenance, the provision of broad technical guidance for both organizational and intermediate maintenance levels, and the implementation and execution of maintenance policy.

b. The Navy applies the three levels prescribed by the Office of the Secretary of Defense; e.g., organizational, intermediate, and depot. They're distinguished by differences in capability of the facilities concerned, rather than by the type or kind of maintenance performed. Capability for maintenance of aircraft, shipboard, and shore equipment is controlled through the assignment of skills, tools, and repair parts. Whether or not the equipment to be maintained must be removed from the ship or aircraft is a further consideration.

c. Organizational maintenance is defined by Office of the Secretary of Defense as that maintenance which is the responsibility of and performed by a using organization on its assigned equipment. It normally consists of inspecting, servicing, lubricating, adjusting, and replacing parts, minor assemblies, and subassemblies.

d. Intermediate maintenance is that maintenance which is the responsibility of and performed by designated maintenance activities for direct support of using organizations. It normally consists of calibration, repair, or replacement of damaged or unserviceable parts, components, or assemblies; emergency manufacture of nonavailable parts; and providing technical assistance to using organizations. Intermediate maintenance normally is accomplished in fixed or mobile shops, tenders, ship intermediate maintenance activities, aircraft maintenance department of Naval air stations, or other shore-based facilities. The Navy has established an aircraft intermediate maintenance level capability on carriers.

e. Depot maintenance is that maintenance which is the responsibility of and performed by designated maintenance activities to augment stocks of serviceable material and to support organizational and intermediate maintenance activities by the use of more extensive shop facilities, equipment, and personnel of higher technical skills than are available at the lower levels of maintenance. It normally consists of repair, modification, alteration, modernization, overhaul, and reclamation or rebuild of parts, assemblies, subassemblies, components, and end items; the emergency manufacture of nonavailable parts; and providing technical assistance to using activities and intermediate maintenance organizations. Depot maintenance normally is accomplished in fixed shops, shipyards, naval air rework facilities, or other shorebased facilities. Designated repair contractors are also considered to be depot-level activities.

f. The structure for handling maintenance activities at the organizational and intermediate levels begins with the Chief of Naval Operations and extends downward to the fleet commanders and type commanders to the force units. At the force unit level, organizational maintenance is assigned to the military personnel on a given ship, squadron, or shore unit. The intermediate-level maintenance is assigned to a repair ship, tender, aviation maintenance department of a naval air station or aircraft carrier, or other supporting repair facility. In the case of depot-level maintenance, responsibility flows from the Chief of Naval Operations through the Chief of Naval Material, through the appropriate systems commands to the various depot facilities.

21-13. The 3-M system

a. The primary system employed by the Navy in the management of its maintenance function is the Navy Maintenance and Material Management System (commonly known as the AM System). It consists of two parts, the Planned Maintenance Subsystem and the Maintenance Data Subsystem. The Planned Maintenance Subsystem is designed to:

(1) Simplify maintenance procedures

(2) Define.

(3) Forecast and plan manpower and material requirements for maintenance. All preventive maintenance tasks for all shipboard or

squadron equipment are identified and listed separately on maintenance requirement cards which prescribe what inspections are to be performed, when and how they should be performed, who should do them, what tools, repair parts, and special equipment are required, and what safety precautions should be observed. This information is provided in a form which is readily accessible and understandable to technicians, supervisors, and managers.

b. The second portion of the AM System, the Maintenance Data Subsystem, has an objective of recording on a one-time basis those elements of maintenance information of value to commanders and managers at all levels. The data collected for ships, shipboard equipment, aircraft, and directly related support equipment include equipment identification, maintenance action, parts usage, labor, and organization identification. This information is reported to the Navy Maintenance Support Office, Mechanicsburg, Pennsylvania, where the data are retrievable from a central data bank for analyzing maintenance and supply support problems.

21-14. Importance of maintenance in supply

Because equipments and systems in the Navy grow more complex and more difficult to maintain, increased use is being made of replacement equipments, components, and modules. These reparables are components of a system or equipment (e.g., electronic control box, power supply, starter) or end items (e.g., a portable pump), and are replaced periodically or upon failure. When a technician removes a failed reparable, he draws a serviceable one to replace it, turning the failed item in for repair. If the failed item cannot be repaired locally, it is sent to a designated overhaul point where it is repaired and becomes a wholesale system asset for the inventory manager. Thus, the dependence of the supply system on maintenance as a source of supply requires prompt repair action.

21-15. Role of the hardware system commands and protect managers

The decision as to which maintenance levels a reparable item will be assigned for repair is made by the hardware systems commander or project manager during the provisioning process. In determining the level at which repair will be made, the hardware systems command or project manager considers factors such as:

(a) technical feasibility of repair.

(b) maintenance capability and economy of repair at the various levels.

(c) military essentiality of the component in question.

(d) physical characteristics of the item (e.g., is it practicable and feasible to remove and replace the component or is it more feasible, due to size and weight constraints, to repair the component while it remains installed). Other responsibilities of the hardware system command or project managers include the assignment of source, maintenance, and recoverability codes, the preparation or approval of repair specifications, the designation of repair facilities (i.e., qualified contractors or specific activities in the Navy or other services for depot-level repair of the item), and insuring that required repair capability and opacity are established. The hardware systems command or project managers control and manage the facilities which perform Navy in-house repair.

21-16. Role of the inventory managers

Inventory control tasks performed by the inventory manager for reparables are similar to those performed for other items of supply. However, there are certain additional tasks incident to managing reparables. The inventory manger:

(a) establishes specific arrangements for repair services with Navy or commercial repair sources.

(b) determines current item repair requirements based on the current and projected onhand quantities of serviceable items and the current and projected failure rates and turnaround times.

(c) advises the repair activity concerned of the current item repair requirements and the relative urgency of these requirements.

(d) maintains a watch over individual item turnaround times and evaluates the actual experienced turnaround time against current and projected failure rates and onhand inventories.

(e) maintains information concerning the location and status (for example, awaiting repair or undergoing repair) of items returned for depotlevel repair.

(f) directs distribution of serviceable items.

(g) forecasts requirements for Navy depot-level repair.

(h) develops budget estimates for depot-level repair.

(i) provides input to the Navy Master Reparable Item List which furnishes instructions for return to depot repair facilities.

21-17. Contractor participation

Commercial repair facilities supplement in-house repair. Frequently during the design stabilization and demand development period, in the initial support phase of new systems, Navy managers will arrange for contractor repair of components while in-house capability is being established. Later, after in-house capability is established, contractor repair is sometimes used to supplement the in-house effort when overflow exists. In

addition, commercial sources are frequently used for the repair of nonmissionessential equipment.

21-18. Management of reparables

a. Most reparables, by their nature, are essential to the performance of the mission of which they are a part. To maintain an effective reparable management program and, consequently, an adequate supply of serviceable items, more control is required to manage this material than is needed for consumables, not only on the part of the inventory manager but also by the fleet commanders, fleet units, commercial contractors, hardware system command repair facilities, and the supply system.

b. A significant consideration in determining the quantity of a given reparable to be carried in the Navy inventory is that period of time from the removal from service of a failed unit until it is returned to a serviceable condition and made available to potential users. It is the Navy's objective to keep this turnaround time as short as practicable and to optimize the number of carcasses returned for repair. The Improved Reparable Asset Management Program has been initiated to achieve these goals. The several elements of the turnaround cycle and the organizational or command levels responsible for each element are:

(1) removal, replacement, and repair at the intermediate level are responsibilities of the fleet commanders and their subordinate commanders.

(2) repair of the items subject to the inventory manager requirements is the responsibility of the commanders of the hardware systems commands through their assigned repair activities or the inventory manager for commercially repaired items.

(3) return of a serviceable item to stock so that it is made available to meet user requirements is a responsibility of the inventory manager and the Navy supply system.

21-19. Reparable processing

Large numbers of the Navy's reparables (about 70 percent for aeronautical components) are repaired at the organizational or intermediate levels. A high rate of repair at these levels for a given rate of failure requires only minimum inventors levels because of the shorter turnaround time involved. If less repair were accomplished at the lower levels for the same rate of failure, and more carcasses were returned to the depot level for repair, the system inventory requirements would become greater because of the need to fill a larger retrograde pipeline.

21-20. Key Installations

Key installations responsible for maintenance of various types of Navy equipment and weapons are shown in table 21-1.

Table 21–1. Key Installations Responsible for Maintenance of Various Types of Navy Equipment and Weapons

Commodity	Activity	Location
Aircraft, Aircraft Engines	Naval Air Rework Facilities	
Aviation Components		Norfolk, VA
		Cherry Point, NC
		Jacksonville, FL
		Pensacola, FL
		North Island, CA
		Alameda, CA
	Fleet Air Western Pacific Repair Activity	Japan
	Naval Avionics Facility	Indianapolis, IN
	Various Commercial Contractors	
Ships, Shipboard Components Shipboard Ordnance and Electronics Equipment	Naval Shipyards	Puget Sound, WA
		Mare Island, CA
		Long Beach, CA
		Portsmouth, NH
		Philadelphia, PA
		Norfolk, VA
		Charleston, SC
		Pearl Harbor, HI
	Ship Repair Facilities	Subic Bay, Philippines
		Yokosuka, Japan
	Naval Electronic Systems	San Diego, CA
	Engineering Centers	Portsmouth, VA
	Various Commercial Contractors	
Shipboard Ordnance	Naval Ordnance	Louisville, KY
	Stations	Indian Head, MD
	Naval Weapons Stations	Yorktown, VA
		Seal Beach, CA
		Earle, NJ
		Charleston, SC
		Concord, CA
	Naval Weapon Support Center	Crane, IN
	Naval Underwater Weapons Research and Engineering Station	Newport, RI
	Naval Submarine Bases	New London, CO
		Pearl Harbor, HI

table 21–1. continued

Shipboard Ordnance (cont'd)	Naval Torpedo Station	Keyport, WA
	Various Contractors	Commercial
FBM Modules	Module Maintenance Facility	Charleston, SC
	Naval Avionics Facility	Indianapolis, IN
	Various Commercial Contractors	

Section IV
Maintenance and Supply Management in the Air Force

21-21. Introduction

a. The basic objective of Air Force equipment maintenance is to sustain systems and equipment in a state of operational readiness at minimum total cost consistent with mission requirements. The Air Force philosophy underlying the management of equipment maintenance advocates that the two elements (maintenance engineering and maintenance production) are cooperative rather than competitive elements. To that end, maintenance data and management systems have been developed to feed information between the engineering and production work forces. The basic policies of Air Force maintenance state that maintenance engineering will be accomplished under centralized direction and control; however, the responsibility for proper maintenance of assigned equipment rests with the appropriate commander.

b. Similar organizational or intermediate maintenance functions are to be consolidated on an installation or be geographically centralized, whenever this yields greater economy without degrading system and equipment readiness. Therefore, Air Force policy is to perform maintenance at the production levels and locations at which the work can be accomplished effectively and economically.

c. It is also Air Force policy to design the organizational structures on the basis of wartime concepts to provide an "in-being" maintenance support capability to meet all operational requirements. The manpower, skill levels, equipment, facilities, and other resources are tailored to the accomplishment of the maintenance mission.

d. The focal point of the maintenance effort in the Air Force is the Directorate of Maintenance and Supply in the Air Staff, which is a part of HQ, US Air Force. This directorate formulates broad policy governing maintenance engineering support and maintenance production covering all equipment used by the Air Force except civil engineering, medical equipment, vehicles, and ADP equipment. The Director of Maintenance and supply has responsibility for insuring the operational readiness of all weapon systems, ground communications systems, and all other equipment supporting these systems. He develops and disseminates the basic policies and plans for maintenance throughout the Air Force. Authority has been granted to the Air Force Logistics Command (AFLC) and the Air Force Data Systems Design Center to develop some baselevel standard procedures and systems input/output rules. Depot-level maintenance procedures are developed by the AFLC.

e. The Deputy Chief of Staff for Logistics Operations, AFLC, has cognizance of both maintenance and supply functions. This deputy is responsible for the development of the technical orders which spell out the detailed methods and procedures to be used by all base-level maintenance organizations, along with developing the complementary supply procedures. The internal AFLC data and management systems which support maintenance engineering and requirements computations are directed by this directorate.

f. The AFLC, Deputy Chief of Staff for Maintenance, has cognizance over Air Force depot-level maintenance.

g. The next lower levels of management within AFLC is at the air logistics center. Each center has a Director of Materiel Management to manage the maintenance requirements computations and a Director of Maintenance to manage depot-level maintenance production. AFLC delegates the necessary authority to the air logistics center to allow for determination of the scope, level, and frequency of maintenance of the assigned weapon systems. All of the air logistics centers possess identical technical management responsibilities but are specialized in different weapon systems. For example, the Director of Materiel Management at Warner-Robins Air Logistics Center is responsible for the C-141 and C-130 aircraft, as well as other weapon systems.

h. Within each Directorate of Materiel Management at air logistics centers, there is a System Management Division and an Inventory Management Division. The System Management Division is responsible for the technical management of Air Force systems. The Inventory Management Division is responsible for the technical management of Air Force items. The process of determining the depot maintenance workload requirements for aeronautical equipment begins with system and inventory managers within the Directorate of Materiel Management of each center and ends with the Directorate of Maintenance Engineering and Supply, HQ, US Air Force. Both the system and inventory man-

agers are responsible for determining workload requirements associated with the hardware they have been charged with managing. This includes all Air Force equipment processed through depot maintenance activities each year. At the other major command levels, there is a director or DCSLOG who, in turn, has a Director of Maintenance and a Director of Supply under him. Each director's management responsibilities are basically as indicated by his title. The relationship between the operating commands and the AFLC could be compared to a retail/ wholesale relationship. Each major command negotiates with the system managers on the scope of depot maintenance to be performed and with item managers on any command-required special levels and spares.

i. At base level, there is a single Deputy Commander for Maintenance under the Wing Commander who has a standard organization and standard functions assigned to him. The Deputy Commander for Maintenance has operational control over all weapon systems, equipment, maintenance personnel, and facilities belonging to the wing. He provides the weapon systems and equipment, on a preplanned schedule, which are required by the Wing Deputy Commander for Operations to perform assigned missions.

j. The "customer" of base-level supply is the individual mechanic assigned to one of the maintenance squadrons. The mechanic is authorized to make direct demands on the supply system. The Deputy Commander for Maintenance staff function (programs and mobility) monitors the expenditure of funds for supplies, as does the individual maintenance squadron commander. The Deputy Commander for Maintenance looks to two other staff functions to aid him when dealing with base supply, materiel control, and quality control. Quality control is concerned with the quality of maintenance performed and the quality of materiel used. The materiel control function is the primary staff interface between maintenance and supply at base level.

21-22. Maintenance management system

a. The Air Force Maintenance Management System is governed by the provisions of Air Force Regulation 66-14 and supporting manuals and technical orders. Essentially, the system has been designed to give Air Force managers at all levels the information they need to make decisions concerning maintenance. Through the application of ADP management reports, which are compiled with data collected from the point of maintenance action, are made available to all levels of maintenance management.

b. The system applies to aircraft, missiles, communication equipment, and associated support equipment. Its application has been extended to weapon systems as they begin in the test phase and continue into operational units. All maintenance tasks, from minor adjustments to major repairs, are included in the reporting process. Contractors performing maintenance on Air Force equipment are also required to use the reporting system. The basic parts to this system are:

(1) *Maintenance data collection.* The maintenance data collection system provides full maintenance production and component failure reporting. Information begins with the mechanic whose input tells what job was done, who did the work, what malfunction occurred, why it occurred, when and how it was corrected, man-hours used, and repair parts needed to correct the malfunction. Standard data elements and source documents are used by the mechanics who complete the maintenance action records which tell exactly what work was done. At the base level, maintenance information is converted to punchcards for machine processing of reports pertinent to that level of maintenance management. Selected data are forwarded to a central processing point where they are processed for use by other levels.

(2) *Aerospace vehicle inventory, status, and utilization reporting.* This system provides the data to identify the organization, location, and use of all aircraft and intercontinental ballistic missiles assigned for Air Force use. In addition, the time which individual equipments are not available for operation are reported together with the reason for nonavailability. This system provides the mission capability data used officially within the Air Force. Details of the system are contained in Air Force Regulation 65-110.

(3) *Equipment status reporting system.* This system is similar to the aerospace vehicle inventory, status, and utilization reporting system, but is tailored to communications electronics, meteorological equipment. Details are contained in Air Force Manual 65-662.

(4) *Maintenance cost system.* This system combines data from the three systems described above, plus data from the standard base supply system and the Air Force standard accounting system for operations. The maintenance cost system was developed to accumulate maintenance cost data by weapon systems for use in developing cost factors and for management control.

(5) *Maintenance management information and control system.* This system is a base-level system used to monitor and control activity within the maintenance complex. Basically, it provides automated support to routine maintenance scheduling and planning functions. Detailed descriptions of this system are contained in Air Force Manual 66-278.

(6) *Management control.* Management summaries show precisely what production has been accomplished, what each weapon system is consuming in terms of manpower and materials, what components are failing, how often, and for what reason. By using these data, man-

agers at all levels ascertain trouble spots and determine what attention is needed. They also determine how best to use manpower, facilities, and materiel resources to carry out assigned missions. They advise higher management of any limitations on their capability and the reasons therefor. The impact of unprogramed requirements is ascertained and, conversely, higher management is advised of any surplus capacity and the reasons. Since data are available daily, managers are able to keep tight control on their resources.

c. In the air logistics center, increased use of critical path, program evaluation and review technique, and other scheduling techniques has resulted in a reduction in the time that aircraft and equipment remain in shops. Analytical and diagnostic overhauls are resulting in longer use of equipment before depot overhaul. Air logistics centers are making use of "exception time" accounting to shift personnel from low-volume work centers to those having excessive workloads. Depot area support teams are dispatched to bases to assist in reducing critical backlogs.

21-23. Maintenance support to supply

a. The repair program reduces the demand for procurement of new repair parts, consequently lowering support costs. The most expensive segment of the supply system is the unserviceable pipeline. The Air Force classifies this segment as the repair cycle; it is defined as the period that elapses from the time an unserviceable item is removed from a piece of equipment until the item is processed through the complete repair procedure and made ready for reissue. The importance of repair can further be brought into focus by the fact that three out of every four recoverable items used in the maintenance of Air Force equipment at the flightline are items that have been cycled through a repair program.

b. Processing repair parts through the repair cycle has proven to be the most expeditious and economical means of obtaining resupply support. Independent studies from outside agencies have validated the fact that the average cost of repair is approximately 20 percent of the stock list cost of the item. In computing this cost, both the direct labor and material support cost are included. Other studies show that the repair cycle time averages 32 days per item. The average time an item actually spends within the maintenance repair facility is 12 days.

c. The Air Force policy, in determining the classification of an item as recoverable or nonrecoverable, relates to two major considerations.

(1) Does the item have the physical characteristics permitting repair?

(2) Can the item be repaired economically considering the expense involved in managing the complete repair process?

d. In the economical consideration, the following criteria are used: Items costing $10 or less per unit are automatically identified as nonrecoverable items. Items costing more than $10 but less than $50 are subject to management review. If this category of item generates unserviceables in a low volume, such as 25 units or less per year, the item can be considered as nonrecoverable. This type of consideration is given on an item-by-item basis through study of the whole spectrum of repair cost. It is also the Air Force policy to permit repair to the maximum extent possible at the point of generation. Very few exceptions exist in providing parts support to the lowest echelon. Items that cannot be restored to serviceable condition at the user level are shipped to the depot repair facility.

e. All items within the Air Force inventory have been classified into three categories of repair status. Those items coded as nonrecoverable are classified as "B" in the expendability-recoverability-reparable category code. For this category of item, no parts support has been procured to accomplish repair. The next category includes those items coded for field-level repair only. These items are considered as "F"-coded items in the expendability-recoverability-reparability category code. For this category of item, limited parts support has been procured. Repair will be accomplished at field level. If the repair cannot be performed at this level, the item will be condemned and disposed of. The major consideration in this category of item is that the skills required to perform repair are those that exist at field level in the performance of their maintenance response. No special test equipment or tools are required. The last category of item includes those coded "D" for depot-level repair. In this category, repair to the maximum extent possible will first be performed at field level. If the item cannot be made serviceable, it will then be shipped to the specialized repair activity.

f. The Air Force has three basic sources of repair which are repair by Air Force-owned facilities, inter service support agreements for work accomplished at other military service facilities, and by commercial contractors. For items requiring depot-level repair, the Air Force is the single largest user of commercial resources. Studies indicate that 45 percent of the component items repaired by the Air Force are repaired through commercial sources. A single-point repair policy is also used within the Air Force. This policy provides that, for items requiring depot-level repair, specialized repair facilities will be designated. It is the policy to schedule repair of all like items at a single repair facility. The only exception to this rule occurs when a "best-mix" consideration is used in programing repair by a combination of commercial resources and Air Force resources, or where the workload exceeds the capacity of any one repair

activity. To facilitate shipment of unserviceable items to the correct repair activity, reparable item movement control system data are distributed to all field activities through the stock number user directory. This directory advises the user of the correct shipping destination for each recoverable assembly.

g. The responsibility for managing the depot-level repair program is shared by two major functional areas. That portion of the repair program dealing with the determination of requirements is the responsibility of the Directorate of Materiel Management. In this area, the requirements and distribution item manager has the responsibility for determining repair needs. After the need has been determined, the requirement is forwarded to the industrial specialist in the production office located within the same organization as the item manager. It is the industrial specialist's responsibility to program the item for repair and monitor the results. The second major portion deals with the industrial facility. The industrial facility, which does not necessarily need to be located in the same geographical area as the item manager, processes the actual physical repair work. For items repaired by commercial sources, the industrial specialist within the Directorate of Materiel Management manages the repair through the contract facility. The foregoing organizational assignments are made to provide complete continuity and coordination between the buy program and the repair program. The item manager determines the repair requirements as well as the buy requirements.

h. The development of the actual repair requirement is accomplished in two phases. First, a quarterly projection is made which reflects the anticipated repair needs by quarter for the current quarter plus seven more quarters. The current quarter's needs are then negotiated with the organic facility. This process involves an assessment of funds and maintenance resources in light of the projected requirements. The agreed-upon quantity must be within the total maintenance capability (man-hours, skills, facilities, test equipment, etc.) and fully supportable with Director of Materiel Management funds and anticipated reparable assets.

i. The negotiated quantity forms the basis of the second phase, which is a biweekly statement of the Director of Materiel Management requirement. The computation starts with the quarterly negotiated quantity, deducts production to date, and divides that sum by the number of days remaining in the quarter. Thus, overproduction or underproduction decreases or increases the repair quantity needed from maintenance when the next computation is made.

j. The biweekly computation displays the requirement in precedences. Precedence One portrays Military Standard Requisitioning and Issue Procedures (MILSTRIP) Priority 1-3 back orders for the item, but never more than the prorated share of the negotiation for that period of time. Precedence Two is the prorated share of the negotiation minus the Precedence One value. In other words, Precedences One and Two, when added, equal the required production negotiated within maintenance. However, since the basis of the computation is a projection, assets sometimes fail to materialize or do so erratically. To allow flexibility and maintain a steady flow of reparable assets in to the shops, as buffer quantity of one-third of the quarter's negotiation is reflected as a requirement in Precedence Three. Precedence Three work is tapped only if Precedences One and Two are not available or cannot be produced.

k. This repair process is highly complex and involves the use of many data systems.

Section V
Maintenance Management in the Marine Corps

21-24. Introduction

a. HQ, Marine Corps, establishes programs, develops policies, and maintains centralized surveillance of the Marine Corps maintenance system. Except for ammunition, the Fleet Marine Forces are structured to be self-supporting in first through fourth echelon maintenance during combat, without the need for permanent facilities or outside assistance. When maintenance beyond an organization's capability is required, the equipment is evacuated to the next higher maintenance level.

b. The Marine Corps recognizes five echelons of maintenance. In practice, they are consolidated into three levels which relate to the DOD structure.

(1) Organizational (first and second echelon).

(2) Intermediate (third and fourth echelon).

(3) Depot (fifth echelon).

21-25. Relation to supply

a. Organizational, intermediate, and depot maintenance support the troops and their equipment, which are essential to combat readiness in both peace and war. Acquisition project officers located at HQ, Marine Corps, and item managers at the inventory control point closely coordinate support actions for major and secondary item repair or rebuild programs, provide input to master work schedules, forecast the availability of ready assets, and determine if unserviceable equipment is to be evacuated or disposed. The criteria used for the determination consider age, usage, and repair costs compared to acquisition costs.

b. The Marine Corps maintains two depot maintenance activities with the capability to repair or rebuild both major and secondary items. They are an integral part of the Marine Corps Logistics Base located at Al-

bany, GA and Barstow, CA. Ammunition maintenance is performed at Army and Navy storage sites. *c.* Fleet Marine Force combat service support elements perform authorized intermediate-level maintenance, and using organizations perform organizational-level maintenance. Equipment maintenance may be accomplished by one activity for and at the request of another activity or another military service under an interservice agreement. The Fleet Marine Forces have the maintenance capability, including trained personnel, to deploy and operate independently without reliance upon commercial sources, and generally make use of contract maintenance services on an exception basis. *d.* Effective maintenance at all levels reduces supply support funding requirements, extends requirement life spans, and places units in improved states of readiness for operational missions.

21-26. Depot maintenance

a. The two Maine Corps depot maintenance activities operate with industrial funds in accordance with approved charters, dated 1 July 1968, under the direction of DOD. The Marine Corps depot maintenance activities, mission is to:

(1) perform maintenance through depot-level by repair, rebuild, or overhaul.

(2) perform modification, fabrication, and assembly/disassembly.

(3) perform test, repair, and calibration of electrical or physical measurement test equipment.

(4) establish and implement quality control services.

(5) provide technical assistance for Fleet Marine Forces and Marine Corps Reserve units.

(6) perform engineering services, technical services, and develop maintenance rebuild standards.

(7) perform preparation for shipment of materiel which requires unique depot maintenance activity service.

(8) perform inspection, maintenance, and preservation of stocks in storage as appropriate.

(9) perform maintenance through depot-level and calibration support for other military services and DOD agencies through interservice support agreements.

(10) furnish the above-mentioned services or products to agencies of other Government departments or instrumentalities and for private parties or other agencies as are authorized by law

b. The depot maintenance activities are operationally governed by approved coordinated master work schedules for the repair, overhaul, or rebuild of major end items and components. HQ, Marine Corps cumulates total depot-level maintenance requirements. The requirements are then analyzed with respect to priorities by HQ, Marine Corps which funds depot maintenance activity capabilities along with commercial contracts and interservice agreements, and assigns the annual workload. Also, HQ, Marine Corps coordinates the execution of the overall depot-level maintenance program and is responsible for issuance of depot-level maintenance policy.

c. The inventory control point, located at the Marine Corps Logistics Base in Albany, GA, computes depot-level maintenance requirements for secondary depot reparable items, provides data to HQ, Marine Corps for principal end item depot-level maintenance requirements and schedules the movement of items under the direction of HQ, Marine Corps.

d. The depot maintenance activities execute the depot-level maintenance program assigned to them by HQ, Marine Corps. The depot maintenance activities possess the capability to perform depot maintenance on the majority of ground equipment within the Marine Corps inventory.

e. The depot maintenance activities use military and civilian personnel in both the management and production functions. Necessary technical skills and proficiency levels are developed and maintained through technical, apprentice, and on-the-job training programs.

21-27. Replacement and evacuation program

a. The purpose of the replacement and evacuation program is to insure materiel readiness sufficient for active and Reserve Marine Corps units to carry out their missions, nd to extend the life of the equipment by providing for cyclic replacement and evacuation for overhaul.

b. The primary source of serviceable equipment is the Marine Corps repair program. Conversely, the primary source of unserviceable equipment for induction into the repair program is the equipment retrograded under the replacement and evacuation program. Items selected for inclusion are missionessential items.

c. Replacement equipment requirements are submitted by field commanders. Upon approval by the Commandant of the Marine Corps, shipment of assets to meet replacement and evacuation requirements are directed by the inventory control point in accordance with the replacement and evacuation shipping schedule, which is developed in response to field requirements. Replaced equipment is retrograded to the repair site designated by the inventory control point.

21-28. Recoverable Items program

The recoverable items program is covered in some detail in the Marine Corps portion of chapter 17. It is designed to insure that reparble end items are either recovered or disposed of, dependent upon the condition

of the equipment and the asset position of the Marine Corps.

21-29. Operational readiness float

Operational readiness float items are critical end items designated by HQ, Marine Corps and held by a specified field maintenance unit to enhance the third/fourth echelon maintenance effort. Such an item is issued to using units as a replacement for an unserviceable item that cannot be repaired to meet the unit's required delivery date. Once issued, the item becomes the property of the using unit, and the unserviceable item is repaired/replaced and returned to stock for use as operational rediness float.

21-30. Secondary reparable item program

a. Repair is the primary source for replenishing assets of secondary reparable items. When unserviceable items require repair, serviceable items are made available on a direct exchange basis to minimize the downtime of the parent equipment. A supply of serviceable reparables, termed maintenance float, is normally located at designated combat service support elements where this direct exchange procedure is carried out. The unserviceables are sent to the maintenance float and promptly repaired at an activity due to a shortage of skills, facilities, or time are evacuated to the next higher maintenance echelon, and action is taken through supply channels to obtain a replacement.

b. Repair of secondary items is done at the lowest maintenance echelon authorized to make the needed repair. The capability of a maintenance facility to repair an unserviceable reparble secondary item is indicated by the fourth character of the source, maintenance, and recoverability code assigned to the specific part that failed.

Section VI
Maintenance and Supply Management in the Defense Logistics Agency

21-31. General

a. The Defense Logistics Agency (DLA) maintenance effort includes maintenance of mission materiel (essentially the maintenance of reparable items returned from customers) and maintenance of DOD-owned idle industrial plant equipment.

b. Maintenance of mission materiel is directed by the DLA commodity managers and is accomplished by commercial contractors, cross-service agreements with the military services, or DLA in-house facilities located at defense depots: Mechanicsburg, PA; Ogden, UT; Tracy, CA; and Defense Construction Supply Center, Columbus, OH; and Defense General Supply Center, Richmond, VA.

c. The repair or rebuild of DOD-owned industrial plant equipment is directed by the Defense Industrial Plant Equipment Center, Memphis, TN. The actual maintenance is accomplished by commercial contractors, Defense Depot, Mechanicsburg, PA; Defense Depot, Tracy, CA; Defense Construction Supply Center; and the Defense Industrial Plant Equipment Facility (a Government-owned, contractor-operated facility) at Atchison, KS.

Chapter 22
Property Disposal and the Handling of Excess and Surplus Materiel (Except Automatic Data Processing Equipment)

22-1. Introduction

a. Property disposal is the process of identifying, redistributing, transferring, donating, selling, abandoning, or destroying personal property. The property disposal program has become an enterprise of significance in military logistics for five principal reasons:

(1) Rapid technological developments render equipment and supporting stocks obsolete.

(2) Peacetime military missions wear out equipment.

(3) Future support requirements cannot be forecast with 100 percent accuracy, and excess stockages result.

(4) Program modifications cause inactivation of installations and force reductions in stocks of items, and modernization of inventories.

(5) Mission changes to support changes in United States (US) policies. *b.* The property disposal program is operated in accordance with authority contained in the Federal Property and Administrative Service Act of 1949, as amended (Public Law (PL) 81-152). This law, known as the Federal Property Act, established the General Services Administration (GSA) headed by the Administrator of General Services. Among other responsibilities, GSA has supervisory and directory responsibilities for the reutilization and disposal of Government property located in the United States and territories and possessions of the United States. Under the Federal Property Act, the executive agency that owns property located in foreign countries is responsible for disposing of it.

c. The Administrator of General Services has delegated the responsibility for disposal of excess and surplus Department of Defense (DOD) personal property except donations to the Secretary of Defense. Within DOD, the Defense Logistics Agency (DLA) has been designated the single item manager of the Personal Property Utilization and Disposal Program. DLA receives staff supervision from the Assistant Secretary of Defense (Manpower, Installations, and Logistics (ASD(MI&L)) who is provided with summaries of program progress and is kept apprised of significant developments within the program.

22-2. Responsibilities of the Defense Logistics Agency

a. DLA exercises responsibility for worldwide command and control of the utilization and disposal program and the precious metals recovery program. This responsibility includes establishing, coordinating, and supervising policy, program guidance, budgets and funding actions, career development for property disposal personnel, management reviews and analysis, and Inspector General (IG) surveillance. With respect to this mission, DLA prepares systems concepts and requirements and insures maximum capability between documentation, procedures, codes, and formats used in property disposal data systems.

b. DLA also develops, coordinates, and maintains the Defense Utilization and Disposal Manual, the Defense Demilitarization Manual, and the Defense Scrap Yard Handbook. These publications are continually revised to reflect current policy guidance; changes are coordinated with affected Federal and defense agencies and approved by the Office of ASD(MI&L) prior to publication. Interim instructions are used to implement policy changes until they are incorporated in the publications.

c. Property disposal activities are located at most sizable military installations in the United States and overseas. At installations where it is not economically feasible to operate a separate property disposal activity, excess property is either transported to a nearby activity or maintained in an onsite holding area. Host installations where property disposal activities are located provide day-to-day service support in accordance with interservice support agreements. Property disposal activities are established and disestablished by DLA in coordination with the military service concerned.

d. Generally, proceeds from the sale of surplus property and scrap are deposited to the US Treasury. In addition, generating activities receive all or a major part of proceeds from the sale of materiel such as industrial fund scrap, commissary byproducts, and contractor inventory. With the exception of contractor inventory, a portion of the proceeds is returned to the Treasury.

22-3. Defense Property Disposal Service (DPDS)

DPDS is a primary level field activity of DLA and is responsible for the dayto-day operation of the property disposal activities, the Defense Materiel Utilization Program, and the Defense Surplus Sales Program. DPDS exercises program management and staff supervision and manages the centralized portion of DOD Excess Property Utilization Program. Information on available excess property in selected Federal supply classes is passed to GSA for screening among Federal civil agencies. DPDS also acts as manager for the proceeds from sale of surplus property and scrap.

22-4. Defense Property Disposal Regions (DPDR)

In order to maintain adequate control over routine disposal matters and to coordinate disposal operations on a geographic basis five property disposal regions have been established. Regions are located in Columbus, OH, Memphis, TN, and Ogden, UT to support property disposal activities in the Continental United States (CONUS). For property generated in the European area, a property disposal region has been established in Wiesbaden, Germany; and for property located in the Pacific and Hawaii a region is situated in Honolulu. The DPDRs provide technical assistance to the Defense Property Disposal Office (DPDO) regarding utilization, merchandising, and sales and perform physical surveillance to insure proper performance. In addition, the regions prepare master production copies of invitations for bids (IFB), conduct sales, execute and administer sales contracts, and process disputes, protests and claims relative to sales and sale contracts. The oversea regions are responsible for disposal of Military Assistance Program property and maintenance of security trade controls on property sold.

22-5. Defense Property Disposal Offices

The DPDOs maintain physical custody and/or accountability for excess and surplus property and scrap materials. These offices are responsible for safeguarding and protecting property on their accounts, entering the property into the disposal accounting system, insuring that property moves through the activity from receipt to screening to sales within the prescribed time frames. With regard to sales, these offices prepare sales descriptions and arrange property into lots for inclusion in IFBs that are prepared by the disposal regions. In addition, the DPDOs are responsible for recovering precious metals from disposable materials when it is cost-effective to do so and to see that demilitarization is performed when required.

22-6. Responsibilities of the military services

The military services recommend changes to property disposal policy and procedures that affect their operations. These recommendations are submitted to DLA where they are coordinated with other defense components and, when required, Federal civil agencies. The military services provide data to DLA regarding disposal operations conducted by them and, when authorized, receive reimbursement for expenses incurred. The services normally perform demilitarization of ammunition, explosives, and other dangerous articles and manage the lumber and timber programs on military installations. The military services also perform several joint functions related to the property disposal program. The US Army Logistics Management Center, Fort Lee, VA conducts property disposal training for personnel of all services, and the Air Force manages the Military Aircraft Storage and Disposition Center which stores, maintains, and reclaims parts from aircraft owned by all services.

22-7 Interface with other Federal agencies

a. Certain aspects of the defense property disposal program are operated in coordination with other Federal agencies to insure that conflicts between agency policies do not develop.

b. The Department of State with DOD coordination, consummates bilateral disposal agreements with foreign countries in which excess property is disposed of, and guidance is solicited from US diplomatic mission in-country as required for sales of property. The US Munitions List promulgated by the Office of Munitions Control, Department of State serves as the basis for DOD demilitarization and security trade control policies.

c. The Department of Commerce is responsible for evaluating certain proposed disposal actions to determine market impact consequences and publishes synopses of sales of surplus property.

d. The Department of Justice provides antitrust clearances on proposed sales involving surplus property with an acquisition cost of $3 million or more and investigates instances of suspected collusion involving sales contracts and their prosecution, when appropriate.

e. The General Accounting Office (GAO) performs audits of program policy, operations, and efficiency and issues reports and recommendations for improvements and corrections of procedures.

22-8. Identification, reporting, and turn-in of excess property

a. When quantities of stock exceed authorized retention levels or other stockage criteria, the balance is identified as excess to the needs of the "owning organization." Each service or agency uses its own selective screening criteria based upon item cost, condition, and reparability to determine if the stock is needed to fulfill requirements anywhere in the services. Line items of high value are screened servicewide, while insignificant quantities of low-value items receive local area screening. If competent authority determines the stock to be no longer required by the controlling service or agency, it becomes identified as "declared service/ agency excess." Direction to turn this property in to a defense property disposal officer usually comes from the responsible inventory control point. Smaller quantities or less significant line items may be placed in disposal channels at lower echelons in the service supply systems.

b. When wholesale assets owned by a foreign country under terms of a cooperative logistics supply support agreement are determined to be excess to the needs of that country, the inventory control point identifies the materiel as "foreign equity" and directs shipment to the nearest disposal office. Likewise, special procedures insure that the current military assistance parent account is reimbursed with 80 percent of the proceeds from sales.

22-9. Defense Utilization Program

a. The DOD Utilization Program is administered by the Technical and Logistics Services Directorate, DLA. The program's major objective is the prevention of concurrent buying and selling. Utilization of materiel is first within DOD and then within the Federal Government, which takes precedence over donation, sales, abandonment, or destruction.

b. Property which is no longer needed by an inventory control point or by using organizations is transferred to the DPDO as declared excess property. Entry of receipts into the Integrated Disposal Management System constitutes acceptance of accountability, and commences the screening process.

22-10. Utilization screening

a. Several systems and programs are employed to promote the objective.

b. Initially, items with an acquisition of $100 ($50 for the Air Force and defense supply centers) or more in issuable condition are mechanically referred to the DOD integrated item managers. This screening provides highest priority to item managers to recoup items for which requirements have been generated since the materiel were excessed. This is called the front end screen.

c. Excess Personal Property Listings are mailed weekly by DPDS to DOD activities, foreign governments, and selected Federal civil agencies. The dollar floor for inclusion in the listing is $1,500. Activities which have a need for listed items request them through DPDS, which, in turn, directs the DPDOs to effect the transfers.

d. DPDS has the capability of providing a DOD customer, on an overnight basis, with information on the availability of any excess item identified by a national stock number (NSN) or Federal supply class. Using this system (known as interrogation requirement information system) an activity may indicate a requirement for specific condition codes, specific geographic locations, and for information on a one-time basis or for extended periods of time. DPDS provides a final asset screen, which makes a final referral to item managers, when the items are being prepared for sale. As in the front end screen, the dollar floor is $100 and the property must be in issuable condition.

e. DPDR property utilization specialists and DPDOs are responsible for promoting and effecting the reutilization of excess and surplus property prior to donation or sale.

f. Excess property which is not reutilized through DOD screening is passed to GSA for Federal civil agency utilization screening and donation screening. *g.* Reportable property is that which meets the minimum line item value and condition specified in screening criteria for reporting. Criteria vary by Federal supply class.

h. Some nonreportable property receives only local screening. Examples are scrap, perishable property, foreign-made items which were procured offshore, and limited use items, such as unit insignia and forms and publications unique to one service or activity. Items which fail to qualify under the criteria for reportable property because of low value or poor condition are also locally screened.

i. Peculiar arms, ammunition, and implements of war do not normally receive formal screening. Such items are usually controlled by an integrated manager who is completely familiar with the world requirements and assets of all Defense Department components. Additional screening of these items (which are often uneconomically reparable, condemned, or unsupportable with repair parts) is considered unnecessary. Other nonreportable items that receive intensive management and do not normally receive formal screening are radioactive materiel, thermal batteries, controlled substances, and other identified drugs.

j. Under unusual conditions, destruction of certain property may be ordered by proper authority, thus, precluding the screening process.

22-11. Donation program

a. Background.

(1) Government property in the United States which is not reutilized is designated "surplus" and may be donated to eligible activities. Donations are subordinate to reutilization by DOD or other Federal agencies but take precedence over other forms of disposal because continuing use by governmental units provides the greatest return on investment. Donation to authorized recipients tends to lighten the local tax borders, possibly reducing needs for Federal funds.

(2) The Federal Property and Administrative Services Act of 1949 (PL 81-152), as amended, authorizes the Administrator, GSA to allocate Federal surplus property for transfer to State agencies which, in turn, distribute such property to the State and local organizations for public and other purposes. The act also authorizes the allocation of Federal surplus property to

State agencies for distribution to civil preparedness organizations which are established pursuant to State law. A State agency in each State distributes the property. Donations under this authority constitute the largest segment of the donation program

(3) The principal activities eligible to obtain surplus property in addition to those identified above are: public airports, service educational activities (explained in more detail in a later paragraph), veterans' organizations, museums, and incorporated municipalities and public bodies under specified conditions.

b. Donations approval. Donations of surplus property for education, public health, and civil defense purposes are approved by GSA, when the property is located in the United States, Puerto Rico, American Samoa, Guam, the Trust Territories of the Pacific Islands, and the Virgin Islands. Each State has established an agency for distributing surplus property under the donation program. Representatives of eligible donees within the State deal with their agency for property they require. State agencies select surplus property and submit applications to GSA. To insure equity in surplus property distribution, allocations are made among the States by this department, based on a number of factors including demonstrated need, population, quantity of similar property already available, etc. Most State agencies operate on a selfsustaining basis. They recover costs incurred, generally by assessing a nominal service charge to the donees to cover handling, transportation costs, and overhead expenses.

c. Donations to service educational activities.

(1) Educational activities designated by the Secretary of Defense as being of special interest may receive donations of specified kinds of personal property from DOD components. These educational activities include military schools which provide high school and junior college instruction and military training units established at high schools and other educational institutions of comparable level which require all military students to be in uniform. They also include such national activities as military, naval, and maritime academies, the Boy Scouts, the Boys' Clubs of America, Girl Scouts, the Camp Fire Girls, the Naval Sea Cadet Corps, and the United Service Organizations, Inc., American Red Cross. Young Marines of the Marine Corps League, and Little League.

(2) The military services nominate schools or organizations in CONUS and the categories of property usable by and necessary for these educational activities to the ASD(MI&L). They inspect annually the property administration in these schools or organizations to insure compliance with donation agreements and to verify that the donated property is the correct type and quantity. National organizations such as the Boy Scouts and Boys' Clubs are exempt from these inspections. Actual administration of the donable surplus property program, as it applies to approved service educational activities, is a responsibility of DLA, which prescribes procedures, develops donation agreements, and processes requests to higher authority for deviations from formal agreements.

22-12. Sales program

Upon completion of the reutilization and donation cycles, property is available for disposition by sale. This phase of the disposal program is concerned with marketing, a major responsibility of DPDS, through its Directorate of Sales. This directorate provides technical guidance and assistance to the five DPDRs which are subordinate elements of DPDS. Each DPDR is responsible for sale of property within specified geographic areas.

22-13. Merchandising and sales contracting

a. The DPDRs are responsible for two major sales functions, merchandising and sales contracting. Their merchandising functions are:

(1) Determine types of sale-auction, sealed bid, spot bid, negotiated, and local site sales.

(2) Edit and compile property lists submitted by DPDOs.

(3) Advertise and publicize sales.

(4) Assist property disposal officers in preparation of their surplus property for sale through displaying, looting, or writing sales descriptions.

b. The sales contracting functions are:

(1) Conduct sealed bid, spot bid, auctions, and negotiated sales.

(2) Determine applicable sales terms and special conditions to be included in each sales catalog.

(3) Administer and process claims or disputes.

(4) Collect and process sale proceeds.

22-14. Destruction, abandonment, or donation to public bodies

As a last resort, if property is not reutilized, donated, or sold, it may be destroyed, abandoned, or donated to a public body. Techniques usually employed to destroy property include crushing or burying.

22-15. Contractor Inventory

Contractor inventory as defined in Defense Acquisition Regulation 24-101.1 which is in the possession of a contractor but no longer required in performance of his Government contracts. The property may be material, facility items, special tooling, special test equipment, or military property. It can become excess as the result of an engineering change, termination of the program,

or completion of the contract. The contractor is required to report this excess property to the cognizant Government contract administration office. Generally, the property is screened for reuse within DOD and then for reuse by other Federal agencies by GSA. Finally, there is 15-day donation screening period. If the property is not reutilized or donated, it is either sold by the contractor for the Government’s account, abandoned, or destroyed.

Chapter 23
Resources Management Program

Section I
Department of Automation

23-1. Introduction

a. The Federal Property and Administration Services Act of 1949, as amended (Public Law (PL) 89-306), Designated reutilization of Government-owned and leased automatic data processing (ADP) equipment as a separate and distinct reutilization program. The General Services Administration (GSA) is charged with the responsibility to prescribe policies and procedures for ADP equipment reutilization throughout the Federal Government. Reutilization of Federal property is also provided for by 40 USC 483 (Amendment to the Federal Property and Administrative Services Act).

b. The Department of Defense (DOD) regulations prescribe special screening and reporting channels consistent with Federal Government procedures. The Office of the Assistant Secretary of Defense (Comptroller) determines ADP equipment reutilization policy for DOD, with Director, Defense Logistics Agency (DLA) designated as executive agent for program implementation and maintenance. Procedures have been promulgated and are uniformly applicable to all DOD personnel involved in the acquisition, utilization, and/or disposition of ADP equipment, including defense contractors with contracts negotiated on the basis of cost data. The program provides the capability for manual or a completely automated screening of excess by the reporting service concurrent with DOD-wide screening, followed by GSA screening for other Federal agencies and their contractors/grantees. System integrity establishes proprietary rights of the reporting service. Donation screening is accomplished for a period of 21 days, immediately following the established excess screening cycle, by the Donation Division of GSA. Thereafter, any residual items are declared surplus and transferred to the Defense Property Disposal Service (DPDS) for sale as surplus property. Conversely, Federal agency excess is made available for DOD reutilization through the Defense Automatic Data Processing Resource Office, which is the DOD focal point for ADP equipment reutilization.

23-2. General

The Defense Automation Resources Office (DARO) was established to serve as the focal point for the operation of the DOD Automation Resources Management Program and the Automation Resources Management Systems (ARMS) to:

a. Reduce ADP equipment procurement and operating costs through sharing and reutilization.

b. Protect and increase equity accrued through leasing automation equipment, in the event the equipment is ultimately purchased by the Government.

c. Provide continuous screening of the excess inventory to determine if outstanding service/agency/contractor automation equipment requirements can be satisfied from the excess inventory.

d. Satisfy automatic automation equipment requirements for equipment in short supply and not otherwise available.

e. Provide automation equipment no longer required by DOD components to support other Federal agencies and programs; and, conversely, to make other Federal agency excess automation equipment available to satisfy DOD component requirements.

f. Provide information to the services/agencies as to potential for replacement of leased automation equipment currently in the active inventory by equipment reported as excess.

g. Promote sharing of excess computer time within DOD in lieu of procuring these services commercially.

23-3. Automation equipment

a. Automation equipment is defined as ADP components and the equipment created from them, regardless of use, size, capacity, or price, that are designed to be applied to the solution or processing of a single problem or application or a variety thereof. Whether general purpose or special purpose, Government-owned or leased automation equipment includes (but is not limited to):

(1) Digital, analog, or hybrid computer equipment.

(2) Auxiliary or accessorial equipment such as plotters, communications terminals, tape cleaners, tape testers, source data automation recording equipment (optical character recognition equipment, paper tape typewriters, magnetic tape cartridge typewriters, and other data acquisition devices, etc.) to be used in support of digital, analog, hybrid computer equipment, either cable-connected, wire-connected, or self-standing and whether selected or acquired with a computer, or separately.

(3) Punched card accounting machines used in conjunction with or independently of digital, analog, or hybrid computers.

(4) Automation supplies such as, but not limited to, electronic data processing tapes, canisters, reels, control panels and wires, cabinets, tape storage, and safes and rcks peculiar to automation.

b. New applications with associated nomenclature and acronyms are constantly being generated in the automation field. Representative automation equipment components, and in some cases, complete auto

mation systems appear in, and are procured for, test sets, programable calcumlators, programable billing machines, automated or automatic test sets, automatic network analyzers, data logging systems, numerical control systems, process controllers, teleprocessors, trainers, simulation systems, word processing coupler systems, interface systems, communication controllers, communication systems, communication switches, command and control systems, spectrum analyzers, weapon control systems, missile and trajectory measurement systems, space control systems, tank missile and aircraft guidance systems, and tactical systems. Regardless of nomenclature, automation equipment forming part of these and other systems are reportable for the purposes of DOD reutilization. A representative list of the most common reportable automation components and/or systems identified by noun name is provided in the Defense Automatic Data Processing Equipment Reutiliation Manual (DOD 7950.1M, September 1974, appendix 1).

23-4. Ownership categories of automation equipment

a. Government-owned. Automation equipment purchased by the Federal Government for use by a service/agency or contractor. A service/agency using Government-owned automation equipment may accomplish an intraservice/agency reutilization of automation equipment providing appropriate service/agency approval is acquired. All interservice/agency reutilization transfers require DARO approval. Contractors using Government-owned automation equipment are not authorized to transfer automation equipment from one contract to another without DARO approval except when a follow-on contract is issued that provides for specific items to be transferred as Government-furnished equipment to be used for the same purpose for which originally authorized. The reutilization of Government-owned excess automation equipment is not a procurement action and, therefore, is not subject to the laws and regulations governing new procurement.

b. Exchange/sale of automation equipment. This is property which is not excess to the needs of the owning agency but eligible for replacement which is exchanged or sold in order to apply the exchange allowance or proceeds of sale in whole or part as payment for the replacement of a similar (like) item. Excess automation equipment offered for exchange/sale by civil agencies through reutilization can be acquired by DOD components upon reimbursement of the exchange/sale price to the reporting civil agency.

c. Leased. Automation equipment acquired from the original equipment manufacturer or a third party company (other than the original equipment manufacturer under a rental or leased-to-purchase option contract). The reutilization of leased automation equipment is a procurement action and is, therefore, subject to the laws and regulations governing new procurement.

d. GSA Automation fund. A financing mechanism administered by GSA and which, subject to GSA approval, is available without fiscal year limitations for financing the procurement of automation equipment and related items by lease, purchase, or transfer. The acquisition of excess automation equipment owned by the GSA fund to satisfy approved requirements or replace installed leased equipment, is a reutilization action and not a procurement action. Therefore, the acquisition of fund automation equipment is not subject to the laws and regulations governing new procurement. This automation equipment is made available to DOD activities and defense contractors through the DARO. Activities acquiring automation fund property are required to execute a lease agreement with GSA. Responsibility rests with GSA to insure ADP fund property will be acceptable for maintenance.

23-5. Reporting of excess automation equipment

a. All automation equipment scheduled to be replaced by new acquisitions or no longer required for the purpose for which it was originally acquired is reported to DARO on a Standard Form 120, Report of Excess Personal Property, 150 days prior to its anticipated release data. DOD components or defense contractors are not authorized to retain excess automation equipment for the purpose of satisfying an unapproved or long-range potential requirement, to provide maintenance by redundancy, or cannibalization as a source for spare parts unless approved by the DARO. Such approval is granted when no higher priority requirement is identified through normal screening.

b. Upon receiving an excess report, the DARO assigns a DOD case number and establishes an automatic release date. An acknowledgment letter is forwarded to the reporting activity notifying them of the date of receipt of the excess report, DOD case number assigned, and the automatic release date.

c. Leased punched card accounting machines are not subject to automation equipment reutilization screening and, therefore, are not reportable.

23-6. Automation equipment resources screening

a. Screening for available automation equipment is accomplished using two separate methods, the "Excess Automation Equipment Bulletins" and the "Automation Resources Management System."

(1) Excess Automation Equipment Bulletin. All automation equipment reported to DARO is listed in the bulletin, which identifies the excess items, including

any features, options, etc; the reported condition of the property; whether it is Government-owned or -leased; the original acquisition cost; and, if the automation equipment is GSA-fund property, the cost to acquire. The bulletins are distributed to DOD services/agencies and eligible contractors upon written request to DARO. Frequency of publication is approximately twice weekly.

(2) Automation Resources Management System. In accordance with PL 96-511, known as the Paperwork Reduction Act, ARMS has been designated as the primary DOD system for automation technology information. The ARMS is an online system using data base management to provide for ad hoc queries on a data base containing three major categories of data; Government-owned/-leased automation equipment reported excess by DOD, other Federal agencies, and contractors, current DOD installed Government-owned and -leased automation equipment inventory, and automation equipment requirements. Standard reports are generated by the system concerning the potential for reported excess to replace leased equipment in the inventory, and for availability screening of excess to meet approved automation equipment requirements of the services, DOD agencies, and defense contractors. Availability screening is continuous, providing information automatically in the event excess is reported that will meet automation equipment requirements while the procurement process is underway. The system also provides for standard reports of statistics including dollar amounts and types of automation equipment reported and reutilized. Data are also available to promote resource sharing. Online access to the data base is available to all service/defense agency automation equipment focal points. Reports of available excess to meet approved automation requirements are initiated by submission of a requirement to DARO by DOD activities and defense contractors. All excess automation equipment reports received by DARO are automatically screened against the current DOD inventory for potential to replace leased equipment and the results are forwarded to the service/agency focal points for evaluation. Online updating of the data base is used for excess and requirement reports to provide timely information. The system also provides for automatically determining when reported excesses are not required by DOD and are eligible for reporting to the GSA for reutilization by other Federal agencies and programs.

b. The screening cycle for excess automation equipment consists of 60 days for DOD, 90 days for DOD and GSA, and 21 days for GSA donation for a total of 150 days of excess screening and 91 additional days of donation screening.

c. Excess leased automation equipment is returned to the vendor when it is no longer required, as a lease agreement is not extended to accommodate reutilization screening. That is why it is especially important to report leased automation equipment 150 days prior to the anticipated release date.

23-7. Acquisition of excess automation equipment

a. When acquiring excess automation equipment, it is necessary for the requesting activity to place a hold on the desired equipment with DARO and initiate an appropriate requisition to DARO through the approval channels designated by the respective service/ agency directives. DOD contractors acquire excess automation equipment in the same manner except that the signature approval of the administrative contracting officer, or a designated representative, is required, and the requisition is forwarded to DARO in accordance with the Federal Acquisition Regulation (FAR).

b. Since excess reutilization is an integral part of automation equipment acquisition, before a new action is initiated, it is mandatory that the excess automation inventory be screened to determine if excess equipment is available to satisfy requirements. This is accomplished by submitting a Request for Screening (DD Form 1851) to DARO for inclusion in the ARMS requirements file. When desired equipment is available, the requesting activity is advised of the DOD case number and the point of contact at the reporting activity. Upon the receipt of the order, the requesting activity requisitions the excess or annotates the procurement file to indicate why acceptance of the equipment was not in the best interest of the Government. If the desired equipment is not available upon initial screening, a Certificate of Nonavailability is provided; however, the request remains in the ARMS file until the date the equipment is to be installed. If excess automation equipment is subsequently available to satisfy the requirement, an offer is made.

23-8. Disposition of excess automation equipment

a. Government-owned automation equipment. Upon receipt of an approved transfer document from DARO, the holding activity effects transfer as soon as the equipment is taken offline. The holding activity has the responsibility to properly prepare the equipment for shipment in the most economical manner possible to insure good condition upon arrival at its destination. The releasing and acquiring activities coordinate the details of the transfer, with the acquiring activity having the responsibility for all packing, crating, handling, and transportation costs. Automation equipment that survives excess and donation screening is transferred to DPDS for sale as surplus property.

b. Leased automation equipment. Upon receipt of DARO-approved transfer document, the holding activity immediately notifies the vendor or his local representative in writing of the model number, serial number, and acquiring activity. If approved transfer documents are not received by the holding activity by the time the leased automation equipment is taken offline, the equipment is returned to the vendor.

23-9. Automation resource statistical reporting

a. DARO prepares consolidated transaction reports for distribution to DOD and GSA of DOD intraservice, DOD interservice, and inter-Federal Agency reutilization.

b. Further, DARO forwards a report of automation equipment intraservice transfers to the DOD components. This report reflects transfers between activities of the parent service/agency and also between contracts funded by them. These data are accumulated from copies of transfer documents provided to the DARO.

c. Additional program analysis, projection, and statistical data are provided as requested by DOD. Information is also provided authorized recipients in accordance with the Freedom of Information Act.

Section II
Army Automation Materiel Management Systems

23-10. Introduction

The reorganization of the Office of the Assistant Vice Chief of Staff of the Army in 1967 resulted in the abolishment of the Office for Army Information and Data Systems, and the establishment of the Management Information System Directorate. In 1977, the Vice Chief of Staff of the Army approved the replacement of the Management Information System Directorate and the establishment of the Army Automation Directorate. The mission of the Army Automation Directorate is to manage Army automation by establishing automation policy; developing comprehensive, integrated automation plans; exercising broad resource management responsibilities; and evaluating the execution of plans and programs to employ automation technology within the Army. The Assistant Chief of Staff for Automation and Communications coordinates and integrates Army automation efforts among proponents in the Army Staff and the major Army commands. It supervises Army automation activities involving computer-based systems. Activities involved are the US Army Computer Systems Command (CSC), the United States Army Management Systems Support Agency, and the United States Army Computer Systems Support and Evaluation Agency.
23-4

23-11. Army automated logistical systems

a. Direct Support Unit Standard Supply System (S4). DS4 is the Department of the Army (DA) standard multicommand automated supply system for management of repair parts (class IX), general supplies (classes II and IV), packaged petroleum products (class *III*), and medical supplies (class V*III*) at the direct support level of supply. DS4 automates, to the maximum extent feasible, the routine management and information processes inherent in direct support level supply management and stock control functions. DS4 replaced nondivisional direct support unit/general support unit or NCR500 system and the Division Logistics System class IX application. DS4 will operate on the Decentralized Automated Service Support System (DAS3) minicomputer. Significant DS4 features from the user's view include automation of the interchangeability and substitute process, capability to process manufacturers' part numbers, capability to satisfy customers' requests from alternate forward direct support units automatically, and automated processing of customer followups.

b. The Troop Issue Subsistence System.

(1) This system replaced and enhanced functions performed by the Singer Firden 0488 Commissary System. The US Army Forces Command (FORSCOM) is responsible for the development of the Troop Issue Subsistence System. It is a command-unique class C system.

(2) The Troop Issue Subsistence System interfaces with the Standard Army Intermediate Level Supply System (SAILS)/Base Operating Information System and performs the functions of computing dining facility requirements, the creation of requisitions from troop issue subsistence accounting and inventory control.

c. The Decentralized Automated Service Support System (DAS3). This system is a new multicommand computer system and replaces the National Cash Register 500 which was used by nondivsional direct and general support units and the combat service support (CS3) IBM 360 series computer. Systems include the functional areas of supply and maintenance which are the Direct Support Standard Supply System and the Standard Army Maintenance System, respectively. The DAS3 is the target hardware for DS4, SPBS, and SAMS.

d. The Automated System for Army Commissaries.

(1) This was obtained from V Corps, US Army, Europe on 2 February 1976 to support the implementation of centralized management of Army commissaries by US Army Troop Support Agency, Fort Lee, VA. Upon successful completion of a prototype evaluation test at the Southeast Field Office, Fort Lee, VA and the European Field Office, Zweibruecken, Germany in August 1976, the system was extended. Other field office locations now include: Northeastern-Fort Meade,

MD; Midwestern-Fort Sam Houston, TX; and Western/Pacific-Fort Lewis, WA. Functions being centralized at regional field offices include: stock fund management, budgeting, pricing, requisitioning, ordering, inventory control, and accountability.

(2) System extension was computed in September 1976. Replenishment requisitions produced by the Automated System for Army Commissaries 360E+ are routed directly to the Brand Name System at Fort Lee, VA and Defense Personnel Support Center Office located at Philadelphia, PA and Alameda, CA.

e. The Standard Army Intermediate Level Supply System (SAILS-ABX). This system is a multicommand, ADP system accomplishing supply and related financial management between the Continental United States (CONUS) wholesale (United States Army Materiel Development and Readiness Command (DARCOM)/GSA/ DLA) and the direct support level systems (Division Logistics System, CS3, Direct Support Unit/ General Support Unit and Direct Support Unit Standard Supply System). SAILS performs various supply and financial management functions at theater, corps, and installation level.

f. Fourth Transportation Brigade (United States Army, Europe) System. Department of the Army (DA) Movements Management System is a theater transportation management and control system which will provide, during peacetime and wartime, an integrated capability to manage cargo, mode, passenger, movement planning, and performance functions. The system is being developed on a modular basis; currently the first phase of the cargo module (Visibility of Intransit Cargo I) has been completed by the 4th Transportation Brigade in Europe. This establishes the inter-theater cargo movement portion of the data base of DA Movements Management System and allows container shipments to be monitored from time of vessel arrival until the empty van is returned to the carrier/owner, verifies contractor charges, provides for identification of overcharges, and maintains statistical data for General Accounting Office (GAO) review. Phases II and *III* of Visibility of Intransit Cargo and the remaining DA Movements Management System modules are to be developed by the United States Army Logistics Center.

g. The Standard Army Maintenance System. This system is one of the major subsystems of the Standard Army Logistics System which provides for the integration of maintenance operations and maintenance management from the organizational level (retail) through the materiel readiness command (MRC) level (wholesale) up to and including HQDA level (national). The Standard Army Maintenance System concept, as developed in the Detailed Functional Systems Requirement, was approved by the Assistant Secretary of the Army (Installation, Logistics, and financial Management) on 25 July 1979.

h. The Maintenance Reporting and Management System. This system is a multicommand, automated system incorporated into the CS3 in the form of two subsystems. The subsystems, Maintenance Control System and Modification Work Order, both apply to all direct support/ general support maintenance activities operating in the CS3 environment.

i. The Asset Control System. This system merges unit equipment asset data with unit authorization and catalog data to provide a major command level system for equipment redistribution and unit readiness profiles. It also interfaces with the standard Property Book System to provide authorization updates to a unit’s property book.

j. The Standard Property Book System (SPBS). SPBS is being developed as the DA standard multicommand automated property book system for replacement of division logistics property book in active and Reserve divisions and separate brigades. SPBS will also operate in nondivisional and installation environments. SPBS interfaces with the Continuing Balance System-Expanded to provide Army visibility of major items. In the divisional environment, SPBS will operate on the DAS3 minicomputer.

k. US Army, Europe Support District System. The command assumed responsibility for development and maintenance of the US Army, Europe Support District System on 1 October 1973. The system is used to provide area administrative and logistical service support of all US Army personnel and dependents through West Germany, Italy, and the BENELUX countries. The system operates on IBM 1401s at eight widely dispersed locations. The US Army Computer Systems Command Support Group, Europe maintains the system.

l. The DA Standard Port System. The DA Standard Port System is a water terminal automated documentation system which provides users of the Defense Transportation System with machine-produced documentation for receipt planning, inventory accounting, and movement and control of cargo. The system performs water terminal cargo documentation functions (import and export), maintains history files on all cargo, and provides an automated means of developing financial data for contract and interservice support. It meets input/output requirements stipulated in DOD Regulation 4500.32R (MILSTAMP).

m. The Standard Army Ammunition System (SAAS). SAAS is an Army standard logistics system to provide information for the management of conventional ammunition including guided missiles and large rockets. SAAS is processed at three levels:

(1) SAAS level 1 is processed at the theater or major command level to provide overall visibility and control of assets. It also provides the single source for

all theater requisitions and asset status reported to the DARCOM wholesale system.

(2) SAAS level 3 is processed at the corps materiel management center to provide stock control capabilities. It includes requirements computation, intransit visibility, and control of ammunition at individual storage sites.

(3) SAAS level 4 is processed at ammunition supply points and other class V storage sites. It accommodates basic receipt, storage, and issue functions, and prepares interface reports which support data at the SAAS levels 1 and 3.

n. Standard Depot System (SDS).

(1) The AMC SDS evolved from the implementation and modification of the System-wide Project for Electronic Equipment at Depots (SPEED) and SystemWide Project for Electronic Equipment at Depots-Extended (SPEEDEX). The purpose of SDS is to provide a standard automated system in support of AMC depot operations.

(2) SDS consists of 17 applications which can be broadly categorized into three basic subsystems. These three subsystems are: Materiel Management System, Production and Equipment Management System, and Financial and Personnel Management System. The applications within each of these subsystems employ remote processing terminals positioned in functional areas to enable users to interact with the computer data base in conducting day-to-day operations. This immediate access storage provides the capability to retrieve a wide range of management information and to maintain accurate and up-to-date data within the data base. These subsystems and related applications cover the entire scope of depot functions to include: processing of receipts, requisitions, denials, adjustments, preservation packing, storing, inventory, kitting, workload planning, engineering capability data, quality assurance, modification work orders, financial management, and personnel actions.

(3) The Logistics System Support Activity (LSSA) is the central system design activity for SDS.

o. Commodity Command Standard System (CCSS).

(1) In 1962, AMC was assigned responsibility for the total wholesale logistics operation. At that time, the mission was accomplished through a variety of nonstandard automated systems. In 1971, the first phase of CCSS was prototyped and, thereafter, successfully implemented at various commodity commands. By 1977, a functional wholesale logistics system, operating on standard computer software and standard language, had become operational.

(2) CCSS applications provide automated support for the DARCOM commands in the functional areas of provisioning, cataloging, security assistance, supply management, procurement and production, financial management, maintenance, stock control, traffic management, and quality. Automated interfaces with depot operations and other Army, DOD, and Government systems and support for materiel development operations are also provided by CCSS.

(3) CCSS provides certain features which are common to all functional areas. Normal and specialized inquiry systems, based on the needs of the managers, have been developed to allow access to CCSS master files and the use of cathode-ray tube (CRT). With the vast amount of data stored in its files, CCSS offers total item data to all levels of management. CCSS also features standardization of data elements and extensive data communications through the automatic digital network (AUTODIN) which allows for movement of data and interfaces with other systems. The standard software and data base meet the requirements for standard management reporting and the use of the integrated data base concept allows all functional areas the use of data maintained in the files.

(4) The Automated Logistics Management Systems Activity (ALMSA) is the central system design activity for CCSS with the Logistics Systems Review Committee (LSRC) providing functional guidance and system management, and the functional coordinating groups (FCG) providing subject-matter expertise and system design assistance.

23-12. Financial systems

a. The Standard Army Financial Inventory Accounting and Reporting System (STARFIARS). STARFIARS is the Army’s standard multicommand system designed to accomplish financial inventory accounting at the retail level for post, camp, and station. STARFIARS interfaces with the SAILS and the Standard Finance System (STANFINS).

b. The Standard Finance System. STANFINS is the Army’s standard installation-level system for financial management, accounting, and reporting. It provides Army installations with a single financial system having the capability to interface with STARFIARS and other standard systems.

Section III
Navy Automated Material Management Systems

23-13. Introduction

a. In 1961, the old Bureau of Supplies and Accounts envisioned the US Navy Supply System operating in a "real-time mode." In order to achieve the goal, the bureau, now redesignated the Naval Supply Systems Command, adopted a three-phase evolutionary approach: To develop a uniform automated system; to provide ADP capability for the uniform system; and to

implement a real-time system responsive to defense needs and compatible with the specialized requirements of the Navy.

b. In pursuit of this program, the development of the Uniform Automated Data Processing System for Stock Points commenced in 1961. The second step was the development of an extension to inventory control points (ICP). The last project in the program of automation was the Uniform Automated Data Processing System for Shipboard Supply Management.

c. Once these systems are totally implemented, segments one and two of the three-phased program will have been achieved. The next phase in this evolutionary approach is the centralization of such functions as billing and accounting. Stock point data processing systems are being reoriented toward a sophisticated warehousing and shipment planning system including specialized procedures for the unique support requirements of each activity.

d. To bring uniformity to the entire Navy supply system, an interface between the operating systems of the Naval Supply Systems Command and those of the other Navy systems commands had to be established. The key link between all of these systems is a standard method of communication. That communications link is provided by various standard procedures, such the Military Standard Requisitioning and Issue Procedures (MILSTRIP), the Military Standard Transaction Reporting and Accounting Procedures (MILSTRAP), and others. These prescribe standard data elements and formats which allow the various data processing systems to communicate directly with each other.

e. Such are the philosophy and the goals of the Naval Supply Systems Command’s drive toward a fully automated and integrated Navy supply system.

23-14. Program development

The Uniform Automated Data Processing System for Stock Points was the first to use the central maintenance concept. In 1964, the Data Systems Support Office-now merged with the Fleet Material Support Office, Mechanicsburg, PAwas established and given responsibility for centralized program development and maintenance for both the stock point system and the ICP system. In a 1965 consolidation and realignment, the Naval Supply Systems Command assigned to the Fleet Material Support Office the responsibility for maintaining the entire library of the Uniform Automated Data Processing System. Essentially, the Naval Supply Systems Command made decisions which affected the operating systems through its Systems Design Division. When approved, the changes were turned over to the Fleet Material Support Office for the necessary analysis, programing, and implementation. In 1964, the Fleet Assistance Groups. Atlantic and Pacific were established to develop and maintain the supply and accounting portions of the Uniform Automated Data Processing System for Shipboard Supply Management. This is done under the direction of the Naval Supply Systems Command. These organizations proved that the central maintenance of programs operationally used in widespread geographical areas is not only a theoretical possibility but a realistic and practical method to maintain a data processing system. To update and strengthen this ADP management concept, and to consolidate the management, implementation, and maintenance of fleet-installed nontactical ADP programs, the Chief of Naval Operations on 1 October 1978 combined the Fleet Assistance Groups, Atlantic and Pacific with the Ships and Aviation 3-M Departments and 3-M system support resources of the ADP department of the Navy Manpower and Material Analysis Centers, Atlantic and Pacific to form the Navy Maintenance and Supply Systems Office (NAVMASSO) and NAVMASSO DETPAC.

23-15. ADP equipment uniformity

Another common feature of the three systems is the use of the same basic equipment at each of the user activities within the system. The Uniform Automated Data Processing System for Stock Points uses the Burroughs 3500; the same system, in an ICP application, uses the UNIVAC 490-494 computer. The Uniform Automated Data Processing System for Shipboard Supply Management makes use of the UNIVAC 1500. Commonality of equipment insures that programs written by the central maintenance organization can be used by all activities. It also enables system revisions to be implemented simultaneously.

23-16. Stock points

a. The development of the Uniform Automated Data Processing for Stock Points commenced in 1961 with system design and competitive equipment selections. Following the selection, analysis and programing were initiated. A pilot installation was made at the Naval Supply Depot, Newport, R1, in 1963. Since then, the system has been expanded and implemented in other activities. All major supply, financial, and fiscal applications are installed at the naval supply centers in Charleston, SC; Oakland and San Diego, CA; Norfolk, VA; Pearl Harbors HI; and Puget Sound, WA.

b. Recently, the Naval Supply Systems Command completed an upgrade of the Uniform Automated Data Processing System for Stock Points. Original equipment was replaced with technologically advanced computers and related hardware, and a simpler, more modern computer programing language was adopted.

c. The system for stock points has been expanded to include other appropriate activities such as industrial

naval air stations, level II naval air stations, and naval shipyards and is planned to be implemented at naval Reserve air stations. Extension to these smaller activities becomes economically feasible for satelliting them on larger host activities using computer time-sharing techniques.

23-17. Expansion capability

a. The Uniform Automated Data Processing System for Stock Points is an integrated system that uses a highspeed electronic digital computer in conjunction with random access, mass storage devices, and remote terminal equipment that has online interrogation capability into the central computer. The equipment is modular to enable expansion or contraction to meet the requirements of each activity and to enable each activity to use standard system programs regardless of the volume of business or the workload "mix."

b. Primary functions of the Uniform Automated Data Processing System for Stock Points are requisition processing, receipt processing, and financial inventory control. To accomplish these functions, many other tasks, some of which are large and complex, must be performed. File maintenance, status reporting, management reports, allotment and cost accounting, and payroll are illustrative of such tasks.

c. With the Uniform Automated Data Processing System for Stock Points, the Naval Supply Systems Command has learned many lessons in the benefits and problems of large-scale random access systems. Numbered among the benefits are the abilities to process actions by priority; to integrate inventory, financial, and fiscal processing; and to accomplish both immediate and remote interrogation of the files.

23-18. Advantages of the Uniform Automated Data Processing System for Stock Points

a. Implementation of the Uniform Automated Data Processing System was imperative for successful fulfillment of both the immediate mission and the long-range objectives of Navy stock points.

b. Stock points vary as to range of items carried, level of items carried, level of supply support, areas of support, volume of transactions, physical facilities, and the basic procedures required to receive, store, account for, issue, and ship material. However, their missions and accounting responsibilities are similar enough to lend themselves to uniform automation.

c. The system essentially is nothing other than a new way of doing an old job; i.e., shipping in answer to requests for supplies, replenishing stocks, and keeping financial inventory records. However, its advantages lie in the fact that:

(1) Many separate supply operations of a stock point are funnelled into a single data processing system.

(2) Many jobs previously handled separately are now performed simultaneously.

(3) The system can be adapted to fit any size stock point.

d. It satisfies the myriad of requirements placed upon each stock point in an expeditious and economical manner through rapid computer operations. Each operating center:

(1) Processes incoming requisitions, material receipt notices, and requests for information.

(2) Notifies the various warehouses what items to ship, where to find them, and where to send them.

(3) Keeps accounting and inventory records.

(4) Assembles and prints management reports.

(5) Points out trouble spots warranting attention.

e. All of the functions of each stock point are encompassed and standardized. Management control insures successful accomplishment of the mission. This includes:

(1) Inventory control.

(2) Financial inventory control.

(3) Material movement control.

(4) Stores accounting.

(5) Cost, allotment, and appropriation accounting.

(6) Payroll accounting.

f. Both stock points and the Navy as a whole have reaped many benefits from implementation of this uniform system. For example:

(1) *Economy.* Large savings accrue by use of one central agency for system design and maintenance. Personnel requirements are reduced. Increased responsiveness leads to lower levels for pipeline and safety stocks.

(2) *Centralized control and uniformity.* This makes possible a faster response to DOD guidance. Compatibility between the Navy computer and communication systems and those of sister services and DLA can be maintained. Better management control and fidelity in policy implementation can be achieved. The multiplicity of like programs and equipment insures a built-in backup capability.

(3) *Better customer service.* Processing is fast enough to supply an end product or service while it is still useful or needed (called real-time processing). Remote access equipment is stationed in convenient locations. The status of material requested by a customer can be almost immediately determined.

g. In the final analysis, the goal of every logistics system is more efficient service to a customer, such as immediate processing of bearer requisitions, the completing of today’s work today, and the posting of receipts to immediately reflect material on station or intransit to warehouses, thus, permitting issue of newly received stock for high-priority requirements.

23-19. Inventory control points

a. The second cornerstone in the automated supply system is the Uniform Automated Data Processing System for Inventory Control Points. Each ICP is the worldwide material manager for most assigned items. In the past, these managers have been rather autonomous, which resulted in divergent procedures and capabilities. This lack of standardization made life unduly complex for the customer, but uniformity has helped to rectify the situation. Some of the new methods are geared for improvement and standardization of internal procedures in use at ICPs. Others are aimed at standardizing the requirements placed on stock points for the issue and receiving of material and the reporting of transactions. The uniform system provides for:

(1) The stockage of items at those points where future demand is most likely to occur. This helps to satisfy the customer, while minimizing the number of activities stocking any particular item.

(2) Daily transaction reporting and stock status reconciliation.

(3) "Real-time" processing of requisitions.

(4) Rapid response by the ICPs to requisitions for items not in stock, resulting in "fill, kill, or pass" actions.

(5) Central maintenance of back orders.

b. Some of the features which enable the ICP to carry out these functions are:

(1) Random access to master record files containing a maximum amount of supply, technical, and configuration data.

(2) Remote interrogation and updating of files.

(3) Use of advanced mathematical decision rules for daily determination of stock replenishment requirements.

(4) A weapon systems file that relates weapons to the parts required for their support. Decisions are responsive to requirements of the weapon systems managers.

c. The system has now progressed to the point where subsystems for requisition processing, item transaction reporting, supply demand review, purchase, stratification, disposal, setting of levels, accrual accounting, weapon system management, and cataloging and publications are implemented at the Aviation Supply Office and the Ships Parts Control Center. Other subsystems are being implemented when proven reliable.

23-20. Current ICP practices

a. Today’s supply management procedures would be impossible without the extensive use of third-generation computers, rapid communications, and highcapacity random access storage devices. The advent of the computer made possible several improvements in supply management over the earlier punched card equipment. The early benefits were based on the speed and memory capacity of the electronic computer. It became possible to use stored programs to make better checks and comparisons during the preparation of stock status reports and the processing of requisitions. The internal memory capacity and calculation speed also made possible the computation of requirements in a more precise and detailed fashion.

b. It became possible to increase the frequency of record update and maintain currency of records. However, limitations existed as long as sequential tape processors were used. Reports could only be generated efficiently when an adequate "batch" of changes had accumulated. Requirements computation and the printing of stock status reports had to be cyclical processes. Similarly, requisitions had to be batched and presorted for efficient sequential processing.

c. The electronic computers of the late 1950s allowed more frequent update of Navy records and improved the validity and timeliness of stock status reports and requirements computations. However, they lacked the capabilities required for the implementation of an integrated communications-computer system designed and operated to provide nearly instantaneous response to a variety of stimuli. It was not until computer speeds increased by another order of magnitude and highspeed, high-capacity, random access memory devices became economically feasible that "real-time" operations were possible. Other requirements were for a large number of flexible, versatile input-output channels and for exceedingly sophisticated software executive routines, programed to control these input-output devices and provide for the concurrent operation of several programs. These executive routines provide interrupt capability for instant response to inquiries or requisitions without operator intervention or significant disruption of the more routine programs being processed.

d. Today’s ICP supply management function is geared to this capability. Worldwide assets and transactions are reported daily by way of the AUTODIN. Requisitions can be transmitted directly into the ADP system at the ICP from any network terminal and processed as received. The required action and status documents are prepared automatically and retransmitted within minutes. Asset records are updated, and any item having an asset change can be subjected to a review of requirements daily, or even more frequently, if required. The random access capability, and the input-output flexibility and capacity of the computer systems allow interrogation of nearly any data pertaining to an item from remote teletypewriter units located in the working spaces of the inventory manager and others. Most responses are virtually instantaneous. Stock status reports can be requested from remote units when

needed. Currently, data will be received within 24 hours or less.

e. Many of the advantages of such a system are obvious. Virtually all available facts about an item including detailed asset location and condition, supply performance data over a protracted period, and basic source and technical information can be stored. Nearly instantaneous retrieval can be made. Expanded capacity has allowed almost the entire range of items managed to be included. This data bank is kept current within time frames unachievable previously since no batching process is required. Data files of all types can be updated as transactions and changes are reported or occur due to the random access features of the system.

f. This data bank and computer capability allow very sophisticated techniques to be used for requirements determination. Complex management decision rules for setting safety levels and reorder points as well as order quantities are used. The random variable nature of demand and leadtime is explicitly incorporated in the determination of optimal management policies for items which have adequately rapid turnover. Decision rules assist in achieving maximum system effectiveness within authorized funding levels. These rules are used to forecast the minimum quantity of each item needed to prevent a zero balance stock condition, subject to a specified degree of risk. This risk depends upon each item's characteristics such as unit cost, demand history, procurement leadtime, and system constraints. However, slowmoving items continue to defy rational logic.

g. Requirements computations may be made whenever a change in assets or requirements signals a possible imbalance in supply and demand for an item. The speed and memory capacity of the modern data processor makes it possible to consider many more of the interrelated pieces of data concerning an item than was previously possible. These data may be manipulated to arrive at such esoteric things as predictions for time-phased future requirements, and optimal levels and order quantities. The calculations required to forecast and set levels on reparable assemblies and components are particularly complicated. Such characteristics as repair leadtime and repair cost must be considered in addition to procurement leadtime and price. The requirements computation for major end items, which may involve program-based demand forecasts, mobilization requirements, demand rate trends, attrition rates, repair programs, and other such complications can be computed rapidly by the data processor using complex formulas which take into account data and techniques not manually usable. The computer is capable of performing in seconds what would require many man-days of manual effort, using better techniques and achieving more accurate results at the same time.

h. Automated documents reduce administrative leadtime for procurement. Small purchase documents suitable for direct submission to manufacturers are automatically produced as a byproduct of supply demand reviews. For larger procurements, automated documents suitable for enclosure in requests for quotation reduce the time required for manual review and bid preparation. Concurrent statistical extractions and automated reports provide all levels of management with timely viable data for better problem identification and decisionmaking.

i. The improved currency and accuracy of worldwide asset data and the increased sensitivity of the requirements determination process have enabled the ICPs to be responsive to demands for the slower moving consumables and reparables which constitute the major portion of its responsibility today.

j. Computers have, through accuracy and speed, enabled automation of and increased the system capability for simpler and less complex materiel management decisions. Computer capability has allowed people to be shifted into more complex areas of weapon systems management. This shift would have otherwise been much more difficult to accomplish because of increasing personnel costs and tightening of personnel ceiling restrictions.

k. The transfer of items with high usage rates and relatively few special problems to DLA has been more than offset by the addition of complex reparable and consumable items used in programs like POLARIS and other weapons systems. Acceptable supply system responsiveness would have been virtually impossible to maintain in the face of austere investment levels and the increasing complexity of the mix of items managed without the aid of highspeed, random access computer systems, and the sophisticated management techniques they make possible.

23-21. Shipboard uniform automated data processing

a. This newest of the three uniform systems provides tenders, repair ships, carriers, and Marine Air Groups with completely automated supply and accounting systems. It forms an integral part of the shipboard information system that is essential to the collection of maintenance data, as directed by the Chief of Naval Operations under the Standard Navy Maintenance and Material Management System. Its objective is the achievement of effective control over shipboard inventory and financial management. Some characteristics are:

(1) Input, output, and data files are standardized, and validation controls insure correctness of data.

(2) Like the Uniform Automated Data Processing System for Stock Points and ICPs, a master stock record is established to maintain all pertinent data for an item.

(3) The supply and accounting functions have been fully integrated to insure that financial records and control are in harmony with the inventory records.

(4) Improved management reports indicate supply performance and trouble areas for management attention.

b. The shipboard nontactical ADP equipment (AN/UYK-5 computer) is second generation, modular, sequential processing, using tape or cards and is obsolete. The Shipboard Nontactical Automatic Data Processing Program sponsored by the Chief of Naval Operations is dedicated to upgrading (Shipboard Nontactical Automatic Data Processing Program I, Phase 1) and ultimately replacing (Shipboard Nontactical Automatic Data Processing Program I, Phase II) the AN/UYK-5 computer with third-,/fourth-generation ADP capability. Shipboard Nontactical Automatic Data Processing Program II is a parallel effort being developed to provide nontactical ADP capability to selected smaller ships. The hardware will be ruggedized to insure maximum reliability during operation in a shipboard environment. Equipment enhancement/repalcement is expected to begin in January 1979 and continue through fiscal year 1985.

23-22. Current afloat activities

Since World War II, and particularly since Korea, the complexity of the Navy supply job afloat has increased in proportion to the installation of advanced shipboard weapons. The inventories to support these weapons have expanded, and today the supply officer of an aircraft carrier manages approximately 85,000 line items of material. A conventional tender or repair ship carries 45,000 to 65,000 line items. A fleet ballistic missile submarine tender carries in excess of 80,000 line items. In addition, the value of the inventories has increased sharply. This general situation has pyramided the shipboard workload of the supply department by:

a. Requiring that large quantities of clerical information be processed.

b. Increasing the tempo and importance of inventory management because of its impact on operational readiness.

c. Requiring development of more comprehensive and timely financial reports needed to maintain maximum operational readiness under austere budgets. Supply department staffing has not kept pace with the overall complexity and workload increases. The need for data processing equipment to cope with the increased workload, in both the mobile support forces and aboard aircraft carriers, was first recognized in 1958. Now, with automation all transaction and changes e.g., stock; number unit of issue and price) can be effectively and accurately posted to the stock records a task which would otherwise comprise a highly significant workload.

23-23. Navy International Logistics Program

a. International logistics plays a major role in the US Navy, touching on the entire logistics system in one form or another. Collectively, foreign military sales and grant aid logistics support are a high-dollar value business with myriad procurement and work requests. Four hundred thousand customer requisitions for service stock are received annually. The International Logistics Program provides defense assistance to allied nations and, therefore, is a vital part of foreign policy. In the past 25 years, the Navy’s International Logistics Program has developed into a multimillion dollar operation serving not only the navies of 60 customer countries but also segments of their armies, air forces, and marine corps.

b. In early 1965, the International Logistics Program was developed for the Uniform Automated Data Processing System and installed at the Navy International Logistics Control Office to provide the computer systems needed for the magnitude and uniqueness of International Logistics Programs.

c. A smooth interface must be maintained between the Navy supply system and the operations of the Navy International Logistics Control Office, which plays a role similar to that of agent for the customer. Management echelons within the Navy and DOD require a large volume of cyclic and one-time reports extending over the entire spectrum of historical and current data. The foreign countries demand accurate accounting for their monies and supply transactions, and quick responses to situations which fall outside normal parameters.

d. These requirements, which are unique to the Navy International Logistics Control Office, are being fulfilled by the Uniform Automated Data Processing System for Stock Points. The standard equipment and programing language are used. However, at the time of upgrading of the stock point system, previously discussed in this chapter, the international logistics applications underwent a major redesign effort which resulted in the Management Information System-International Logistics. The redesign requirements were developed jointly by the Naval Supply Systems Command the Navy International Logistics Control Office, and the Fleet Material Support Office. By bridging the newly developed system into the uniform stock point system, the Navy International Logistics Control Office has become able to meet all the unique management, control, and reporting requirements.

Section IV
Air Force Automated Logistics Systems

23-24. Responsibility for ADP systems

a. The functional aspects of automated logistics systems are exercised through the Deputy Chief of Staff

for Logistics and Engineering, and the automation aspects are exercised through the Air Force Standard Base Supply System, HQ, US Air Force. Through its mechanism and management tools, HQ, US Air Force controls and monitors the design and development of automated data systems.

b. Logistics operations account for a major portion of ADP equipment in the Air Force. This is likely to further increase as projected programs for maintenance, transportation, procurement, and services are implemented.

c. Responsibility for data systems requirements rests with the functional area concerned. Automated data system design and development are directed and managed by HQ, US Air Force in accordance with data project directives developed and issued by the functional area, in coordination with the Assistant Chief of Staff for Information Systems, HQ, US Air Force.

d. Air Force Regulation 300-2 describes policies and procedures for initiating management supporting data systems. A requirement for an automated data system or modification of an existing system is described and documented in a data automation requirement.

e. The requirement is evaluated in its relationship to existing systems and availability of data and is coordinated with appropriate agencies at HQ, US Air Force. If the requirement is approved, a data project directive is issued to designate the design agent and participants and to provide responsibilities and other direction necessary for developing the automated data systems.

f. At the retail level, actual logistics systems design and development is divided between the Air Force Data Systems Design Center and the commands. Systems which are standard across two or more commands, or are not unique to the mission of any particular command, normally are assigned to this center. Systems not standard within this meaning normally are assigned to the command concerned.

g. The Air Force Logistics Command is responsible for providing logistics support and services, and related automated systems. The Air Force Data Systems Design Office and the Air Force Logistics Command coordinate their efforts continuously.

h. As an instrument of the Air Staff to design standard data systems for the Air Force, the Air Force Data Systems Design Office was activated in 1967. The mission of this center is to analyze, design, develop, test, implement, and maintain standard automated data systems. They are responsible only for those systems specifically assigned to them by the Air Staff. Excluded from their mission are command and control, intelligence, and military personnel systems.

i. The Directorate of Logistics Systems of the Air Force Data Systems Design Agency was organized to design, develop, and maintain logistics systems. There are four divisions to handle the functional programs: Supply, Maintenance, Procurement, and Transportation Divisions.

23-25. Base-level automation

a. In 1967 and early 1968, the Air Force completed installing more modern, transistorized computers dedicated to base-level supply functions. The UNIVAC 1050-II Air Force Standard Base Supply System marked a new era in supply activity at base level. For the first time, all major bases in the United States and overseas were operating under a standard system, using one type of equipment of five modular configurations, one organization, again in modular configuration, and one set of operating programs. Even in Southeast Asia, operational bases had 1050-II computers operating the standard system.

b. System design and related computer programing is done at the Air Force Data Systems Design Office. The programs are distributed worldwide, either by punched cards or magnetic tapes. A command post, to answer questions and assist in solving problems, is maintained 24 hours a day, 7 days a week. Air Training Command conducts a standard set of training courses for supply personnel of all grades and ranks. These graduates can then be moved to bases anywhere in the world and immediately become productive without extensive retraining on the "local system." The standard system is the most responsive supply system in history.

c. The Air Force Data Systems Design Office is responsible for designing, programing, and implementing 77 standard Air Force management systems, including the Air Force Standard Base Supply System. The Phase II Base-Level Computer System is designed to handle other than base supply data systems. The phase II data system provides integrated automated systems for maintenance, medical, military personnel, civil engineering, accounting, and finance. Phase II systems are operated on Burroughs 3500 computers at worldwide Air Force bases.

23-26. Early Air Force Logistics Command systems development

a. In 1954, the Air Force Logistics Command began modernizing its management information systems through automatic systems through ADP equipment and an Air Force-wide data communications network which evolved into the presentday DOD AUTODIN. Objectives for the improved management of logistics were defined along functional lines with primary emphasis placed on wholesale logistics.

b. System specifications were developed by HQ, Air Force Logistics Command, and the detailed design and programming by development activities in the air lo-

gistics centers. A single air logistics center or depot was assigned primary responsibility for the development of a particular system. When completed and approved by HQ, Air Force Logistics Command, the system was then implemented by all other air logistics centers. The Air Force Logistics Command Headquarters directed, monitored, and coordinated the development and implementation of the systems. This arrangement was difficult because of the geographical separation between the headquarters staff and the field activities. Data compatibility and systems integration were also difficult to achieve with system development at multiple locations. In addition, standard transaction formats and data standards levied on a DOD-wide basis, were difficult to design into the systems with development efforts decentralized. System development, thus, became costly, complicated, and difficult to manage.

23-27. Centralized system design

The automation program was further complicated by having different types of computers throughout the command. This necessitated parallel development efforts for a number of the major processing systems. In addition to this being very costly in resources and time, it created complicated interface problems. To correct these deficiencies, the responsibility for the development and programing of all Air Force Logistics Command data systems were returned to the headquarters in 1960. Improvements were realized in developing standard systems and achieving interface between systems. Centralized system design has been further emphasized with increased capability for integrated logistics systems.

23-28. Scope of automation in the Air Force Logistics Command

The Air Force Logistics Command maintains approximately 450 command standard automated data systems on approximately 80 computers located throughout the command. The Item Management, Stock Controls and Distribution System is the largest automated logistics system and accounts for up to 30 percent of total computer usage. This system is representative of the logistics support capability and design approach. Other major systems are in use for computing consumption item requirements, managing depot-level repair and worldwide asset control of recoverable items.

23-29. Item Management, Stock Control, and Distribution System

a. This system has been evolving since 1955 when the RAND Corporation undertook a project to determine the feasibility of stock control by computers. Other development efforts in the Air Force Logistics Command gradually expanded the concept to cover both stock control and distribution functions. In 1960, a standard Item Management, Stock Control, and Distribution System was implemented at several of the airlogistics centers. The system was redesigned in 1963 to implement the MILSTRIP requirements and modified in 1966 and 1967 to accommodate the MILSTRAP and the Air Force Recoverable Assembly Management System.

b. The Item Management, Stock Control, and Distribution System supports worldwide wholesale ICP functions at each of the five air logistics centers. The system provides accounting and management for the receipt, control, and distribution of materiel by the centers. It processes requisitions and provides data for inventory control, requirements computations, depot production control, and interservice supply support. It also provides positive response to worldwide customers, principally Air Force bases using the Standard Air Force Base Supply System, but the response includes others services, security assistance programs and contractor demands. It distributes and redistributes for both initial and follow-on support, and provides selective management attention to critical and classified items.

c. The Item Management Stock Control, and Distribution System maintains visibility of assets in the warehouses of the air logistics centers. In addition, it maintains memorandum balances for serviceable assets available for redistribution at specialized repair and other Air Force Logistics Command base support activities. Transaction reports of excess recoverable assemblies at Air Force bases are input daily into this system, which redistributes them against back orders or new requisitions. It processes data for over 900,000 items used by the Air Force. The five air logistics centers collectively process almost five and a half million transactions per month. A total of 878 million characters of item data are stored on magnetic tapes for this system. The principal communication channel among the air logistics centers and the customers is through the AUTODIN system; however, large volumes of periodic data are recorded on magnetic tape and mailed.

23-30. Recoverable Consumption item

Requirements Computation System
The Recoverable Consumption Item Requirements Computation System uses centrally prepared programs and past consumption data as a basis for item requirements and predicting future stock levels, fiscal year budget and buy programs, and time-phased repair requirements. The system takes into account all onhand and due-in assets. It also computes excesses, provides data for contract terminations, identifies assets available for interservice use, and prints out inventory analysis summaries for management evaluation. Approxi-

mately 150,000 items are covered by this system, and are processed on a quarterly schedule at all five air logistics centers.

23-31. Management of items subject to repair

Management of items subject to repair is a system for managing depot-level repair of all recoverable items in the Air Force inventory. It covers items repaired by Air Force Logistics Command specialized repair activities and those repaired by commercial sources. Data from this system are used as the basic source for determining requirements factors. This interface insures complete correlation between the buy and repair programs. It also provides for computing a long-range forecast of repair parts needed for use in future repair programs. Requirements data, worldwide asset data extracted from the transaction recording system within the Air Force Recoverable Assembly Management System program, and actual customer demands recorded in the Item Management, Stock Control, and Distribution System are correlated in a biweekly computation to determine the total worldwide stock-level deficit. This deficit is then adjusted based on actual unserviceable items available for repair, resulting in a repair requirement by the repair activity. Total requirements are then segmented by urgency of need to facilitate repair scheduling and application of available resources.

23-32. Air Force Recoverable Assembly Management System

The Air Force Recoverable Assembly Management System is a concept of management providing improved control for Air Force-managed items subject to depotlevel repair and is superimposed on many other logistics systems to produce an integrated management process. The concept was initially conceived to provide life-cycle management for recoverable assemblies by employing advanced techniques of management control and data processing. The initial concept would have required a long-term development effort, including data processing equipment not yet developed and an advanced communications network. In the interest of the near-term benefit, an extensive development effort was initiated and the resulting processes implemented in 1967. The current system provides a common item identification base for all Air Forceused items, daily asset and levels knowledge for depot recoverable assemblies Air Force-wide, knowledge of depot recoverable assemblies intransit between activities.

23-33. A look to the future

As the Air Force weapons inventory becomes more and more sophisticated, the corresponding logistics support required becomes more difficult to provide. The Air Force Logistics Command Logistics Management Information System Master Plan was published 7 September 1977. This plan provides a clear, comprehensive, and credible long-range Logistics Management Systems Capabilities Plan, and a supporting long-range Automatic Data Processing Capabilities Plan that, taken together, will become the architecture for defining functional requirements and ADP support for the Air Force Logistics Command of the future.

Section V
Automatic Data Processing Systems In the Marine Corps

23-34. Introduction

a. The Marine Corps Unified Materiel Management System is an integrated system of centralized supply management using modern management and ADP techniques at a single ICP and two remote storage activities. It is compatible with DLA procedures and with all standardized requirements of DOD, such as MILSTRIP, MILSTRAP, and the Military Standard Transportation and Movement Procedures (MILSTAMP).

b. The Marine Corps Unified Materiel Management System is composed of 15 interrelated subsystems that process on third-generation computers as a single integrated system. Data filed in each subsystem are available to the other subsystems for computations and for the preparation of reports or documents. The degree of interface between the subsystems is depicted below by a brief description of the salient features of each subsystem.

(1) The inventory control subsystem provides central control of stocks, issues, receipts, and requirements. Inherent in this subsystem is the ability to segment the inventory in the central computer record by purpose, condition, project, and location; to control issue, passing order, and back-order routines; to produce status for the customer automatically; to forecast demands, compute stock levels, and determine requirements; and to allow the managers to identify needs from initial planning to ultimate issue.

(2) The stores accounting subsystem is an automated operation to record and accumulate all data required for financial analysis of inventory movement and to control and account for cash resources as well as financial inventory balances. From the input data, current and timely management and financial reports are produced for review and decisionmaking, and for financial control actions under the budget process. This subsystem receives transactions which affect the Marine Corps stock fund, the Marine corps appropriation stores account, master inventory record, and the direct support stock control records. The dollar value of the trans-

actions is computed simultaneously updating both the store balance records and the Marine Corps stock fund general ledger accounts. Further updating of the general ledger accounts is made by fiscal transactions entering the system. These transactions are also accumulated into various files to be used for the preparation of bills, management reports, financial reports, budget reports, and for reconciliation of supply and fiscal transactions. This subsystem includes an automated program to estimate standard unit prices for new items and to revise standard unit prices for established items.

(3) The controlled item management subsystem contains complete asset data for principal items and depot reparables. Requisitions for these items are computer screened to determine if filling the requisition would exceed the allowance authorized the requisitioner. If the requisition is not challenged it is processed. If challenged, it is suspended for item manager action. The subsystem contains a complete range of allowance-type requirement data needed in the development of provisioning, war reserve, and applications requirements. It provides the data needed to prepare budget stratification reports for appropriation stores account items.

(4) The automated procurement subsystem provides semi-automated requests for quotation for commercially purchased supplies or services in response to requirements from the inventory control subsystem. In addition to the request for quotation for supplies or services document, a tearoff trailer is also printed out. The trailer contains previous procurement history for the item; identification of potential suppliers; specification and drawing numbers, when applicable; and other pertinent dates necessary for the buyer to select, solicit bids, evaluate and award.

(5) The automated allotment accounting subsystem is an automated system that records funding data from the time the ICP initiates requisitions until its funds are liquidated. This subsystem provides up-to-date information on funds allotted to the ICP on an accelerated basis, including the recording of necessary funding data from computer-prepared buy recommendations, manually prepared buy recommendations, direct delivery buy notices, and requisitions in MILSTRIP format. In addition it has techniques for monitoring funds to insure that overcommitment or overobligation does not occur, the allotment file and other associated files furnish all necessary data for the preparation of reports for local management and for submission to the Commandant of the Marine Corps.

(6) The technical data management subsystem is resigned to establish the policies and rules and to develop the procedures related to the Federal Cataloging Program and selected management data programs of DOD, DLA, and the Marine Corps. These policies, rules, and procedures provide instructions and guidance for the development, maintenance, notification, and publication of catalog, technical, and selected management data. The detailed procedures of this subsystem outline specific functions and responsibilities necessary to maintain pertinent files of data related to items of supply and production and provide a means of ready retrieval of stored data through the use of inquiry techniques; provide notification of cataloging and management data changes to Marine Corps organizations and certain DOD activities; interface with, and provide information to, other materiel management systems and be compatible with DOD and the DLA materiel management systems; and furnish cataloging and management data support for specific functions and operations of the ICP programs.

(7) The applications subsystem provides an automated capability to maintain certain elements of current management data for all stock numbered items in the Marine Corps Materiel Support System. It computes retention levels for special item categories to insure protection of assets. Peculiar and common parts of equipments are identified as well as items which are to be phased out of the system.

(8) The provisioning subsystem insures that initial repair parts, special tools, test equipment, and support equipment required for initial support of new items are procured and protected from general issue and are distributed on a timely basis to appropriate organizations. This subsystem, in conjunction with the other subsystems, causes supply support with single managers to be established; updates or establishes applications files; prepares repair parts orders; causes new items to be entered into the inventory control subsystem; prepares selected Marine Corps stock lists; provides financial management data necessary for budgetary purposes; and evaluates the effectiveness of provisioning.

(9) The war reserve subsystem develops the record for all M-day materiel requirements authorized for acquisition in the Marine Corps. Requirements for various contingency plans are processed routinely in the inventory control subsystem to insure that protected assets are not inadvertently issued. The records developed by this subsystem provide the necessary war reserve portion of the approved forces acquisition objective for input to the stratification process. Upon execution of a contingency plan, this subsystem generates the necessary transactions to the inventory control subsystem to cause the release of the required materiel. The overall concept is tailored to provide immediate response to the Fleet Marine Force materiel support requirement at M-day, or any short-of-war situation.

(10) The stratification subsystem extracts, accu-

mulates, and projects basic data which are summarized in different ways for budget and financial management reports. Materiel requirements and financial assets are collated into an accurate determination of deficiencies by time sequence. The product of this subsystem is a coherent, justifiable request for peacetime operating stock funds and mobilization funds. It is supported by a variety of prescribed and internal analyses. This subsystem also accumulates, analyzes, retains, updates, and projects provisioning funding requirements for new end items. It produces a refined workable budget document which includes gross requirements, net funding requirements, and a sales forecast. After funds are made available to the ICP, this subsystem provides the analyses needed to evaluate each funding forecast.

(11) The special program subsystem is designed to give the program manager control information, cost data, and the program status. Special programs in the subsystem include assembly/disassembly, modification, modernization, alteration, research and test, Government-furnished materiel, recoverable items, collateral equipment, ready line materiel, and loads. Miscellaneous management projects are added to this subsystem as the need occurs.

(12) The supply management information subsystem is designed to fulfill a vital role. The Marine Corps Unified Materiel Management System is organized into functional subsystems with each containing many complicated processes which generate all kinds of data. A system of this magnitude needs a focal point for collecting useful data from all of the subsystems and for collating it into meaningful reports for management personnel. This subsystem incorporates all of the processes and procedures necessary to support this centralized materiel management approach. Each subsystem design includes processes for generating prescribed output to this subsystem. All of these data are collected in the subsystem data bank, from which the data are retrieved for timely integrated processing.

(13) The direct support stock control subsystem is designed to record and accumulate data required for routine recordkeeping, requisitioning, reporting to inventory control and stores accounting subsystem, and maintaining history. This subsystem serves the retail-level outlets at the various bases. Key features include elimination of recordkeeping at the issue points; automatic requisitioning based on past demand history; automated daily and quarterly reporting of asset status and transactions which affect the inventory or stores records at the ICP; automatic disposal of excesses based on programed rules; and automatic redistribution of assets between issue points.

(14) Mechanization of warehousing and shipment processing is another automated subsystem designed for shipment of supplies, receipts, instorage operations, and preparation of management reports. It covers the following functions: the receiving process; the issue and shipment process; the preservation and packing process; operational inspection of technical items; and space reporting.

(15) The data control subsystem provides central control at the ICP of all data element terms, definitions, abbreviations, and codes used in all subsystems of the Marine Corps Unified Materiel Management System. Control of the data serves to insure standardization in terminology and compatibility in usage.

23-35. Development and maintenance of ADP programs and procedures

a. Class I systems, AIS developed and managed by a functional manager at HQ, Marine Corps with technical support provided by a Marine Corps Central Design and Programing Activity (CDPA), are of two types:

(1) Class IA which supports the data input and output functions of the parent systems and uses minicomputers at the supporting establishment and FMF to support Marine Corps-wide users.

(2) Class IB which is processed on minicomputers at the Fleet Marine Forces (FMF) and supporting element in support of Marine Corps-wide users. *b.* Class II applications are those under the functional contract of HQ, Marine Corps, the FMF or supporting establishment (SE) for local use with technical support provided by an Information Systems Management Office (ISMO), Regional Automated Service Center (RASC), or CDPA.

23-36. Automatic data processing support of Fleet Marine Forces

a. ADP support for deployed Fleet Marine Forces units is provided by Marine Amphibious Force automated service centers. Each Marine division/wing team (e.g., Marine Amphibious Force) has two automated service centers housed in modular relocatable shelter systems. Remote computer processing units and terminals are provided for units not located near an automated service center when suitable communications facilities are available.

b. The automated service centers are not dedicated to support specific organizations or applications; rather, they provide support in all functional areas to commanders and staff at all levels of the Fleet Marine Forces.

c. The automated service centers can be deployed into an amphibious objective area as part of a forward service support organization. They also support deployed forces through AUTODIN, narrative message, mail and courier service.

d. In addition to automated service centers support,

each Marine aircraft group possesses a van-mounted AN/UYK-5 (UNIVAC 1500) computer system similar to those found on Navy ships. These support aviation-unique maintenance and materiel processes, using standard systems that were developed and provided by the Navy.

Section VI
Automated Logistics Systems in the Defense Logistics Agency

23-37. Introduction

DLA has implemented a Uniform Automatic Data Processing Systems Program. ADP equipment applications common to two or more field agencies are centrally designed and programed at the DLA Systems Automation Center, Columbus, OH, and installed on uniform hardware at the various field activities. Single Activity Automated Data Systems which support the needs of one activity are now designed and programed either at the activity or Defense Systems Automation Centers depending on the availability of resources. All systems development, design, programing, and maintenance efforts for automated data systems is centralized at the Defense Systems Automation Center. A description of the major logistics data systems of DLA follows.

a. Mechanization of Warehousing and Shipment Processing.

(1) Mechanization of Warehousing and Shipment Processing System has been installed at four defense depots and three supply centers with storage depot missions. The uniform system mechanizes receipt processing, shipment planning, freight consolidation, shipment status, stock locator files, workload forecasting, and the preparation and control of shipment documentation.

(2) The system provides a complete locator, freight data, and pre-positioned materiel receipt file in random access storage available for remote inquiry in lieu of manually processed files which are susceptible to lack of control and a high degree of error. An inquiry can be made at a remote teleprocessing terminal and a receiving form electronically received containing warehouse location and other pertinent data extracted from the random access files. The form is placed on the materiel and is used to complete the receiving process and to store the materiel. When this action is completed, data are reintroduced into the computer, appropriate files are updated, receipt history prepared, and confirmation automatically forwarded to the ICP.

(3) Central asset accountability is employed by DLA and all requisitions for DLA materiel are transmitted to the appropriate defense supply center for edit, validation, and processing. The result of this process is a materiel release order which is transmitted by way of the AUTODIN to a selected storage point. At the depot, materiel release orders are processed daily to comply with standards off the Uniform Materiel Movement and Issue Priority System (UMMIPS) and to provide optimum service to customers. High-priority materiel release orders are batch processed once or twice daily and documents are created for the pick, pack, mark, and ship process. Low-priority documents are held in a workload bank for optimum consolidation and released in a planned daily routine based on transportation and shipment schedules to areas of destination.

(4) A workload forecast report is prepared for materiel release orders in the bank which lists number of line items, weight, and process man-hours represented by workload in the data bank identified to warehouse area, shipping area, and date to transportation. Workload normally will be released from the bank on the document release date in sufficient time to permit stock picking, packing, and assembly and turnover to transportation division on the priority date. Depot managers will pull workload in advance of a normal release date by number of lines, number of man-hours available; by date to transportation, warehouse area, customer, shipping area, or by a combination of these factors. Materiel release orders in process are completely controlled by the computer. Related status reports are prepared daily to alert management to problems.

(5) The location audit process which is the function of insuring that the locator file data for materiel, recorded in the computer is, in fact, the physical placement of such in the warehouse is likewise under complete computer control. The parameter of the audit is established by introducing a single message into the computer. When this occurs, an audit suspense file is created for all items within the parameter and audit data produced for each location concerned. As the audit is performed, corrections are made and cards are entered into the computer for release of suspense and for file update. When the audit is completed and all suspense records cleared, a location reconciliation card is prepared and forwarded to the ICP to match against the accountable records. Discrepancies which may be noted by the ICP are forwarded to the depot for research and correction as necessary.

(6) The inventory process is also under full control of the computer at all times. Inventory schedules are established by the depots, in coordination with the defense supply centers, on an annual basis. In accordance with this schedule, the computer selects and flags items to be inventoried, prepares count cards and lists for each location of pertinent items, and establishes the computer inventory suspense files. In addition to support of the physical inventory, the computer identifies and controls inprocess shipping and receiving docu-

mentation which supports the reconciliation prior to reporting balances to the defense supply center. Special inventories are received by the depots on an unscheduled basis by way of AUTODIN. The computer automatically batches these requests into compatible lots which are then scheduled by cutoff date and placed on the inventory workload.

(7) Upon completion of an inventory, summary data by national stock number are computer prepared and automatically routed by way of AUTODIN to the ICP.

(8) Finally, all statistics generated by the Mechanization of Warehousing and Shipment Processing System relative to workload, volume, backlog, receipt performance, shipping effectiveness, denials, and so forth compare actual performance to management established standards. Since the computer program is not susceptible to multiple interpretations and applications, comparative performance statistics are realistic.

b. Standard Automated Materiel Management System. This system is made up of five functionally oriented subsystems: distribution, financial, procurement, requirements, and technical. Applications common to all subsystems and each of the functional subsystems are described below.

(1) In the entry/exit subsystem, the entry side receives card image data from the AUTODIN, direct card, direct tape, and remote terminals. Communication validation, AUTODIN recordkeeping, document identification and some document validation are performed. Acceptable documents are assigned to predesignated subsystem input stackers (called working data sets). Other valid documents are output in the appropriate medium to other addressees sharing the same communication terminal; in the case of collocated depot and ICP activities, this would include data for the Mechanization of Warehousing and Shipment Processing System. The entry has two major portions: the resident and the schedule portions. Resident means the continuous occupancy of a section of core by a program; scheduled means the program is in core only when called.

(2) The exit side accepts data documents from within the Standard Automated Materiel Management System and from external sources, identifies, categorizes, and validates them, then formats them for the appropriate communication medium. The principal media are the AUTODIN and the mail. The principal files used are the AUTODIN header file and the Defense Activity Address Directory.

(3) Control is effected through a standard control routine used by all applications. Statistical counts are maintained by number and type for control, reporting, and analysis purposes. File counts are maintained to insure integrity of file data. Controls are maintained for both item and financial accounting, and validated frequently enough to permit reasonable research and resolution in the event a discrepancy is noted. Integrity of files and control of documents are considered critical to the successful operation of the system.

(4) Tables which are internally stored within the computer logic are extensively used to accommodate the diversity of items managed among the several centers; i.e., the Source Preference Table identifies the storage location closest to the requisitioner. Since tables are modified frequently, they are maintained outside the programs so that they can be updated as required without patching or reassembling programs.

(5) Validation is performed in toto by the subsystem initially receiving input to the Standard Automated Materiel Management System. For example, a requisition is validated by the distribution subsystem not only for assurance that the quantity is reasonable, and that it is for an item managed by the receiving center, but also to insure that shipping and proper billing can be effected. Single-point validation insures acceptance by all applications or rejection prior to any processing.

(6) Statistics are accumulated as the action occurs and are recorded in the central statistical control file. This technique is designed to avoid scanning of immense files solely for the purpose of seeking management information, and since inquiry of this file is possible, certain data, important to management decisions, can be extracted during the accumulation period when required.

(7) Historical files are common to all subsystems. The extent to which these files are maintained and used has been carefully evaluated, as these files can be very voluminous and costly to process. The technique being used is to segment the files by time period rather than to build single unending files. The Standard Automated Materiel Management System provides for all management-type file data to be updated as often as jointly determined by functional and data system personnel to be reasonable and necessary.

(8) The technical subsystem is responsible for item intelligence and supply management data. It is the link through which the supply centers communicate with the Defense Logistics Services Center, the military services, and the customers, and through which the several subsystems of the Standard Automated Materiel Management System communicate with regard to the data maintained. The principal file used in this subsystem is the total item record, which includes supply management data records.

(9) The capability for automatic substitution is provided within the system through interchangeability and substitutability tables established by manual input

from the item managers or by automated input from the item standardization application in the technical subsystem.

(10) In its distribution subsystem, the Standard Automated Materiel Management System has been carefully interfaced with the Mechanization of Warehousing and Shipment Processing System. The specific areas of interface are in receipt processing, Issues, physical inventory, followups, and locator file reconciliation.

(11) The procurement subsystem provides for the computerized control and tracking of all procurement actions from the receipt of a purchase requirement to contract completion. A number of master data files are used within the subsystem to record information pertaining to each procurement and to furnish status to procurement personnel. The principal files are the active purchase request file, the active contract file, and the procurement technical data file. Also, various files are used to support the Automated Small Purchase System, an integral part of the procurement subsystem. The Automated Small Purchase System automatically issues calls against blanket purchase agreements, delivery-type contracts. and requests for quotations in competitive small purchase situations. In the automated request for quotation process, the system also mechanically evaluates quotations received from industry, selects the best offer for award, and computer prints a purchase order for the awardee. In addition to the Automated Small Purchase System, the procurement subsystem is capable of printing purchase requests and purchase order documents. A future improvement to the subsystem will provide for the interrogation and update of system files through the use of the CRT terminals. This application is expected to significantly reduce the time required to obtain data from and post data to the procurement subsystem.

(12) The financial subsystem insures a high degree of funds control; accounting for all actions through the commitment, obligation, and expenditure phases of a procurement. Financial inventory control is maintained along with recording of sales and replenishments. Customer billing is accomplished automatically each month, with collection from customers made through the interfund process. Complete financial records and general ledger accounts are maintained in the system with statements and reports prepared on a defined schedule.

(13) Here is an example of system integration in the Standard Automated Materiel Management System. The financial subsystem furnished the procurement subsystem funding data by fund classification code, for all commitment and obligation funds available to the system for the procurement of materiel. All transactions requiring funding are reviewed for availability of funds. Transactions are forwarded to the financial subsystem for adjustment of the various general ledger accounts when commitments and/or obligations are made.

c. The Defense Integrated Data System.

(1) The Defense Integrated Data System is the ADP system used to process, store, maintain, and disseminate Federal Catalog System data. The Defense Integrated Data System is administered by DLA and is operated and maintained by the Defense Logistics Services Center, a DLA field activity. The Defense Integrated Data System is a one-of-a-kind system which is designed to interface with and support the logistics systems of DOD components, US civil agencies, US Government contractors, and foreign governments. These systems depend on Defense Integrated Data System, in varying degrees, to accept and process their data and provide data for their use in accomplishing their missions.

(2) The major goals and objectives of the Defense Integrated Data System are to:

(a) Establish a central repository of logistics management information (clearly identified as to source, format, function) based on: Massive random access storage and retrieval capability; standardized coding of data elements in all aspects of logistics management; and a logistics communication network designed to transmit logistics data as transactions occur, and the continuing updating of information to insure currency.

(b) Provide a completely integrated data record, structured to furnish rapid accurate logistics data support.

(c) Develop a management data reporting and information system which provides visibility needed to evaluate the progress and effectiveness, and identify problems of the associated materiel management programs.

(3) The Defense Integrated Data System integrates associated national stock number cataloging and management data into a common authoritative source file for use by the entire logistics community. It supports such diverse functions as: cataloging, requisitioning, procurement provisioning, standardization, excess redistribution, inventory control, warehousing, transportation, disposal, and depot operations.

(4) The Defense Integrated Data System is a highly automated system. It is one of the largest information processing systems in the world and is the largest in the logistics area. There is information on over 5 million items in the master file, comprising almost 16 billion characters of data. Annually, the Defense Integrated Data System receives more than 36 million transactions for processing which result in dissemination

of almost 400 million output transactions. The Defense Integrated Data System is also the source of the DOD catalog which is distributed almost entirely in microfiche form, some 5 million copies annually. Notwithstanding this high degree of automation, the Defense Integrated Data System provides tailored support to those activities which use and need manual processes and hardcopy documentation.

d. Mechanization of Contract Administration Services System.

(1) The Mechanization of Contract Administration Services System is a data system used by the Defense Contract Administration Services (DCAS) regions. Modern, high-speed, electronic equipment processes data relating to DOD contracts received for administration. The administrative contracting office uses contractor data such as contractual clauses, type contract, contractual completion data, etc., in the administration of contracts and contract orders. They also need schedule and delivery information and financial data including obligation and disbursement information. In addition, the system includes separate subsystems for supporting the quality assurance, transportation, invoice control, and management information reporting functions of the DCAS regions.

(2) The Mechanization of Contract Administration Services System provides operational data used by the DCAS regional personnel to manage the many tasks associated with contract administration. Actions taken are processed through the system which, in turn, generates logistical, operational, and management products. The operational data are used to monitor contractors' delivery performance, pay contractors' invoices, and control the many facets of contract administration.

(3) The processing of contract data supports the buying activities (and inventory managers) who award the contracts. Through this processing, they receive notifications of shipments of goods, alerts of delinquent items, notice of contract payments, and periodic delivery status reports. Additionally, mechanized reports of funds disbursed in payment of contracts are furnished to the respective accounting activities of the military departments.

(4) The Mechanization of Contract Administration Services System has been installed at nine DCAS regional headquarters. Contract administration encompasses such functions as pre-award surveys, production surveillance, expediting, inspection and acceptance of materiel, industrial security, and payment actions. The automated files contain a contract data record for all assigned contracts; a record of all obligations, disbursements, and status of unliquidated funds; month-end inventory of contracts-active, physically completed, dormant; payment and adjustments required and closed; a record of line item status for all contracts reflecting items on order, schedule of deliveries, shipments made, and shipment acceptance; production and delivery data covering contract delinquencies and deliquent alerts; management information on contract administration services; record of all invoices from time of receipt until paid; and record of contracts received and completed, the dollar value of contracts received, and all items shipped. The Mechanization of Contract Administration Services System interfaces the military services through Military Standard Contract Administration Procedures (MILSCAP).

e. Defense Retail Interservice Support Program.

(1) The Defense Retail Interservice Support Program is serviced by a centralized data bank containing data from the Interservice Support Agreement (DD Form 1144). The data system is designed to promote Interservice and interdepartmental support between retail activities of DOD and participating non-DOD elements. Its purpose is to provide or obtain various kinds of support from these activities to achieve efficiency and economy in their operations. The centralized data bank was developed and is maintained by the Defense Logistics Services Center.

(2) The data bank provides a central repository of supplier information which may be systematically applied against requirements for specific categories of support services to preclude duplication of services when such service can be provided more economically by a dominant user. The data bank contains information regarding the supplier, receiver, geographic area, type of service supplied, and related cost factors in terms of dollars and personnel resources. The system provides the capability for retrieval by files interrogation of selected information recorded in the master file by authorized activities.

(3) In addition to the interrogation feature, the data system provides periodic management reports reflecting savings accrued, man-years saved, number of agreements by supplier/receiver, dollar value of support summary, and a participating activity summary. Additionally, the system provides an extensive catalog of support services to assist the military departments, defense agencies, oversea unified commands, and other Federal Government agencies/activities in maximizing the attainment of the program's objectives. The catalog provides visibility to the numerous categories of support services currently being supplied/received worldwide under the auspices of the program. Another service provided by the data system is the compilation and publication of a Directory of Single Points of Contacts reflecting the name and address of the major commands appointed Interservice support coordinators. This publication is used in establishing interservice/interagency liaison, locating an information source for resolving

problems pertaining to the program, and identifies potential suppliers of support services.

(4) The system designers of the program are continually pursuing methods of improving the utilization of the central data bank in order to facilitate the basic objective of the Defense Retail Service Program of providing local commanders with a means of improving operations by promoting the effective use of support and eliminating unjustified duplication.

f. Defense Documentation Center Information Processing System. The Defense Documentation Center is responsible for developing and operating programs to provide scientific and technical information products and services to the research, development, test, and evaluation user commodity. These programs facilitate the flow of scientific and technical information within DOD, between DOD and its contractors, between DOD and other Federal agencies and their contractors, and between DOD and the scientific and technical community. To this end, the Defense Documentation Center acquires and maintains DOD-sponsored technical reports, and announces and disseminates them. It serves the research, development, test, and evaluation user commodity in an additional, vital way by collecting, storing, maintaining, and providing search and retrieval services for four major scientific, technical, and management data bases. These data bases are the Research and Development Program Planning consisting of planned research; the Research and Technology Work Unit Information System which describes research and technology projects currently in progress; the Technical Report Program consisting of formally documented scientific and technical results of completed research; and the Independent Research and Development Data Base containing information describing the technical programs being performed by DOD contractors as part of their independent research and development programs. The information contained in these data bases is available to registered users of the system through both conventional methods and the Defense Documentation Center Telecommunication System, the Defense Research, Development, Test, and Evaluation Online System. The Defense Research, Development, Test, and Evaluation Online System provides the ability to retrieve, sort, and display data from each of the data collections using remote terminal devices.

g. Defense Fuel Automated Management System.

(1) The Defense Fuel Automated Management System is an automated system in process of development, which encompasses all functions of a military logistics system designed to accomplish all Defense Fuel Supply Center missions related to inventory management, procurement, financial control, and accounting for bulk fuel products. The system relies on reporting by way of AUTODIN and other methods from more than 400 DOD activities engaged in ordering fuel from industry or issuing fuel to military installations.

(2) The Defense Fuel Automated Management System provides for the management of fuel by the Defense Fuel Supply Center under a fully automated, integrated system operating on a worldwide basis. The system is an integrated management system for fuels by the Defense Fuel Supply Center. The Defense Fuel Supply Center is responsible for the development and documentation of detailed functional system requirements plus responsibility for developing the data system design specifications and for programing and testing the system. The Defense Fuel Automated Management System is designed to facilitate replenishment of bulk product terminals on an automatic supply concept and to record bulk product issues and direct delivery obligations and issues on a "post-post" basis. The Defense Fuel Automated Management System also includes all necessary computer support functions for Defense Fuel Supply Center control of and, as applicable, accounting for all materiel and services procured by the Defense Fuel Supply Center under assigned coordinated procurement responsibilities.

h. Integrated Disposal Management System.

(1) The Integrated Disposal Management System is the centralized data system which supports the DOD disposal program. The system provides a standard mechanized accounting system for controlling, reporting, and screening all excess and surplus personal property. The system is made up of three major subsystems: property accounting, reutilization, and marketing.

(2) The property accounting subsystem contains provisions for visibility, control, reporting, and screening of excess and surplus property processed by the Defense Property Disposal Offices (DPDO). The system provides an audit trail and history of an item from time of receipt to disposition.

(3) A Disposal Regional Inventory File is established for each of the five disposal regions and reflects separate accounts for each DPDO. Responsibility for the property is at the DPDO and only that office can input data to process against the centralized file.

(4) The system mechanically screens all standard item with a valid national stock number and automatically reports all items that meet DOD/GSA screening criteria. The system automatically maintains appropriate records as the property is processed through the interrelated programs of reutilization, donation, and sales.

(5) The system provides management data which portray workload data, trends, effectiveness of property disposal offices, and property items which require resolution of exceptional actions.

(6) The reutilization subsystem supports the reutilization program by referring applicable items to the

Defense Property Disposal Offices (DPDO). The system provides an audit trail and history of an item from time of receipt to disposition.

(3) A Disposal Regional Inventory File is established for each of the five disposal regions and reflects separate accounts for each DPDO. Responsibility for the property is at the DPDO and only that office can input data to process against the centralized file.

(4) The system mechanically screens all standard item with a valid national stock number and automatically reports all items that meet DOD/GSA screening criteria. The system automatically maintains appropriate records as the property is processed through the interrelated programs of reutilization, donation, and sales.

(5) The system provides management data which portray workload data, trends, effectiveness of property disposal offices, and property items which require resolution of exceptional actions.

(6) The reutilization subsystem supports the reutilization program by referring applicable items to the item manager during front end screening; providing excess personal property listings to DOD activities; and provides a final referral to item managers in the final asset screening. The subsystem also provides an emergency interrogation feature. Property which is not reutilized in the above DOD screening processes are then screened by eligible activities participating in the disposal donation program.

(7) The marketing subsystem supports the disposal sales program in processing property which was neither reutilized nor donated in the previous cycles. Processes in this subsystem include bidders mailing list, sales and contract processing, and compiling marketing statistics for management.

23-38. Summary

a. The vital influence of computers and telecommunications on logistics management is evident from the foregoing systems descriptions. The full power of automated materiel management may only be recognized when we examine the ICP systems containing files of millions of characters of information which can be manipulated in fractions of a second. This permits a requirements review of inventory levels as frequently as needed. Using the AUTODIN and standard systems such as the MILSTRIP, MILSTAMP, MILSTRAP, MILSCAP, and MILSTEP have enabled the free flow of information worldwideover 60 million MILSTRIP requisitions were processed through these systems during the peak year of 1966.

b. The progress and success of logistics automation is not as reliant upon computer and telecommunications technology as it is upon management’s ability to define system objectives and to be creative in policy and procedure development. This controlling influence is most frequently a matter of management education and the participation of functional management in automated systems development and design.

Chapter 24 Financial Inventory Accounting and Funding in Supply Management

Section I
Financial Inventory Accounting

24-1. General Background

a. During the last 20 years, the Department of Defense (DOD) has employed an increasing number of commercial practices in supply and financial management to obtain maximum efficiency in operations. The basis for this was Public Law (PL) 216, a part of the 1949 amendment to the National Security Act of 1947. Among other things, provisions of the act state that "property records will be maintained on both a quantitative and dollar basis under such directives as shall be issued by DOD."

b. Congress recognized that DOD lacked a positive system for comparing dollar requirements for necessary materiel with the value of assets which could be used to satisfy the requirements. In fact, the military services had only incomplete data concerning the dollar values of stocks on hand, and were consequently at a disadvantage when attempting to justify requests for congressional appropriations. The implementation of financial controls served to prevent the military services from asking Congress for funds to procure new materiel, if adequate stocks of these items were on hand.

c. During World War II and later in the Korean conflict, military activities expected and received almost unlimited funds, which Congress felt necessary for successful military operations. Afterwards in gearing supply to peacetime operations, DOD devised financial controls to aid the services in efficiently managing their total resources. These controls assist in the appropriation process by providing information on the types and values of resources already available, thereby, fulfilling congressional expectations as expressed in PL 216.

d. Many elements of the Defense Department, even as late as 1948 and 1949, were still applying World War II methods to control supply. These uneconomical methods were blamed for high Federal expenditures, which far surpasses the anticipated peacetime needs of the military departments. In retrospect, it can be said that obsolete methods were not the sole cause of this ineffectiveness and inefficiency, but rather, the lack of a modern approach to management of the multibillion dollar logistics business.

e. Among the main recipients of congressional criticism was the Army supply system which maintained only nominal control over supply operations. Prior to PL 216, the Army had tried to control its huge inventory of more than a million line items, solely on an item-by-item basis. Obviously, it was quite impractical for analysts at departmental levels to review the supply positions for each of these individual items. Furthermore, the asset position of each item displayed only those depot stocks over which the inventory control points (ICP) exercised authority. Stocks located at other sites within the materiel pipeline (e.g., Army posts) were excluded from the supply position because there was no requirement to report these inventory data. Consequently, the Department of the Army (DA) was unable to determine and evaluate its worldwide inventory position.

f. Although Army supply operations have been singled out to illustrate unbusiness-like management, studies which were submitted to Congress provided increasing evidence that supply elements of the other military services were also inefficient. In response, Congress enacted PL 216 which, as previously indicated, required accounting for inventories and inventory transactions on both a quantitative and monetary basis.

g. Following enactment, a DOD directive to the military departments stated that: "As a minimum, supply accounting at depots, camps, and stations will be developed to achieve integration of financial accounting." The intent was that item management systems should be paralleled by financial management systems. This is still true.

h. Although each service designed its own procedures, these all had the common characteristic of collecting data necessary to enable managers at all echelons to manage their supply functions efficiently.

24-2. Principles of financial inventory accounting

a. The military services today use systems known as financial inventory accounting, in which cost data as well as item data are accumulated. Since cost information, if accumulated on an item-by-item basis, offers no advantage over item accounting, financial inventory accounting techniques segregate related items into manageable groups. The dollar value of each group is then used to note increases within a group, or to compare one group with another. Supply data, converted to dollar summaries, provide meaningful management information which supplements reports of tonnage and item quantities. Basically, financial inventory accounting systems require that:

(1) All items be assigned to a class of similar materiel, so that the total inventory is divided into significant groups for management purposes.

(2) Supply transactions be recorded in financial journals and ledgers with which supply agencies relate changes to the inventory amounts by class.

(3) Uniform financial statements, reports, and supporting schedules be prepared with an amount of detail or summarization most appropriate for use by the

echelon of management needing the data.

b. Financial inventory accounting applies to inventories under the control of supply officers who have been assigned formal stock record accountability. Excluded from the reporting procedures are those items which have been issued to the ultimate users. In summary, the financial inventory accounting methodology uses the dollar as a common denominator to measure the status of supply operations by superimposing dollar accounting upon the long-standing system of item accounting.

c. Many features are shared with private business practice. Some examples of the dollar amounts which can be extracted for management purposes are:

(1) *Source*. Stocks may be distinguished by the congressional appropriations used to finance their procurement.

(2) *Requirements.* Inventories used for normal operations may be distinguished from those earmarked for reserves or disposal.

(3) *Status*. Information about items ready for issue, awaiting repair, or order, on work order, and intransit is available.

(4) *Activity*. The system depicts the amount of inventory transactions.

d. Internal transactions which affect the supply status at a single reporting agency are reported in detail. These are: redistribution among supply agencies, gains or losses to the supply system worldwide, and adjustments to the inventory records.

24-3. Stratification and use of financial inventory accounting data

a. The financial inventory accounting reports and summaries are used to study the adequacy of assets with respect to requirements and to scrutinize actions being taken to obtain materiel for unfilled orders.

b. The reports are accomplished by a comprehensive analysis which includes a statement of highlights, an explanation for any deficiencies or abnormal ratios, and corrective action. Ratios are often used to analyze the data. Assets which are applicable (i.e., serviceable inventory on hand or on order plus economically reparable materiel) may be compared to requirements with an objective of reaching a one-to-one ratio, which would indicate that assets match requirements. Unserviceable assets may be compared to total inventory, and a ratio computed. However, for a ratio to be used as a management tool, criteria for acceptability must be determined. For example, in the case of unserviceable materiel, a supply manager may be directed to submit an explanation if the ratio of unserviceable assets to total inventory exceeds 0.05, which would indicate that over 5 percent of the dollar value of the inventory was not suitable for immediate issue. Ratios serve the manager by providing warning signals based upon the financial statistics.

c. Current reports are compared with previous reports to determine trends. This information is used to channel procurement funds into the proper commodity areas.

d. The two major divisions into which assets are stratified on financial reports are assets applicable to peacetime requirements and those applicable to mobilization. Funds for procurement of mobilization stocks are annotated and not used for other purposes without prior approval from the source which originally made the funds available, and the values of stocks purchased by these funds are accounted for separately. By examining financial inventory accounting reports, higher headquarters can observe that supply managers are responsive to those directives dealing with mobilization needs. Reductions in mobilization stocks or loss of integrity in stocks purchased and reserved for mobilization are conditions warranting full explanation.

e. Additionally, financial inventory accounting data aids in:

(1) Controlling levels of investment for materiel.

(2) Planning overhaul or procurement, including local procurement.

(3) Measuring progress in redistribution or disposal of excess materiel.

(4) Auditing changes in values caused by physical inventory adjustments, accounting reconciliations, price changes, shipments, and receipts.

(5) Measuring overall accuracy attained by supply managers in their forecasts of requirements.

(6) Indicating the adequacy of assets for peacetime and mobilization requirements at a given point of time.

(7) Determining the rate at which materiel become unserviceable.

(8) Determining the extent to which suppliers fill requests for materiel.

(9) Collecting historic cost data for justification purposes.

24-4. Flow of financial inventory accounting reports and summaries

Financial data flow upward in pyramidal fashion from the lowest echelons which maintain supply levels. At succeeding echelons, the data are consolidated and, if necessary, summarized prior to submission to the next level. Ultimately, the consolidations reach the departmental headquarters of each service, where analysts make evaluations and recommendations for management decisions. The financial inventory accounting system also provides for the interchange of data between lateral supply activities so that managers of weapon systems have access to information concerning dollar value of supporting items at each stockage point.

24-5. Accomplishments of the financial inventory accounting system

Financial inventory accounting has made administrators and supply managers more aware of the dollar amount of materiel under their control, thus contributing to improved policies, procedures, and practices. It has, as originally intended, resulted in improved relationships between the military services, DOD, Congress, and the Office of Management and Budget (OMB).

24-6. Concept of stock funds

a. Although the Navy Department created the first of the military stock funds in 1878, current practices are an outgrowth of PL 216.

b. Subsequently, stock funds have been chartered in each of the military services and Defense Logistics Agency (DLA).

c. The concept of governmental stock funding parallels commercial business practices. When commercial wholesalers have sold a portion of their stock, the funds accumulated from these sales are used to purchase additional stocks from manufacturers. The customers of the wholesalers are the retailers, who purchase materiel from wholesalers and resell the items to the user or customers. This method for buying and selling describes a basic governmental approach identified as horizontal stock funding.

d. A second method is also practiced. Often, a commercial wholesaler will find it expedient to place some stock on consignment in the warehouses of retailers. Stocks under these circumstances are available to the retailer for sale to the customers, yet the wholesaler retains ownership and control until the sale is consummated. This approach is identified, in Government parlance, as vertical stock funding.

24-7. Implementation of DOD stock funds

Originally, most materiel in military supply warehouses were issued without charge. To initially implement stock funding, the value of inventory under military control had to be determined and subsequently capitalized; i.e., an entry had to be made on the fund's accounting records listing the value of the inventory under the title of "assets." The implemented stock fund, therefore, consisted of money to pay for stock replenishment and inventory for sale to customers. The price a customer pays a wholesale stock fund for an item is the standard price that is determined by adding a stock fund surcharge and a price stabilization factor to the replacement cost of the item. The surcharge is developed by each military service and DLA, and is sufficient to recoup authorized costs chargeable to the operation of the fund; such costs include transportation, stock losses, obsolescence, and other costs as may be authorized. The price stabilization factor is determined annually by the Office of the Secretary of Defense (Comptroller)(OSD(Comptroller)) for each military service and DLA. The stabilization factor represents a forward looking pricing policy with a twofold effect: It limits price changes to once a year as of 1 October and, thus, stabilizes costs to stock fund customers; and it allows the stock funds to recover the effects of price escalation in the costs of materiel experienced over a fiscal year. Wholesale stock funds sell items to retail stock funds at standard prices. The retail stock fund sells the items to the ultimate user at standard price. The funds which accrue to the wholesale stock fund because of the difference in buying and selling price of the item are used to pay firstand seconddestination transportation cost and recoup inventory losses and obsolescence occurring at the wholesale stock fund level. Catalog data provide stock fund customers with standard prices. These are used in funding requisitions for materiel and in developing budgets and programs.

24-8. Consumer funding

a. Congress appropriates for the Armed Forces those funds necessary for their operations. The amount is related to the cost of the annual performance required of each military service. After apportionment by the OMB, the funds pyramid down through those channels that are used for mission assignment. This technique facilitates the management philosophy that a commander must be provided with the resources necessary to perform an assigned mission and that the commander will be held accountable for proper use of those resources. Some of these resources are used to purchase materiel from military stock funds.

b. This technique for consumer funding insures that the commanders obligate within a fiscal year those funds appropriated by Congress for their performance. It allows for appraisal of individual military operations to insure that benefits outweigh costs. It also provides individual commanders with a means for planning, administering, and measuring performance costs.

24-9. Revolving funds and obligational authority

a. In Government accounting terminology, a stock fund is called a revolving fund. This means that sales revenues and collections are added to the stock fund appropriation account at the Treasury, and immediately become available for disbursements for inventory replenishment and other authorized expenses of the fund.

b. OMB exercises budgetary control over operations of the DOD stock funds through the apportionment process. Stock fund managers must obtain obligation authority before ordering replenishment stocks, even though funds to finance replenishment would be avail-

able from sales. The philosophy behind the budget apportionment process is that OMB has responsibility for controlling Government outlays.

c. Because stock replenishment requirements can be correlated with military service operating budgets, the OMB release of obligation authority can be matched to anticipated sales.

d. Some military stock funds are no longer required to obtain obligation authority. For commodities such as food in commissaries and uniforms in clothing stores, OMB provides exemption. Funds selling these items must react quickly to changes in consumer demand. Furthermore, the amount of food purchased by military dependents and the sales of uniforms have almost no correlation to OMB apportionment of the military pay appropriations. The Army still requires obligation authority for the Army commissary stock fund.

24-10. Buying and selling stock funded materiel

Stock fund managers effect replenishment from any supplier in accordance with the Federal Acquisition Regulation (FAR). Current DOD policy requires the assignment of each item of supply to only one wholesale item manager. Consequently, managers procure only those items for which they have been assigned responsibility. Customers of the wholesaler who has been designated as the source of supply for the desired item. These customers may be either users or retail stock funds.

24-11. Concept of industrial funds

a. Another concept, similar to stock funding, was an outgrowth of PL 216. It is the industrial fund, which is a revolving fund used to finance the production of goods and services. A military activity may request service from an industrially funded organization. Subsequently, a bill is submitted to the requesting activity. The funds received are then used to replenish the money expended by the industrial fund in producing the service requested by the customer. Examples of industrial funded activities are depot maintenance shops, research and development sites, and the Military Airlift Command.

b. Industrial fund activities are very similar to commercial manufacturers or service businesses. If an activity offers more than one service, or if more than one installation is involved in production of the service, the fund is segmented among the producers, each of which act as a separate division of a corporation.

c. Each fund consists of dollars, accounts receivable, accounts payable, inventories of materials, supplies, work in process, and all other assets and liabilities pertaining to the operation.

24-12. Payment methods and rationale

Customers may be billed after completion of the requested goods or services. However, it is proper for an industrial fund to submit a progress billing prior to completion. This is done because industrially funded activities are expected to operate with minimum cash and the customer is required to set aside the payment prior to placing an order. It would be unwise to request additional appropriations while a customer’s funds were lying dormant. Accelerated billing and collecting procedures are excellent techniques for obtaining operating monies, both for stock funds and industrial funds.

24-13. Authority

a. The Secretary of Defense regulates the operation of activities and the use of inventories. Subject to his direction, the Secretary of each military service allocates responsibility for organization and operation of activities and the efficient use of the inventories of the industrial fund.

b. Prior to the financing of an activity under such a fund, the Secretary or the Assistant Secretary of the military department must submit a charter signed by him to the Assistant Secretary of Defense (Comptroller) for approval. The charter governs the operations of the industrial fund and is prepared in accordance with service regulations and DOD instructions. A charter may be changed subject to the same requirements for approval or may be revoked by the Assistant Secretary of Defense (Comptroller).

24-14. The operating budget

a. The operations of an industrial fund activity are controlled by its command operating budget. The command furnishes instructions for the preparation of the annual budget submission and presentation, and other guidance. The objectives of an internal budget are to:

(1) Fix responsibility for the control of resources and costs at the various echelons of management in the activity.

(2) Provide an orderly means for controlling resources and costs.

(3) Control the incurring of obligations and costs, within established limits.

(4) Compare actual performance and costs with previous projections.

b. Within an industrial fund, the operating budget represents a plan of action by which fund requirements are met. It is the basis for analyzing operational efficiency. Because the budget is a significant part of the operation, the terms associated with it should be clearly understood.

(1) *Cost centers.* The organizational elements of an activity are frequently referred to as cost centers for cost accumulation and control purposes. They are responsible for a specific function or family of similar functions to which costs are budgeted, reported, dis-

tributed, and controlled. There are three types of cost centers:

(a) Productive and mission cost centers. Organizational elements directly engaged in carrying out the installation's mission assignments; e.g., those actually performing fabrication operations, working on projects, and accomplishing depot maintenance.

(b) Productive support or mission support cost centers. Organizational elements which directly support assigned missions such as production control and quality control offices.

(c) Nonproductive support cost centers. Organizational elements whose activities are not directly identified to any single element of the assigned mission, such as the comptroller organization.

(2) *Internal operating budgets.* Internal operating budgets are comprehensive financial plans prepared for each cost center. They are designed to implement programs in accordance with financial guidance. Operating requirements for personnel, materials, supplies, and contractual services are projected in monetary terms. The basis for each budget is the estimated cost to be incurred by every organizational element engaged in accomplishing the programed workload.

24-15. Responsibilities of commanders

a. The commanders of industrially funded activities are responsible for:

(1) Submitting an annual budget, preparing internal operating budgets, and establishing overhead rates and predetermined billing rates.

(2) Submitting quarterly revisions of the internal operating budget, overhead rates and predetermined billing rates to the headquarters of the command for approval at least 15 days before the beginning of each quarter.

(3) Executing approved operating budgets.

(4) Reviewing accomplishments against operating budgets quarterly.

b. The installation comptroller is the principal assistant to the commander with respect to budgeting and the use of financial resources. The installation comptroller is also responsible for staff supervision of budgeting activities. Chiefs of subordinate elements are responsible for administration within their elements so that budgetary limitations will not be exceeded. Operating budgets consider incomplete orders on hand at the beginning of the budget period, program guidance provided by the command, workload estimates from other sources, personnel ceilings or guidance, and other factors affecting operations. They must be compatible with the activity's cost accounting system and are projected in quarterly increments for 1 year in advance. Increments are revised to reflect current conditions.

c. A separate operating budget is prepared for each cost center, based on workload guidance provided by the director. Cost accounting data, wage rates, and other historical data required for pricing purposes are furnished to cost centers by the comptroller. Insofar as practical, each cost center prepares its own budget. Those budgets provide estimates for direct labor hours and dollars, direct materials and supplies, direct contractual costs, other direct costs, indirect labor hours and costs, and other indirect costs.

d. Cost budgets are reviewed by the directors and consolidated into operating budgets. After review and adjustments, the operating budgets are combined into an activity operating budget.

24-16. Types of budgets

a. The types of budgets used in an industrially funded activity are:

(1) *Production budget*. A production budget usually consists of:

(a) A schedule of production and estimated requirements for equipment and facilities, direct material, and labor costs to accomplish the program.

(b) Estimated costs of production computed from the most recent labor rates and material costs.

(2) *Expense budget*. The expense budget consists of estimates by areas of responsibility from the various expense elements required to support production activity. The expense budget prevents incurring costs in excess of amounts reimbursable for goods or services by ordering activities, the accumulation of excess inventories, and the incurring or liabilities for expenditures in excess of available resources.

(3) *Procurement budget*. The procurement budget includes balances of outstanding orders. It controls the placement of additional contracts and, thereby, helps to prevent losses to the fund, which might occur if procurement were to exceed the requirements for the materiel and services needed to fill specific customer orders. Very little materiel are purchased for general operations.

(4) *Labor budget*. This provides numbers of employees by skills and pay rate, plans for training new employees, and policy concerning overtime work.

(5) *Capital items budget.*

(a) Industrially funded activities must budget for cost of improvements, betterments to real property, machine tools, other plant equipment, and other capital property. The estimated cost for removing or salvaging capital items is included.

(b) A separate statement showing the investment monies needed for purchase of capital items is prepared annually for each activity.

(c) Plant capacity which is unused but maintained intact for purposes of mobilization readiness must be included in the budget of the command which

needs the reserve capacity. Maintenance of this capacity is a service of the industrially funded activity, for which reimbursement is required.

b. The financial budget forecasts a summary of revenue, costs, and financial condition of the fund.

c. The statement of revenue and cost compares estimated cost with revenues and shows expected operating results of the coming years. The statement of financial condition shows year-end balances of cash, accounts receivable, inventories, other assets, liabilities, and capital for coming years.

d. The budget and account classifications are identical, so that accounting statements and reports showing actual financial conditions and results of operations can be compared with the budget. Differences between planned results and actual results are analyzed to determine causes.

e. Activities of industrial funds prepare operating budgets annually, which include:

(1) Estimates of operating cost.

(2) Estimated cost, when significant, of maintaining plant capacity and equipment for mobilization readiness purposes.

(3) A budget for procurement of materials and supplies.

(4) Forecasts of reimbursements, disbursements, and cash requirements, supported by a statement of the sources from which reimbursement is anticipated.

(5) Projected statements of financial condition. Operating budgets are analyzed monthly. Adjustments are approved by the command headquarters.

24-17. Advantages

Industrial funding techniques provide highly effective means for financing, budgeting, and accounting. The methods:

a. Furnish managers of industrial and commercial activities with modern management tools like those used by private industry.

b. Provide incentives for managers to improve cost estimating and control. The contractual relationships between producer and ordering agencies promote development of realistic cost standards.

c. Require practical financial planning because the funds are dependent upon reimbursements from customers.

d. Impel industrially funded activities to bring cost into line with workloads generated by customer orders. Cost of maintaining unused mobilization readiness capacity is charged to the appropriate activity.

e. Coordinate in detail the financial aspects of estimating and planning performance.

f. Encourage use of standards as targets rather than detailed cost limitations.

g. Require ordering agencies to budget, control, and account for all goods and services ordered, thereby, making them more conscious of cost involved. Elimination of free goods or services makes it possible for a customer to compare the cost of alternatives.

h. Place ordering agencies in a position to criticize quality, delivery speed, and charges for the goods or services supplied. Comparison can be made between similar activities and private industry.

i. Provide meaningful bills to ordering agencies, clearly relating the goods and services furnished to the charges rendered. Ordering agencies can then assess their procurement practices and specifications in full awareness of the cost involved.

j. Enable ordering agencies to budget and account on an end-product basis (similar to buying from commercial contractors), thereby, simplifying budget presentations, budgetary control, and accounting procedures for both producers and ordering agencies.

k. Establish, wherever feasible, predetermined prices for goods and services furnished by industrially funded activities, thus, setting standard prices on performance and enabling ordering agencies to plan and budget more confidently.

l. Encourage ordering agencies to improve program planning and scheduling, in response to producer’s efforts to negotiate orders as far in advance as possible.

Section II
Financial Inventory Accounting in the Army

24-18. Introduction

a. Today’s Army uses financial inventory accounting to integrate quantitative and monetary data for all inventories in the Army supply system worldwide. Related items are grouped together into two principal classes.

(1) *Major items*. These are tanks, artillery, vehicles, ammunition, and other end items characterized by high cost or essentiality. These are funded by the five congressional appropriations for Army procurement of aircraft, missiles, weapons, and tracked combat vehicles, ammunition, and other.

(2) *Secondary items.*

(a) Spare parts (appropriation funded). These consist of investment items which do not lend themselves to consumer funding and stock funding concepts.

(b) Secondary items funded by the stock fund. These consist of consumable (expense) repair parts and end items under $3,000. Each of the principal classes if further subdivided into about 16 materiel categories, some of which are displayed in table 24-1. Each of the 1,018,914 items currently required for Army stockage is included in one of these categories.

Table 24–1. Materiel Categories Description

Major Items (Appropriation Funded)	Repair Parts (Appropriation Funded)	Secondary Items (Stock Funded)
Aircraft	Aircraft Repair Parts	Medical-Dental Materiel
Missiles	Other Missile Repair Parts	Clothing and Textiles
Tracked Combat Vehicles	Weapons and Other Combat Vehicles Repair Parts	General Supplies
Weapons and other Combat Vehicles	Tracked Combat Vehicle Repair Parts	Bulk Petroleum and Packaged Petroleum Products
Ammunition	Tactical and Support Vehicle Repair Parts	Subsistence
Commercial Vehicles	Communications and Electronics Equipment Repair Parts	Industrial Supplies
Communications and Electronics Equipment	Other Support Equipment	Electronics Materiel
Other Support Equipment		Missile Materiel
		Ground Forces Support Materiel
		Air Materiel
		Combat and Weapons
		Automotive Materiel
		Special Weapons, Chemical, and Fire Control Materiel
		Communications Security Materiel
		Safeguard Repair Parts
		Cryptologic Materiel

b. The major item grouping contains the least number of items but these items amount to the highest dollar value. The remaining two groupings contain 91.9 percent of all of the items in the system, many of which are essential to a high degree of combat readiness and to the well-being of the troops.

c. The two classes of secondary items, appropriation funded spare parts and stock funded items, are not homogeneous in that each group contains both appropriation funded items and stock funded items, many of which are used to maintain major equipment items. Changes to inventory levels within certain repair part categories are correlated with variations in number or use of corresponding major items.

d. Inventory and changes within each inventory category are reported in various ways. Attention to reporting format insures that the information presented is meaningful to top levels of management and lower levels as well. Reporting requirements are such that the data reflected may not be useful to every echelon, but the data are nevertheless necessary to higher echelons. Some reports are designed to portray the kinds of inventories and the changes occurring at specific echelons. Reports required of echelons below DA level include: 1

(1) Monthly Report on Changes in Appropriation Financed Secondary Item Inventories2 for appropriation financed secondary items. These reports of transaction data are prepared by oversea commands.

(2) Monthly Report of Financial Status of Procurement Appropriation Secondary Items3 for appropriation financed secondary items. This report is prepared by each Army appropriation manager for assigned budget activity accounts.

(3) Stratification Report of Principal Items4 required annually for each category of principal items by appropriation and budget activity accounting.

(4) Table II, Central Secondary Item Stratification-Retention5 for appropriation and stock fund financed items in the wholesale supply system.

(5) Table *III*, Local Secondary Item Stratifications for procurement appropriation and stock fund financed items below the level of the wholesale supply system.

(6) Quarterly Stratification Report of Secondary items Part A, NICP Assets6 and Part B. Oversea Command and Continental United States (CONUS) Installation Assets7 for stock fund financed items.

(7) Format A-On Order, Intransit, and Locations prepared for each major materiel category of principal items (in store and in use) and for appropriation and stock fund financed secondary items.

e. The formats of these reports aid US Army Materiel Command (AMC) in consolidating the data into worldwide inventory position reports.9 Narrative analyses are prepared and forwarded, along with the reports, to DA, Deputy Chief of Staff for Logistics (DCSLOG). There they are reviewed and subsequently furnished to DOD for each semiannual period. Information of the following type is included:

1 Prescribed by AR 710-1. 2 RCS CSGLD-1421, DA Form 1257-R. 3 RCS CSGLD-1422, DA Form 3331-R. 4 RCS DD-I&L(SA) and*(a)*1000, DD Form 1138-1. 5 RCS DD-I-L(SA)and *(a)*1000, DD Form 1138-1. 6 DA Fomm 1886-R. 7 DA Form 1887-R, RCS CSGLD-1438. 8 Ibid. 9 DD Forms 1138 and 1138-1.

(1) Total requirements for stocks.
(2) Amount of serviceable inventory on hand.
(3) Amount of inventory on order.
(4) Amount of inventory due out to customers.
(5) Amount of unserviceable inventory.
(6) Amount of inventory scheduled for repair.
(7) Amount of excess materiel on hand.

24-19. Refinements in data collection
New or improved financial management subsystems are being incorporated into computer hardware and programs at wholesale and retail supply echelons. These systems develop financial inventory accounting data by referencing supply transactions and standard data bases, thereby eliminating most manual manipulations in financial inventory accounting reporting. Financial management is a part of the following major automatic data processing (ADP) systems:
a. Standard Finance System.
b. Standard Army Intermediate Level Supply System (SAILS).
c. US Army, Europe Supply and Maintenance System.
d. US Army, Pacific Standard Supply System.
e. DARCOM 5-Year ADP Program.

24-20. The Any stock fund (ASF)

a. Overall responsibility rests with the Secretary of the Army, who has, in turn, assigned duties along functional lines to assistants and staff agencies.
(1) Chief of Staff-overall direction.
(2) Assistant Secretary of the Army (Installations, Logistics, and Financial Management financial management and materiel aspects.
(3) Deputy Chief of Staff for Logistics-Program Director includes programing, budgeting, program execution, and supply policy.
(4) Comptroller of the Army (COA) overall financial management including accounting policy.
b. There are 10 operating divisions, which employ the horizontal stock fund concept. In financial management jargon, these divisions are called home offices.
c. AMC operates the only wholesale division within the Army. It is subdivided among the major subordinate commands (MSC), and each subdivision (called subhome office) procures and maintains inventories of assigned stock funded items. As a wholesaler, AMC buys from manufacturers and sells to retail stock funds, other military customers, and foreign military sales (FMS) customers. The wholesale divisions also include the mobilization (MOB) program. This program is used to purchase and hold, under DARCOM control, DLA-managed stock fund items for war reserve inventories.
d. The second operating division of the ASF is the AMC Installation Division, a retail Stock fund, which buys supplies for AMC-operated installations, the United States Army Intelligence and Security Command (INSCOM), the United States Army Communications Command (USACC), and the Health Services Command.
e. The third operating division is the Defense Supply Service Division, a retail stock fund which purchases and sells supplies needed by agencies in the Washington, DC area. It is often called the Pentagon Stock Fund Division.
f. The six retail stock fund divisions are known as command channel stock funds because they are controlled through the following command channels:
(1) US Army Training and Doctrine Command (TRADOC).
(2) US Army Forces Command (FORSCOM)(Supply Groups Alaska and Panama are branch offices).
(3) US Army, Japan.
(4) US Army, Europe.
(5) Eight US Army.
(6) WESTCOM.
g. This retail stock fund system is considered unique because US Army installations receive both stock funds and consumer funds through their command channels. Simply stated, the installation supply officer acts similarly to a commercial retailer. The installation supply officer uses stock fund money and obligation authority to buy from wholesalers or other sources. He or she sells to the customers for money from their consumer funds. The remaining stock fund division is the commissary stock fund which manages the Army commissaries worldwide. It uses six commissary regions five in Continental United States (CONUS) and one in Europe.

24-21. History of installation supply

a. When the ASF was first implemented in 1952, installation supply officers used funds from station operating appropriations to buy stock funded items for later resale to their customers. This method was defective because it converted a portion of the annual operating appropriation, which Congress intended for use in a specific year, into a station-owned resource which could be sold in any year.
b. During the middle 1950s, the vertical stock fund concept was tested. Theoretically, the vertical extension filled the pipeline by placing wholesale-owned stocks at the station level. These stocks were available for sale to customers, even when there was a shortage of station operating funds. The ragtime between obligation of appropriated funds and actual consumption of materiel was reduced to a minimum.
c. The vertical concept did place the supply officer in the unenviable position of serving both the installation commander and the wholesale stock fund manager. As

a result of testing this concept, DA directed the development and test of an altogether new idea-the command channel stock fund-which began operations in 1959 and continues to this day.

d. The installation stock fund manager has considerable autonomy in spite of obligation authority limitations. He or she maintains close liaison with the station comptroller, the Finance and Accounting Office, and the customers. They furnish information concerning funds which may be used by customers for stock fund purchases, and plans for training and other supply consuming programs. The fund manager then forecasts sales by major category and studies future cash flow to insure that the fund remains solvent. He or she is not required to acquire and stock those items originally forecast, but may reprogram acquisition from one category to another, as long as total obligation authority is not exceeded. Efficient management minimizes the effect of funding constraints upon the quality of mission support.

e. Managers of stock funds at home offices may set aside some cash and obligation authority for use if unplanned mission requirements arise. Obligation authority is not set aside at DA level. However, DA maintains ASF cash reserve.

24-22. The Army industrial fund (AIF)

a. The Army currently operates 25 industrially funded installations and activities. These produce commercial services or research and development.

b. One of the principal Hoover Commission recommendations was that certain business or commercial-type activities of the military departments be financed by means of revolving or working capital funds. Their recommendations were enacted into law in 1949 as part of the National Security Act. The DOD components are known as the Army industrial fund, Air Force industrial fund, Navy industrial fund, and the Marine Corps industrial fund, respectively. Congress provides working capital (cash) to DOD through an industrial fund appropriation which is allocated to each service. The Army receives its working capital from Congress by way of DOD and the allocation to Army is identified as AIF. The corresponding financial system, rather than the appropriation, is usually referred to as AIF. Headquarters, DARCOM and Military Traffic Management Command (MTMC) commanders are designed as activity managers responsible for developing the detailed budgetary and accounting systems and procedures provided by COA and DCSLOG who are the AIF directors.

c. The basic concept of AIF as a working capital fund is simple. The dollars provided by the AIF are used to initially pay for the costs of producing goods or services. The proceeds of the sale are redeposited in the AIF account and become available to finance additional goods or services. From this characteristic, working capital funds, including AIF, are known as "revolving funds." The AIF activities from a financial viewpoint, generally operate in a manner similar to commercial/industrial enterprises in the private sector; i.e., they all need working capital. However, there is one major difference. By congressional direction expressed in the enabling statute, AIF activities must operate on a break-even basis. There is no profit motive. This means that prices charged by an AIF activity should be substantially the same as the costs of producing the product or services for the customer (revenue = costs). Except for the absence of a profit motive, the operational and financial management of an AIF activity is very similar to that for an enterprise in the private sector. The AIF financial system employs double-entry accrual accounting and budgeting is done on the basis of accrued costs.

d. As part of an effort to increase efficiency and enhance productivity within DOD, Mr. Carlucci proposed that capital equipment purchases be financed by industrial funds. Heretofore, all capital equipment purchases for the industrial funds competed for procurement appropriation funding. This new program was submitted to Congress in the FY 1983 President’s Budget. Congress, with enactment of the FY 1983 Appropriations Act, approved implementation of the industrial fund capital equipment initiative. The new program authorizes industrial fund financing of automation information systems, minor construction, and repair/maintenance projects, as well as capital equipment. The industrial fund finances this new program through the rates charged to its customers. The Army feels this a good program because it allows our industrial fund activities to operate more like a business without competing for procurement funding. OSD, however, has prohibited AIF supply operations (e.g., area-oriented depots (AOD)) from purchasing equipment under the new program. Capital equipment for these activities must continue to compete for procurement appropriation funding. Preliminary implementing policy and authorization to purchase equipment, based on congressional approval, was disseminated to the field on 13 January 1983.

e. The FY 1983 Defense Appropriations Act removed statutory and administratively imposed civilian personnel ceilings in industrially funded activities in FY 1983. Congress lifted the ceiling as a test to determine whether civilian end strength controls are necessary. The FY 1984 Joint Appropriation Conference Report extended this test into FY 1984. In addition, House Appropriation Committee language states that for purposes of planning FY 1985 workload at industrial activities, continuation of the ceiling prohibition should be assumed. Accordingly, commands can continue to

take advantage of this opportunity to effectively manage based on workload requirements and available funds, and should continue to document the results of this test.

24-23. Consumer funding in the Army

The apportionment-allocation-allotment approved operating budget procedure is the means by funds are made available to the Army installation/activity commanders. These commanders incur the obligations against which expenditures are made or, in simpler terms, buy and pay for the goods and services needed to perform the Army's missions.

24-24. Financing of operations

a. The mission or support funds, which are made available through command channels, are used to finance operating cost to include purchase of supplies from the stock fund. For efficient supply support, the installations maintain an equitable balance between their consumer funds and stock fund acquisition authority. The attainment of this balance is largely dependent upon the accuracy of forecasted supply requirements contained in the installation program and budget estimates.

b. Consumer funding, however, does not provide a direct financial support to a commander for all purposes but is restricted to those items of cost incurrance over which the commander has direct control. The pay and allowances of military personnel are centrally managed and financed; therefore, the funding for these items of cost are not provided installation/activity commanders. Financing of major construction normally is provided the district engineer under whose direction the construction is being accomplished rather than to the installation or activity commander for whom the work is being done. Consumer funding provides for the financing of all operations and maintenance cost incurred in the accomplishment of a commander's missions to include the maintenance and repair of those items initially provided on a free-issue basis.

c. A basic precept of the consumer funding concept is that commanders be permitted the maximum flexibility in the use of their resources to include financial resources. The degree of permitted flexibility is a subject open to interpretation and question, particularly in the face of the limitations that are imposed. First, there are legal restrictions which specify the mounts of funds that may be obligated for specified purposes. Generally, fund usage is limited by time periods; e.g., by fiscal quarters and by fiscal year. Fund limitations are also established by subdivisions of appropriations and the local commander is denied authority to transfer funds from one subdivision to another even though the commander would remain within the total provided under the appropriation. (Transfers between appropriations require congressional approval; however, intraappropriation transfers are accomplished by the operating agency head or at Headquarters, Department of the Army (HQDA), upon proper justification.) A comparatively new technique of establishing funding limitations is by ascribing "floors" within the total funding authority. A floor in this instance is a fund control directive which specifies that a minimum amount must be costed for a specific purpose such as the maintenance and repair of real property or for the maintenance of equipment. Floors are the result of congressional interest in specific areas, particularly those which, over a period of years, have shown an increasing backlog of work to be done as a result of a shortage of funds.

d. Normally, a commander will not be provided financing to accomplish all the work that has accumulated nor to meet 100 percent of the supply and equipment requirements of the units and activities being supported. Therefore, higher headquarters in the chain of command establishes priorities with in which the commander must operate, thus, creating further limitations on the use of the resources available. Despite all the various limitations and restrictions, flexibility does exist to a degree in the use of a commander's resources. Rescheduling of work, savings generated as a result of management improvements, shifts in emphasis on locally established priorities; elimination of nice-to-have but nonessential items or standards, increase in efficiency and economy, and many other actions, all of which fall under the heading of good management, are available to commanders as a means of making maximum use of their resources and providing a degree of flexibility.

Section III
Financial Inventory Accounting In the Navy

24-25. Introduction

a. The Navy follows the basic tenets of DOD with respect to financial inventory accounting. In addition, serveral improvements are being or have been incorporated.

b. As a result of direction from OSD to proceed with implementation of a centralized accounting and billing system, a test centralized accounting and billing system was implemented at three naval supply centers, the Aviation Supply Office, and Ship's Parts Control Center in FY 1972. Due to lack of funding, further developmental effort was delayed. Further, as a result of shore establishment realinement actions, two of the naval supply centers involved were disestablished in FY 1974.

c. In mid-1966, the Secretary of the Navy approved a System Design Proposal for the Conventional Ammunition Management System which provided for the

transaction item reporting of changes in ammunition asset status to the ICPs. Since the Conventional Ammunition Management System's transaction item reportings provide all necessary transaction data to the ICPs, it was jointly determined in early 1976 by Naval Supply Systems Command and Naval Sea System Command that centralized accounting and billing would be implemented at the ammunition stock points on a phased basis commencing 1 January 1977. This subset of the central accounting and billing system is identified as centralized accounting and billing/Conventional Ammunition Management System.

d. The Navy developed a milestone plan which included improvements to the centralized accounting and billing system implemented at 29 major stock points during the FY 1979-80 time frame.

e. Centralized accounting and billing is a financial management system which integrates at the Navy ICPs the accounting and billing functions for all centrally managed materiel which are transaction item reported. Essentially, the transaction item report which updates the ICP supply data base is also processed through the centralized accounting and billing programs to maintain financial ledgers, to prepare billing documents, and to prepare and report financial inventory data. The stock points are relieved of these stores accounting responsibilities for these items.

f. As a result of centralization, centralized accounting and billing reduced the overall cost of performing Navy stores accounting functions, financial inventory reporting, and billing.

g. Integrated disbursing and accounting is one of several projects designed to implement the recommendations resulting from the Navy's accounting system by the firm of Haskins and Sells. Under the integrated disbursing and accounting concept, the posting of expeditures and the disbursement of funds are a part of the same operation and the reliance on hard-copy output for the communication of accounting data and financial information is largely eliminated. These goals are achieved by the development of an online random access data base and extensive telecommunications capabilities between accounting activities and their customers, activities, and a Central Accounting and Finance Office.

h. A limited test of the integrated disbursing and accounting concept was conducted at the Navy Ships Parts Control Center during FY 1973. The center was given authority to pay dealers' bills chargeable to the funds for which it was the authorization accounting activity, and to introduce the expenditure output directly into the accounting system. The benefits achieved were a more responsive payment service to contractors, more timely shipping data for ship and pay purchases and significant reduction of accounting efforts in expenditure processing with a corresponding reduction of undistributed disbursements. In FY 1975, the Navy Comptroller authorized development of integrated disbursing and accounting capabilities in a number of areas.

i. Integrated disbursing and accounting development is being accomplished in three phases. Under phase I, the disbursing and accounting in dealers' bills were combined and the exchange data between accounting activities and finance centers were mechanized. Under phase II, the data base and telecommunications capabilities were developed. Under phase *III*, all accounting and disbursing functions in the Navy were consolidated into a network of Financial Information Processing Centers and satellite Financial Processing Centers. By the end of FY 1977, integrated disbursing and accounting capabilities were available for stock points, ICPs, military construction accounting activities, resource management system accounting activities, fleet commanders, the Chief of Naval Reserve, and the Chief of Naval Education and Training. In FY 1975, integrated disbursing and accounting capabilities were developed for payment of Government bills of lading and EMS. Phase *III* was implemented in FYs 1979, 1980, and 1981.

j. A highly mechanized accrual accounting system was implemented at Navy ICP on 1 July 1972. The system provides a uniform accounting program for wholesale materiel procurement funded by the Navy stock fund and such procurement appropriations as Ship Construction and Conversion, Navy; Aircraft Procurement, Navy; and Other Procurement, Navy. The programs are system maintained by the Fleet Material Support Office under the guidance and direction of the Naval Supply Systems Command. The programs provide for both real-time update and retrieval of data, as well as conventional tape processing. An interface is maintained with the procurement and requisition processing systems.

k. To maintain continued financial control and insure fiduciary integrity, a program of "personal responsibility" was inaugurated in 1973. Commanding officers of various key subordinates were charged by the Commander, Naval Supply Systems Command, to look more closely at significant financial indicators. Elements of this program include a list of defined control points distributed from the headquarters, a listing of checkpoints for use by the Inspector General staff, updating employee position descriptions to further identify financial responsibility and significantly increase attention to career training and employee development. Concurrently, improved qualitative and quantitative financial controls were developed for routine review at the headquarters level.

24-26. Management

a. Under the direction of the Secretary of the Navy,

and in consonance with the guidance provided by the Chief of Naval Operations and the Chief of Naval Material, the Commander, Naval Supply Systems Command administers and manages the Navy stock fund. Inventory management is exercised through ICPs performing supply and financial management of the specific categories of Navy material financed by the Navy stock fund. The Navy Retail Office at the Fleet Material Support Office is assigned responsibility for exercising financial control over Navy stock fund material locally managed on a decentralized basis at retail and consumer stock points. Retail stock levels are monitored using financial inventory data rather than individual item reporting. ICPs, such as naval supply centers, naval supply depots, air stations, and other stock points are responsible for the custody and/or accountability of stock fund inventories. Certain material aboard mobile logistics support force tenders, repair ships, and combat stores ships and allowance material supporting aircraft combatants and marine air groups is also carried in the Navy stock account. Navy retail stocks of DLA, General Services Administration (GSA), and other services are also funded by the Navy stock fund. The Fleet Material Support Office issues Navy stock fund allotments to Navy stock points which requisition the material directly from DLA, GSA, and other services.

b. The following material categories are managed under the Navy stock fund:

(1) Aviation and catapult and arresting gear consumables.

(2) Retail fuels and related items.

(3) Ships hull, mechanical, electrical, electronic, and ordnance consumables.

(4) Publications and forms.

(5) Resale clothing and subsistence.

(6) Ships stores and commissary store items.

(7) Retail supplies.

(8) Ships hull, mechanical, electrical, electronic, and ordnance depot reparables.

24-27. Navy stock fund inventories In FY 1978

a. Inventories of material financed by the Navy stock fund were valued at $2 billion as of September 1978.

b. Among stratified stocks, acquisition and retention assets retained in support of approved forces account for $1,297 million; other retention stocks amounted to $434 million with $271 million in the potential DOD excess stratum.

24-28. Navy test to finance reparable in the Navy stock fund

a. In 1978, the Vice Chief of Naval Operations directed a study to analyze alternative funding mechanisms for secondary item depot-level reparables which would result in improved item availability and, thereby, enhance fleet readiness. The study resulted in a recommendation to test a change in the financing of depot reparable items from appropriation funded to the Navy stock fund. OSD approved a prototype test effort for managing the Navy Ships Parts Control Center depot-level reparable items in the Navy stock fund commencing 1 April 1981.

b. The objective of improved depot-level reparable item availability and readiness is expected to be realized from an amalgam of characteristics inherent to Navy stock fund management. These characteristics included the long recognized discipline fostered by the buyer/seller relationship between stock funds and customer appropriations, the flexibility of the stock fund to make trade-off between repair and procurement financing and the ability to react to changes in customer behavior and needs. An implementation group is monitoring various indexes that will measure attainment of this objective through FY 1983.

24-29. ICP responsibility

a. The primary responsibilities of Navy ICPs include the determination of fund and material requirements, the procurement and distribution of material to meet demands, and the achievement of a balance between the supply and the demand for items under their control. To assist management in carrying out these responsibilities, the ICPs finance the procurement and retention of approximately 536,000 line items, which is over 31 percent of all the items currently stocked in the Navy supply system.

b. Navy stock fund operations are not confined to land-based storage depots. The stock fund has material pre-positioned on mobile logistics support force ships so that ship commanders can be resupplied all over the globe. The stock fund also owns material aboard aviation ships and in support of marine air groups. Like all other customers of the stock fund, any ship commander requiring material from a supply ship or aboard an aviation ship or in support of a marine air group must have consumer funds with which to reimburse the fund.

24-30. The Navy Industrial fund

The capital of the Navy industrial fund totals about $185 million. More than 60 activities have been chartered to operate under the fund, including naval shipyards, overhaul and repair departments of industrial air stations, weapon stations, ordnance stations, ammunition depots, public work centers, laboratories, printing plants, and the Military Sealift Command. Each of the activities chartered under the fund has an individual cash allocation of working capital; changes in these allocations

are made from time to time in response to the varied working capital requirements of the several activities.

24-31. Consumer funding in the Navy

a. Consumer funding is the concept of placing maximum responsibility for the management and control of resources as close to the point of consumption as possible.

b. The principle of consumer funding has been used in the Navy for over 100 years. Prior to 1957, funds were allotted to the individual units of the fleet through means of allotments established by the Chief of Naval Operations. The Chief of Naval Operations allotted portions of the annual appropriation to each of the fleet commanders who, in turn, allotted funds to the type commanders, who subsequently allotted funds to each of their individual ships. The ships procured supplies and services either from the Navy stock fund or from other sources.

c. In 1957, the practice of funding the individual units was discontinued, and operating budgets are now applied only to the level of the type commander. At this level, funding is now accomplished by the issuance of operating budgets which include three types of authority; e.g., new obligational authority, total expense authority, and military expense authority. These operating budgets are controlled, accounted for, and reported under the resource management expense/accrual system and provide the operational management levels with tools required to effectively manage the resources needed to perform missions and functions assigned. The focus of management attention is on expenses which represent resources consumed in the performance of the mission for the period reported. The type commanders, in turn, fund ships and units by granting to them the authority to cite the type commander’s operating budget for operating expenses, including procurement of supplies and services, subject only to operating target amount constraints. Thus, the individual ships are relieved of the administrative functions associated with full operating budget accounting and are obligated only to report the use of the funds and the units of work accomplished to the type commander.

d. Shore activities are now primarily funded by operating budgets issued through the chain of command by a systems command or parent bureau or, in the case of fleet support activities, by the appropriate fleet commander. The commanding officer of a shore activity normally controls the use of the funds available by allocation to the departments of the command on the basis of a station budget. Major industrial and research, development, test, and evaluation activities operate under the Navy industrial fund with the systems commands, fleets, and other military activities as the principal customers for their goods and services.

Section IV
Financial Inventory Accounting in the Air Force

24-32. Introduction

a. During the years following 1947, all military services except the Air Force began extensive use of stock funds. The Air Force, because of its organizational structure, its missions, and mission alinements, and its high degree of mechanization and centralization, elected to apply stock funding only to its commissary stores, clothing stores, the Air Force academy store, and aviation fuels.

b. On 1 July 1968, the Air Force extended the stock fund concept to nonrecoverable secondary items. Comparatively, stock funding is not as extensive as appropriation financing in the Air Force. The financial inventory accounting system is used as a means for recording inventories and transactions for hundreds of thousands of items valued at billions of dollars.

c. The Air Force has developed a financial inventory accounting system that extends all the way down to base level. The Air Force system applies only to inventories managed by accountable officers at the base level (accountable supply offices), at the control point level (the air logistics centers), and at the Air Force Logistics Command level.

d. The Materiel Accounting System consists of item records and monetary records. Detail record maintenance responsibility is divided between the base chief of supply and the accounting and finance officers. Under this system, supply and accounting and finance share use of item/financial records stored in the computer. Data contained in a common input are used to update both item and financial records.

e. Materiel transactions are classified as either stock fund or investment. Accounting and finance computer programs assign the proper financial inventory accounting code to these transactions and update applicable computerstored records.

f. In addition to accumulation and output of financial data required for management of stock fund and investment inventories, this system is also designed to accumulate and output materiel asset/expense data in support of the accounting system for operations. This includes:

(1) Control of operation and maintenance funds for materiel purchased from the stock fund.

(2) Accumulation of cost center materiel expense and obligation data.

(3) Cost center expense reporting and reconciliation of expense and stock fund billing to operation and maintenance. All accounting and finance and supply inline programs that process transactions affecting either the stock fund or operation and maintenance allotment test for fund availability.

24-33. Base-funded inventories

a. Management of base-funded inventories includes a thorough review, analysis, and evaluation of assets and requirements (both on an item and a dollar basis); preparation of budgets; acquisition of materiel; control over stockage; and the subsequent issue of supplies to users. While supply accountable officers are in the position of reviewing the supply status of each item, on an individual basis, segments of management including the base Deputy Commander for Resource Management and the base Comptroller, can and do make a critical review of the materiel assets and requirements position in a monetary way. This is done because, among other things, the commander must develop plans, programs, and budgets pertaining to the issue requirements and procurement of base-funded inventories.

b. Recognizing that financial inventory accounting alone does not assist all logistics to manage or control all materiel, the Air Force requires each base to submit a daily Air Force Recoverable Assembly Management System report for investment repair parts and equipment items to appropriate inventory managers located at the air logistics centers.

c. Information relative to these items is transmitted by the base to the appropriate ICP manager at the air logistics center level. In addition to the Air Force Recoverable Assembly Management System report, the base chief of supply transmits a daily critical item report to appropriate inventory managers.

d. The appropriation financed or centrally procured secondary items are provided by the air logistics center free of charge. The remaining secondary items are funded by the base.

e. In order to accomplish the mission, the item manager at the air logistics center uses the consumption (investment) recoverable item computation, the computation of requirements for equipment items, and the related stratification products from each system. Stratification products are used for internal management and control purposes, budget purposes, and as a primary source of information for DOD.

f. Financial inventory accounting data pertaining to centrally procured items flow from bases and air logistics centers to the financial accounting data bank at Headquarters, Air Force Logistics Command, where data are correlated by budget program and prime class (commodity or weapon system classification assigned to each of the air logistics centers for purposes of item management). Bases also report transaction and asset data and statistical inventory data to the prime class air logistics centers where data are processed as input to their requirements system. Requirements are then transmitted to HQ, Air Force Logistics Command.

g. Data relative to base-funded items are transmitted by the base through the appropriate major air command (e.g., tactical air command or strategic air command) to Air Force Logistics Command. The same information pertaining to base-funded materiel is also reflected in the base's financial plan (e.g., command operating budget) wherein financial resources required to buy materiel from DLA, GSA, and local vendors, are programed.

h. The information appearing on the stratification products is the main source of information required for DOD. There is a commonality between the Central Secondary Item Stratification Report and the DOD series of reports. The Central Secondary Item Stratification Report, an internally required Air Force report, is used by inventory managers at the air logistics center level and the Air Force Logistics Command level to maintain a proper balance between assets and requirements. The reports to DOD are used by personnel at OSD level to review the assets and requirements portion of all the military services.

i. Financial inventory accounting reports and requirements products are used in preparation of the DOD-required Investment Spares Operating Budget Statement. The format of this report includes, among other things, the appropriation used to finance the procurement of materiel; the category of materiel; inventory requirements (peacetime and wartime) objectives; materiel availability, stratified in such a manner as to clearly define the applicability or inapplicability of assets and the amount of funds required to effect the procurement of replenishment spares or repair parts.

24-34. The Air Force stock fund

a. The Air Force stock fund consists of six divisions which are:

(1) *Commissary.*

(2) *Fuels.* Consists of both aviation fuels and missile fuels.

(3) *Air Force Academy Cadet Store.*

(4) *Medical-Dental.*

(5) *Systems Support*. Includes items in support of Air Force systems which are centrally procured and stored in the depot system for further distribution or use.

(6) *General Support*. Includes items procured by base-level supply activities from sources other than Air Force depot system and which are not included in any other division of the stock fund.

b. The Air Force Logistics Command is the division manager for the Fuels, General Support, and Systems Support Divisions. The Cadet Stores Division is managed by the Air Force Academy, the Commissary Division by the Air Force Commissary Service, and the Medical-Dental Division by the Air Force Surgeon General. Each supply activity that stores and issues stock

fund items is a stock fund outlet. The individual in charge at the supply activity operating under a stock fund operating program (chief of supply, commissary officer, fuels management officer, Air Force Logistics Command item manager, etc.) is a primary stock fund manager responsible for managing the stock fund inventories included in the individual operating program.

24-35. Operations

a. Actual operations of retail outlets (stores) take place at the base level or wherever the store might be located. It is the responsibility of a store manager to procure and sell the required items of materiel. The commissary branch office manager procures materiel from DLA or a producer and sells such subsistence items to users. Customers of the commissary store include military personnel and their dependents who purchase subsistence from the commissary and troop messes. While military dependents would actually use cash to reimburse the commissary store stock fund branch office, the cost of subsistence issued to troop messes is chargeable to the Military Personnel, Air Force appropriation.

b. The Air Force Academy stores, which handle the personal needs of cadets, purchase supplies from a number of agencies including GSA, DLA, and other wholesalers. In turn, the store manager sells the materiel and the cost of the sale is charged to a personal charge account established for the cadet.

c. The General Support Division encompasses all base-funded expense items, including ground fuels, not specifically included in another division of the stock fund. The General Support Division items are requisitioned directly from DLA, GSA, and other service stock funds with ultimate reimbursement made to the source of supply. Commercially available items are procured directly from local vendors using local purchase methods. An item is bought and paid for with stock fund money by the stock fund manager at base level when it first enters the supply system. All subsequent movement of an item in the Air Force from base to base is an intrastock fund transfer with no billing or collecting involved. A stock fund item is sold only when issued to a user within the Air Force or to an authorized customer outside the Air Force.

d. The Systems Support Division employs the same management system and technique used by the General Support Division in managing centrally procured expense items. The essential difference is that the Air Force Logistics Command initiates procurements and maintains wholesale depot stock levels at the air logistics centers. As sales occur and inventory levels are reduced, replenishment stocks are procured. Requisitions submitted from a base to Air Force Logistics Command for Systems Support Division items are, in effect, a request for transfer of property from depot stocks to base stocks and is treated as an intradivision transfer and no funds change hands. *e.* Stock fund outlets ordinarily deposit their cash or check receipts with the local accounting and finance officer, who takes action to have them credited to the stock fund's central account. In noncash sales, documents citing the supporting appropriation are prepared by the base Accounting and Finance Office at the base where the agent account is located; however, the actual transfer of funds takes place at the Air Force Accounting and Finance Center, Denver, CO. Payments to the stock fund's suppliers are made locally citing the stock fund's US Treasury account symbol. Through the Air Force Accounting and Finance Center, all sales, receipts, payments, and cash balances shown on the stock fund's books are reconciled with the stock fund's account in the US Treasury.

Section V
Financial Inventory Accounting in the Marine Corps

24-36. Introduction

a. The Marine Corps maintains a financial inventory accounting system as required by DOD instructions. The dollar value of the inventory carried in the Marine Corps supply system, both stock fund and nonstock fund, is recorded in financial ledger accounts maintained at the ICP. The total dollar value of the items in the supply system, as recorded systemwide, is shown by materiel category within geographical location.

b. The processing of receipt, issue, and adjustment transactions against the item inventory records causes a corresponding change in the financial inventory balances. At the end of each monthly reporting period, financial inventory reports showing the total amount of inventory and changes during the period are provided for management use. The dollar amount of inventories and the transactions affecting the inventories are summarized in subsidiary reports to show location and the category of materiel.

c. In addition to the financial inventory accounts, ledger accounts are maintained to record disbursements, collections, and the stock fund's cash balance. From the financial inventory accounts and the accounts recording cash transactions, source data are available for preparation of reports required for internal management purposes and for submission to DOD.

d. The dollar amount of Marine Corps stocks in the supply system as of 30 September 1982 totaled nearly $4 billion. Table 24-2 shows the Marine Corps stratification of inventories, in thousands of dollars.

Table 24–2.
Marine Corps Instore Materiel Assets
(In Thousands of Dollars as of September 1982)

Stratified Stocks:	
Approved Force Acquisition	2,697,161
Approved Force Retention	794
Economic Retention	543,541
Contingency Retention	168,097
Potential DOD Excess	99,186
Total Stratified Stocks	3,311,084
Unstratified Stocks*	262,046
Undelivered Military Assistance	-0-
Total Stock**	3,773,680

*Consists of intransit stocks, stock with contractors, on loan and other unstratified stocks.
**Excludes excess stocks for which disposal has been authorized or initiated.

24-37. Funding

a. Major items, reparable secondary items, and selected major components and assemblies are procured with Procurement, Marine Corps appropriations and issued as a statistical charge to the end user. Other secondary items for supply system stock are procured by the Marine Corps stock fund, a revolving fund.

b. The supporting establishment is issued an operating budget fund authorization for Operation and Maintenance, Marine Corps appropriations with which to procure materiel, whether it be by means of interservice supply support agreements, from local commercial sources, or from the Marine Corps stock fund account through the use of Military Standard Requisitioning and Issue Procedures (MILSTRIP).

c. Some items, such as individual clothing, are procured from the Marine Corps stock fund with Military Personnel, Marine Corps, and Reserve Personnel, Marine Corps appropriations.

24-38. The Marine Corps stock fund

a. The Marine Corps uses stock funding to achieve its objectives: particularly cost-consciousness among its personnel and the development of meaningful and useful cost of performance budgets. The stock fund is managed and administered by the Deputy Chief of Staff for Installations and Logistics.

b. The stock fund finances the procurement of and holds in storage, expense-type secondary items for resale, and for mobilization reserves. There are eight chartered materiel categories managed by the fund with its single division. These are ordnance-tank-automotive, engineer supplies and construction materiel, general property, communications-electronics-electric, clothing and textiles, fuel, subsistence, and commissary stores. Budgets are prepared and funding controls are maintained by type of materiel and purpose; e.g., peacetime operations, mobilization reserve, etc.

c. The Marine Corps stock fund includes approximately 3,427 line items, representing about 47 percent of all of the materiel stocked by the corps. Table 24-3 indicates the scope of Marine Corps stock funding, by materiel categories.

d. During FY 1983, the Marine Corps stock fund (which is subject to the OMB apportionment process) obligated 95 percent for direct procurement of peacetime stocks of which 52 percent or $193.4 million was for subsistence/commissary store items. Forty-eight percent, or $181.7 million, was used to buy supplies for the remaining categories.

24-39. Operations

a. Fiscal transactions between the customer and the stock fund are effected at the ICP, Marine Corps Logistics Base, Albany, GA, based on transaction reporting from the issuing base. For items in support of base operations (including commissary stores, subsistence, bulk fuel, decontrolled and locally procured items), the Deputy Chief of Staff for Installations and Logistics allots obligational authority to the base which, in turn, procures required items from integrated materiel managers or local vendors. Subsequently, base supply officers sell supplies to consumers for consumer funds.

b. The stock fund-consumer fund concept of operation in the Marine Corps is considered to be quite effective in that the corps has successfully instituted a system that enables it to develop and use cost of performance budgets. In addition, within its system, there is an abundance of command emphasis and cost consciousness, both of which have increased supply effectiveness while reducing costs of defense operations.

24-40. The Marine Corps Industrial fund

The Marine Corps industrial fund includes the depot maintenance activities at the two Marine Corps Logistics Bases at Albany, GA and Barstow, CA. The depot maintenance activities commenced operations under the industrial fund in 1968. The depot maintenance ac

Table 24–3.
Marine Corps Stock Fund Materiel Categories
(30 September 1982)

Category	Number of Line Items
General Property	1,256
Communications-Electronics	1,033
Ordnance-Tank-Automotive	656
Engineer	482
Total	3,427

tivities are individually chartered under the fund and perform operations rom working capital cash allocations granted by the Commandant of the Marine Corps. While the overall management of the fund rests with the Commandant, financial management responsibilities are vested in and at the local command level.

24-41. Consumer funding in the Marine Corps

a. Expense operating budgets under the appropriations for Operations, Marine Corps, and Operations, Navy for the support of Fleet Marine Force units are issued to the Commanding Generals, Fleet Marine Forces, Atlantic or Pacific.

b. Bases, air stations, Marine Corps Logistics Bases, recruit and training activities, receive expense operating budgets under appropriations for Operations, Marine Corps.

c. Ship's detachments, supporting and security barracks, and other detachments receive authority to cite funds against a HQ, Marine Corps expense operating budget.

d. Allotments from Military Personnel, Marine Corps appropriations for subsistence are made to the Commanders, Fleet Marine Forces, Pacific; Fleet Marine Forces, Atlantic; and major bases, depots, and barracks.

Section VI
Financial Inventory Accounting in the Defense Logistics Agency

24-42. Introduction

a. Financial inventory and item accounting for the DLA supply system inventories is accomplished on a centralized base at each ICP, except in the case of perishable subsistence and base operating supplies which are on a decentralized basis.

b. DLA uses its stock fund (the defense stock fund) as a means of financing the procurement of all supplies, based on assigned logistics responsibilities. Financial accounting for all inventories and inventory transactions is accomplished through the use of procedures which are part of the stock fund system.

24-43. Magnitude of DLA operations

Inventories financed by the defense stock fund were valued at $9.06 billion as of 30 September 1981. Table 24-4 shows the inventory stratification. Sales for FY 81 were $16.9 billion.

24-44. Current Operational Aspects

a. Inventory management is exercised through defense supply centers which, as integral parts of the agency, perform supply and financial management of specific categories or commodities of materiel

Table 24–4.
Defense Logistics Agency
Stratification of Inventories

(In $000 as of 30 September 1981)	
Stratified Stocks:	
Approved Force Acquisition	$3,786,757
Other War Reserve Materiel Requirements	3,559,712
Protectable	
Economic Retention	652,113
Contingency Retention	-0-
Potential DOD Excess	295,594
Total Stratified Stocks	8,294,176
Unstratified Stocks	766,168
Total Stocks	9,060,344

financed by the defense stock fund. These centers maintain centralized inventory control. All supply management functions such as requisition processing, inventory accountability, financial accounting, reporting, billing, and collecting are performed at these centers. The financial accounting requirements are covered in DLAM 7000.1, Accounting and Finance Manual. The supply centers submit financial statements and reports to HQ, DLA, Cameron Station, Alexandria, VA.

b. Stock fund statements clearly indicate the extent to which financial inventory accounting is applied by DLA. For example, Stock Fund Statement Number 4a (Inventory Status and Transaction Statement) is used for two purposes in that: it reflects data pertaining to the investment in inventory; and it stratifies inventory data by materiel categories, purposes, and condition.

c. Stock fund trial balances and financial statements, together with supporting schedules and a comprehensive analysis, are prepared by each defense supply center and transmitted to HQ, DLA. The headquarters consolidates, reviews, and analyzes the data and furnishes DOD with stock fund reports that reflect agencywide inventory data in accordance with provisoes of DODI 7420.11, "Chart of Accounts and Financial Reports for Department of Defense Stock Funds."

24-45. Highlights of the system

DLA provides for utilization of centralized inventory control concept of operation by commodity. Each supply center establishes and maintains the accountable records for all items within its assigned commodity. This accountable record contains national asset availability. After edit and processing of the customer's requisition, the national asset availability records are updated.

24-46. Objectives of the DLA system

The objectives of the DLA system include:

a. Centralization of all requisitioning procedures and stock control functions in the defense supply centers.

b. A depot storage pattern based on the concept of positioning stocks close to the concentration of military customers and ports of embarkation in the United States. Currently, there are seven principal distribution depots, four specialized support depots, and a number of direct supply support points. Principal depots carry a wide range of commodities. The type and quantities, however, of items stocked in specialized and direct support activities depend on their individual missions. Direct supply support points, for example, are meeting high-volume demands of local maintenance and rebuild operations at repair facilities and shipyards.

24-47. The defense stock fund

a. The defense stock fund is a revolving fund used to finance the procurement of supplies and materiel for resale to other defense and Government agencies. The fund operates as follows: Through the use of permanently appropriated capital, common items of supply identified in the charter are purchased and distributed through the agency's distribution system or shipped directly to the customer. Upon withdrawal of these items from inventory for use, the appropriations provided the customer are used to pay for items received, thereby, restoring the assets of the fund. This generates funds to pay for the procurement of additional materiel to be placed in inventory for another cycle of procurement and distribution.

b. Prior to the establishment of DLA, commodity single-manager assignments were made to the military services. Inventories managed by these agencies were financed out of the parent service stock fund. Now, as common-use commodities are reassigned to DLA, this agency, using its own stock fund, is responsible for supply management and procurement of all such reassigned commodities for DOD. Items purchased and held by the defense stock fund are wholesale stocks. The individual military service (customer) uses its own funds to obtain the materials. The term funds is used here to denote amount (in the form of allocations, suballocations, allotments, suballotments, etc.) available to the particular organization for obligational purposes. After purchase by a military service, the materiel are placed in the service's distribution system, where they become retail stocks. Funds used by the customer are working capital funds established by separate charters or appropriated funds.

24-48. Financial operations

a. Defense supply centers, or separately managed commodity categories, are separate entities so far as accounting for assets, liabilities, and capital is concerned.

b. Defense stock fund obligational (procurement) authority is apportioned by OMB to HQ, DLA. In turn, an amount is allotted to activities. In some instances, the stock fund normally does not finance local purchase, except in the subsistence commodity, and acquisition of supplies to be used by DLA centers and depots for operation and maintenance purposes.

c. DLA is the consolidated wholesaler for assigned items of supply and distributes to the depot level in CONUS. It supports Air Force bases worldwide as that service has requested. Each military service determines its own requirements; the agency, in turn, computes the total quantitative requirements, procures supplies from commercial sources, and sells to the military services at cost plus surcharge for transportation and normal operating losses. Furthermore, DLA arranges transportation for initial distribution of stocks from suppliers to point of storage, from point of wholesale storage points.

24-49. The establishment of the defense stock fund

The establishment of the capital of the defense stock fund on 1 July 1962 in the amount of $1,866.2 million was accomplished through the capitalization of $1,753.8 million of inventories of materiel transferred from military services ownership; the assumption of $132.3 million of accounts receivable and $38.9 million of accounts payable transferred from the military services and the transfer of $50 million of stock fund cash from the military services. Deductions made were $3.6 million for decapitalization of inventories and $27.4 million for fiscal year 1962 operating charges in the defense stock fund.

24-50. The defense industrial fund

a. The defense industrial fund began consolidated operations in May 1962, by capitalizing the clothing factory previously operated under the AIF. On 1 July 1962, the Marine Corps Clothing Factory was also capitalized under the defense industrial fund and the two shops were consolidated at the Defense Personnel Support Center. This combined operation has been designated the Directorate of Manufacturing. The defense industrial fund finances the Directorate of Manufacturing of the Defense Personnel Support Center located at Philadelphia, PA, which produces items required on short notice, in small lots, special measurement, or under special circumstances which preclude commercial source procurement. The clothing factory also serves as a pilot production plant to test design specifications and production methods, and provides a part of the production base for industrial mobilization.

b. This program is financed from customer orders, nearly 95 percent of which are from the defense stock

fund. Annual sales are approximately $16 million. From the outset, the clothing manufacturing activity has employed engineered standards and for the past several years has made use of predetermined fixed prices. It is one of the few installations within DOD that uses an incentive pay system for direct labor employees.

24-51. Consumer funding in DLA

Consumer funding has been used by DLA since its inception in 1962. The operating budget concept began in FY 1969 and replaces the former Command Operating Program/Budget and Allotment System. DLA headquarters issues an operating budget to each field activity, which is in itself a financial authority within the overall operating budget authority received from OSD. The document issued to the field provides dollar and manpower limitations by operating program within a plus or minus 3 percent reprograming limitation. Quarterly limitations are placed on key totals, such as operation and maintenance direct dollar amounts, and total gross program, including reimbursable program and military personnel costs. Other objectives of the priority management effort are met in the consumer funding procedures through exclusion of equipment procurement for items costing $1,000 or more and establishment of retail funds from which other equipment and supplies are purchased by the operation and maintenance account. Section VII Financial Inventory Accounting in GSA

24-52. General

a. The general supply fund finances, on a reimbursable basis, the national supply distribution facility system and the ordering supplies for direct delivery to agencies. Supplies or services are sold to customer agencies from the fund at cost plus a markup to cover first-destination transportation, inventory shrinkage, and inflation. Related operating expenses are provided for under the appropriation Operation Expenses, Federal Supply and Services. Also financed by the fund and reimbursed by using agencies are the operation of the motor.pool, the rehabilitation and repair of furniture and equipment, the redistribution of materials no longer needed overseas, and the rental of administrative equipment to GSA activities.

b. In 1949, the Procurement Division (then the Bureau of Federal Supply) was transferred to GSA. The general supply fund, which had grown to over $10 million, was also transferred to GSA. Today the appropriated capital of the fund is approximately $245 million with a total US Government investment of about $518 million as of 30 September 1983.

c. The IMC Inventory Schedule. submitted quarterly by each inventory management activity, provides the basis for developing overall planning and control of stores inventory. In doing this, allocations of the general supply fund are made to available-for-issue inventories on a nationwide and inventory management activity basis. Supply schedules are prepared by each inventory management activity during the first month of the quarter and submitted to the central office. This planning document provides key financial inventory accounting data for inventory factors such as sales, inventories, receipts, and stock adjustments. These data are provided by quarter to show the actual data for the preceding quarters, and projected data for the current and planning quarters.

d. Each IMC Inventory Schedule is reviewed by the central office to insure conformity to overall planned objectives. Adjustments are made, whenever necessary, after coordination with the inventory management activity. Approved plans are consolidated into a National Supply Operations Plan for use as an integral part of the total planning and control of Federal Supply and Services inventory investment.

e. Monthly analyses and evaluations are made of each inventory management activity’s actual inventory operation to determine the amount and significance that any variation will have on quarterly projections. Significant changes to these projections require the inventory management activity to submit an amended plan with explanatory statements.

Section VIII
Communications Services Industrial Fund

24-53. Introduction

a. In 1964, the Secretary of Defense approved the establishment of a communications services industrial fund activity. The actual charter was apporved for operation by 1965 by the Assistant Secretary of Defense (Comptroller).

b. The charter authorized the Defense Communications Agency to finance those defense communications as directed by the Secretary of Defense to include the operation of the Defense Commercial Communications Office under the provision of DODD 7419.4, Industrial Fund Operations. The communications services industrial fund was established with a capital of $30 million and the stipulation that reimbursement to the activity was to be accomplished at least monthly on the basis of services rendered. This reimbursement is accomplished through the use of cross-disbursement with no checks issued by customers.

c. Today, the communications services industrial fund manages a volume of leased communications approximating $850 million. Leasing activities are con-

ducted for CONUS and Hawa*II.*

d. The activities now financed through the fund include the cost of two switched networks: the automatic voice network (AUTOVON) and the automatic digital network (AUTODIN). The fund also leases circuitry and equipment that connects subscribers to AUTOVON or AUTODIN as well as circuitry and equipment for designated customer requirements.

e. Predetermined subscriber rates are used to recover the cost of operating AUTOVON, AUTODIN, and any other switched networks that may be financed through the communications services industrial fund. These rates are priced according to speed of service for AUTODIN. The AUTODIN rates are priced according to class of service and geographical parameters.

f. A prime benefit of centralized leasing is in the area of circuit mileage within CONUS. Most of this mileage is purchased in bulk offerings through the communications service industrial fund (usually telecommunications packages of 60 or 240 voice equivalent circuits). Individual circuits from these packages are then sold to customers on a predetermined cost per mile basis. The economics of using telecommunications packages results in savings of approximately $1.5 million each year.

g. The daily operations associated with the communications services industrial fund consists of procuring, accounting, and paying for leased communications facilities, equipment, and services for DOD and other Government agencies as may be designated by the Secretary of Defense, with subsequent customer billings for services provided. These functions are accomplished by a Defense Communications Agency field activity, the Defense Commercial Communications Office, whose cost of operaitions is recovered by assessing a small administrative charge to all communications processed through the fund.

24-54. Major item funding in DOD

a. For procurement activities, Congress provides 14 separate appropriations, most of which may be obligated in either the budget year or the following 2 years. Procurement funds for the Army are contained in five appropriations, which are for: aircraft, munitions, tracked combat vehicles, missiles, and other procurement. Five appropriations are provided the Navy: aircraft procurement, weapons procurement, shipbuilding and conversion, other procurement, and Marine Corps procurement. The Air Force has three appropriations: aircraft, missiles, and other procurement. Procurement activities of all other defense agencies are contained in the appropriations entitled Procurement, Defense Agency.

b. Funds for the procurement appropriation are justified within each service by the items contained in the services, Materiel Program or Materiel Annex to the DOD Five-Year Defense Program (FYDP). Here again, such justification is based upon line item requirements. For the higher dollar value items, considerable backup justification is prepared. Controls exist at almost every level of command as to the authority for transfer of appropriated procurement funds from one project to another.

c. The basic objective of any procurement program is to secure prime quality products at reasonable costs. One of the most effective ways to achieve this objective in defense procurement programs is through timely competitive procurement. The problem of securing realistic competitive procurement, without adversely affecting the operation or delivery of essential weapon systems is, in large measure, the matter of obtaining and using technical data and information in the proper manner. Without it, procurement actions tend toward sole-source contracts, cost-plus-fixed-fee, or incentive contracts. The Committee on Government Operations, House of Representatives, US Congress, maintains that proper management of the technical data program is absolutely essential to the formulation of a realistic procurement program. This is no simple task when you consider the fact that defense repositories for this information now contain over 50 million engineering drawings, with approximately 6 million new and revised drawings, being added annually and that from $1.5 to $2.6 billion is spent annually to acquire various types of technical data.

d. The annual budget requests for obligation authority for procurement activity are backed up in each of the departments by an itemized materiel program which is, in essence, the materiel annex of the DOD FYDP. As annual segments of this program are revised for budget purposes, the term annual buy list or shopping list is frequently used for identification purposes.

e. The research, development, test, and evaluation (RDTE) appropriations provide for the conduct and support of all research and development effort including basic research, theoretical studies, scientific experiments, feasibility studies, systems engineering, design studies, weapons systems analysis, development engineering, producibility engineering and planning, and fabrication of experimental models and prototypes. Decisions made as to the annual amounts of new obligation authority to provide each of the services through these appropriations tend to reflect the structure of our forces and their related equipment for several years in the future.

f. One appropriation for RDTE activities is provided for each service. Justification of these funds is expressed and identified by individual RDTE projects and tasks. Considerable control exists in the transfer of funds from one task to another task, and in most instances DOD approval is required before funds can be transferred from one project to another.

g. It is interesting to note the difference in identification of the major program or activity subdivision of this appropriation used by Congress and DOD. The congressional breakout is summarized by activities as: Military Sciences; Aircraft and Related Equipment; Missiles and Related Equipment; Military Astronautics and Related Equipment; Ships, Small Crafts, and Related Equipment; Ordnance, Combat Vehicles, and Related Equipment; Other Equipment; Programwide Management and Support; and Emergency Fund. Such a breakout tends to identify major classification of hardware or end items. The DOD breakout for control purposes, however, tends to be more functional, and is expresed as: Research; Exploratory Development; Advanced Development; Engineering Development; and Management and Support. End item identification is not indicated in the title but is discussed in justification statements.

h. As previously stated, all research and development funds, regardless of grouping or identity to major program, are justified by the individual project or task. Each service has a numbering system which accomplishes this purpose.

i. Within each service's appropriation usually will be found a budget program which provides funds for RDTE activities which cannot be entirely identified with a specific item-related project or task. Within the Army and Navy, the budget program is known as Programwide Management and Support Budget Program and provides for the cost of operation, management, and maintenance of RDTE facilities, which are not distributed directly to other project activities, and for certain cost for central administration. For the Air Force, a similar program provides for the cost of operation, management, and maintenance of all Air Force managed RDTE installations, except the Eastern Test Range and the Satellite Tracking and Control Facility.

j. The emergency fund enables DOD to expeditiously exploit technological breakthroughs in any of the RDTE programs.

k. The annual Appropriation Act reflects the decision of Congress as to the future size and shape of our Armed Forces. To make sound decisions during the hearings, congressmen are informed of the concepts and desired objectives as to force structure and weapon systems being developed by the planning and programming processes within DOD. Many preliminary decisions are made in the development of the FYDP. The annual segments of the program are shaped into the annual budget requests.

24-55. Major item funding in the Army

a. Five procurement appropriations provide for the manufacture, remanufacture, engineering in support of production (including first article testing), reconfiguration, and first destination transportation of major items of aircraft, weapons, combat and tracked vehicles, ammunition, missiles, and other support equipment. These items are centrally procured and managed for operational issue or general service use and are added to the Army inventory upon delivery by the producer. The appropriations also provide for the procurement of selected high-unit-cost reparable major assemblies and components both for initial provisioning and replenishment purposes. Funds are also provided under these appropriations for the establishment and continuance of production capabilities. Excluded from these appropriations are the costs of the procurement functions (e.g., contract execution and administration, and acceptance inspections) which are financed under the Operation and Maintenance, Army, appropriations. Also excluded are the type of supply and equipment procured with ASFs. The budget for the five procurement appropriations is prepared and justifies in detail on a line-item basis in direct relationship to the FYDP and its Procurement Annex. The budget justifications are also supported by the line-item materiel studies drawn up under the Army Materiel Plan. These procurement funds must be obligated with specified periods of time, which relate to the normal long leadtime nature of obtaining the items financed by these appropriations.

b. AMC received about 95 percent of the total procurement appropriations in FY 1974.

c. The following type information is used in formulation of the Army procurement appropriations budgets:

(1) Resource capabilities estimates.
(2) National objectives.
(3) Intelligence.
(4) Current operational planning and evaluation projects.
(5) Joint Chiefs of Staff (JCS) guidance.
(6) Other agency information.

d. The end result of this formulation is the following Army planning documents:

(1) The Army Strategic Appraisal.
(2) The Army Force Guidance.
(3) Army Planning and Programing Guidance Memorandum.
(4) Program Decision Memorandum.
(5) The Army Capabilities Plan.

e. These documents are reflected in the FYDP which requires continual updating. In addition, there is the Force Basis Annex, which permits materiel requirements computation, and the materiel annex which produces procurement lists, data sheets, and procurement schedules.

f. These, in turn, are interfaced with the Construction Annex to the FYDP, the Installation Annex, and the Family Housing Annex. The Procurement Appro-

priations Readiness Study Exhibit P-1 is the shopping list which goes in with the President's budget and is submitted to Congress by January of each year. This shopping list contains generic references to the items the Army is attempting to get approval to procure such as the Light Observation Helicopter and Hawk Missile. It sets out the unit cost and total cost for the budget year, the present year, and the previous year.

g. Subsequent to hearings before congressional committees, an apportionment request, referred to as the Apportionment P-1, is submitted.

h. After the Apportionment P-1 is submitted, it goes through a series of hearings on the apportionment request conducted by OSD and OMB. Finally, OSD releases the approved program. The Deputy Chief of Staff for Research, Development, and Acquisition (DCSRDA) releases the entire program to AMC and others; it may also defer some portion of the program.

i. It is interesting to note, at this point, the mushrooming effect that takes place in procuring a budget line item. The fund distribution within AMC starts when the procurement appropriations fund allocation is released by the COA. AMC suballocates fund allocation is released by the COA. AMC suballocates funds to its subordinate commands, specifically earmarking that part of the suballocation where management responsibility is vested with a AMC project manager. The remaining budget line terms are the management responsibilities of managers who are under the direction of the MSCs. Funds are further distributed by allotments, suballotments, and fund citations to numerous installations, activities, or procurement offices where the actual contractual or work order efforts are to be accomplished. Fiscal and program progress reports flow up the foregoing channel as a basis for program review and analysis and timely reprograming actions.

24-56. Major item funding in the Navy

a. Navy major end items are funded under five procurement appropriations. These are Aircraft Procurement, Navy; Weapons Procurement, Navy; Shipbuilding and Conversion, Navy; Other Procurement, Navy; and Procurement, Marine Corps. The first four of these are allocated to and administered by systems commands of the Naval Material Command. The last is managed by HQ, Marine Corps. In line with Navy and Marine Corps missions, these appropriations cover a wide variety of weapon systems for ground, sea, and air use. Aircraft Procurement, Navy is administered by the Naval Air Systems Command and funds naval and marine aircraft, repair parts, and support and equipment facilities. Weapons Procurement, Navy is administered by the Naval Sea Systems Command and funds air and surface missiles, repair parts, and torpedoes and related equipment. Shipbuilding and Conversion, Navy is administered by the Naval Sea Systems Command and funds ship construction and conversion including an initial outfitting of repair parts. This appropriation is budgeted under the end cost concept whereby the total cost including estimated price escalation over the construction or conversion period is budgeted at one time to complete the program. Other Procurement, Navy funds all end items which are not ships, aircraft, or missiles. This includes air and surface launched ammunition, ship alterations construction and materials handling equipment, nonaviation repair parts, and various supporting equipments. Procurement, Marine Corps, funds weapons support equipment and repair parts for Marine ground forces including missiles, armament, and ammunition. Marine aviation is supported from Aircraft Procurement, Navy.

b. The majority of funds under the above appropriations are put on contract to private industry. The most significant exception is in Shipbuilding and Conversion, Navy where some ship construction and conversions are done in Navy yards operating under the Navy industrial fund.

c. The five major procurement appropriations of the Department of the Navy normally account for approximately 40 percent of the total Navy-Marine Corps budget.

d. The Aircraft Procurement, Navy, and Weapons Procurement, Navy appropriations fund the purchase of these major items for the Navy. While these appropriations are not administered under the Resources Management System, a relationship with the Operation and Maintenance, Navy appropriation does exist. This relationship is evidenced in the operation and maintenance of Navy aircraft and missiles are reported in the Resources Management System by way of account numbers which bear a relationship to the procurement funds. Thus, in combination, the two systems provide the means of extracting the total cost of procurement, operation, and maintenance of a given aircraft type or missile type. This visibility can provide a meaningful cost base which is needed for evaluation of a given weapon system.

24-57. Major item funding in the Air Force

a. Responsibilities. At the headquarters level of the US Air Force, the Director of Budget is responsible for preparing, organizing, monitoring, and consolidating budget estimates for the Air Force and assisting in their justification before OSD, OMB, and Congress. After Congress provides obligation authority and funds become available, the director is responsible for allocating these funds in accordance with approved programs. The entire budgeting effort is directed toward one primary objectives: The most effective use of appropriated funds.

b. Formulation.

(1) The annual budget estimate is developed by pricing the approved Air Force program for the fiscal year concerned. The approved program is the first year of the Program Objective Memorandum. It is identified in a series of documents which are prepared and issued by HQ, US Air Force. Major air commands and operating agencies use these basic program documents and other directives in completing their budgets.

(2) All programs must be approved by the Secretary of Defense. The requirement for this approval is one of the major centralized control features of the DOD programing system.

(3) The first step in the formulation phase is preparing the objectives. These objectives, which are stated in the Air Force program documents, are supplemented by the Director of Budget, HQ, US Air Force, with a document entitled "Call for Estimates, Fiscal Year." This document contains general guidance and special instructions for the fiscal year concerned. At present, the Air Force appropriations are: Aircraft Procurement; Missile Procurement; Other Procurement; Operation and Maintenance; Operation and Maintenance, Reserve; Operation and Maintenance, Air National Guard; Military Personnel; Reserve Personnel; National Guard Personnel; Research, Development, Test, and Evaluation; Military Construction; and Family Housing. To make the structure a most effective management tool, operating accounts are further shredded by program elements, cost centers, and elements of expense.

(4) The next step in the formulation phase is the HQ, US Air Force review. In this step, analysts in the Directorate of Budget review the budget estimates with the offices of primary interest on the Air Staff. If the appropriation concerns procurement, for example, the Deputy Chief of Staff for Logistics and Engineering, is responsible for reviewing it. If the appropriation concerns construction, the Director of Civil Engineering is responsible for the review. When an appropriation is not the responsibility of a specific Air Staff element, it is reviewed by individuals representing Air Staff elements with primary interest in the program areas concerned. These initial reviews determine whether or not basic assumptions have been complied with, the requirements have been formulated in the light of established policies and program directives, and all requirements for funds have been included and balanced against mission objectives.

(5) The next review at HQ, US Air Force is made by supporting committees composed of senior representatives of the Air Staff who have primary interest in the major elements (forces, manpower, flying hours, etc.) of the Air Force program. This is the point at which the Air Force appropriation requirement for the budget year is first reviewed as a whole. The most active of such review agencies is the Operations Budget Review Committee. The committees examine these recommendations to insure compliance with Air Force policy, the guide lines of the Secretary of Defense, and current program documents. If necessary, the committees adjust appropriation areas to balance the program requirements within resources expected for the budget year. The results of these reviews are presented to the Air Staff Board.

(6) The Air Staff Board examines the recommendations of the committees and validates amounts to be requested in each appropriation. The board resolves any differences between reviewing groups, recommends changes needed in policies or programs, and establishes an Air Force position, which is subject to the approval of the Chief of Staff and the Secretary of the Air Force.

(7) The third review of the Air Force budget estimates is made by the Chief of Staff and Secretary of the Air Force who have the final authority for approval or adjustment of estimates within the Air Force. The budget formulation phase ends with their review and approval, usually in September prior to the year in which the funds will be appropriated.

c. Review and enactment.

(1) This phase of the budget cycle has four steps:

(a) Review and adjustment of the budget estimates from the Secretary of Defense to the President.

(b) Presentation of the budget to Congress by the President.

(c) Review of the budget and preparation and passage of the authorizations and appropriation bills by both Houses of Congress.

(d) The action of the President on the authorizations and appropriation bills.

(2) The action of the Congress and the President results in three laws which provide funding authority for DOD. These are the DOD Appropriation Act, Military Construction Act, and Independent Offices Act (for Civil Defense).

(3) The review and enactment phase of the budget cycle starts with a joint review by DOD and OMB. Usually in September of each year, DOD and OMB examiners conduct detailed and searching reviews of the estimates submitted by the military services. If specific programs and requirements are not well justified or if there is any question of the propriety of including them in the budget, in the judgment of the Secretary of Defense, they become subject issues and candidates for elimination or added justification. At this time, the consolidated requirements of DOD are derived and placed into budget categories.

(4) The requirements of DOD have a substantial impact on the Federal budget. Consequently, it has become customary to cut and fit these requirements to an

amount which, on the basis of economic consideration, offers a reasonable expectation of approval.

(5) The process of balancing the requirements of military services resembles that of adjusting appropriations within the Air Force. OSD and OMB balance the requirements of all military services. The joint reviews of these agencies are followed by considerations of any appeals that the services may make. Then, by law, the budget estimates are transmitted to OMB.

(6) OMB accepts and adjusts estimates for the President. When OMB has completed its review and considered all reclamas, a consolidated Federal budget is prepared.

(7) The second stage of review and enactment starts with the President's annual budget message including action on the budget by Congress. In this annual budget message each January, the President presents to a joint session of Congress the total Federal budget for the approaching fiscal year.

(8) After hearing the President's budget message, the House and Senate assign action to the budget to the committees and subcommittees concerned with appropriations. In both Houses, these committees are the Committee on Appropriations and the Armed Services Committee. Both Armed Services Committees consider all service requirements that must have authorizing legislation to legalize the use of any appropriations that might be made. The Committee on Appropriations in each House has a subcommittee to hear all testimony supporting the requirements of DOD. The hearings of the House subcommittee are scheduled to precede those of the Senate subcommittee. The Air Force is represented at these hearings by the Director of Budget, the Director of Aerospace Programs, and other interested members of the Air Staff. These representatives testify in support for funds requested by the Air Force. After completing its hearings, the subcommittee prepares a report for its parent committee. When both Committees on Appropriations have approved the budget of DOD appropriation bills are drawn up. These bills are acted upon by the House and then by the Senate.

(9) If, as frequently happens, the provisions of the bills approved by the House and those approved by the Senate differ, a joint committee of representatives from both subcommittees on DOD appropriations is appointed to resolve the differences. Then the House and the Senate vote on the bills submitted by this joint committee. After Congress has enacted the bills and the President has signed them, they become the Appropriation Acts for the ensuing fiscal year.

(10) If it has not been completed by 30 September, Congress should pass a joint resolution to enable DOD to continue its operations after 1 October. Additionally, Congress may provide supplemental appropriations at any time should conditions warrant this action.

d. Execution.

(1) The third phase of the budget cycle deals with controlling the funding authority made available by congressional actions. Financial plans, budget authorization and allocations, budget administration, and records relating to authorization and allocations all play significant roles in the execution phase.

(2) Important changes can occur in the international situation or within the Air Force after the major commands prepared budget estimates and submitted them to HQ, US Air Force. Sometimes such changes occur even during the time that Congress is reviewing the Air Force budget before passing the Appropriation Act. Consequently, for the operations accounts, during January through March of each year, the Air Force requires each major command to prepare a financial plan for submission to the headquarters in early April.

(3) These plans, which refine the command budgets submitted approximately 7 months earlier by the major air commands and the separate operating agencies, serve two purposes. First, they allow HQ, US Air Force to arrive at a more accurate distribution of funds among the major commands in the light of existing circumstances. Second, after these plans are approved by HQ, US Air Force, they become the priced programs under which commands will operate during the next fiscal year. Even though the financial plan is prepared and reviewed during the final months of the review and enactment phase of the budget cycle, it is actually part of the execution phase.

(4) The major air command financial plans are a most important link in this chain of events. To help commands justify their estimates and at the same time insure the efficient use of funds, HQ, US Air Force gives each major command an operations and maintenance fund ceiling to the appropriation level. This ceiling, called a bogey, represents a portion of the total operations and maintenance appropriation that the Air Force expects Congress to provide. The highest priority mission requirements balanced with other mission resources must be within the bogey and be identified as a Part I Program. Any program that cannot be funded within the bogey is costed separately and identified as Part *II.* Part II requirements are items of lower operating priority. In addition, the financial plan includes a description of the impact that elimination of this program would have on the command mission. When the major air commands receive this call, they request their subordinate commands to submit financial plans.

(5) Each financial plan is an itemized list of the funds needed to carry out the objectives outlined in the operating program. The plan shows the requirement in considerable detail and phases them by the fiscal quarter in which they will be obligated. Each command

then submits its consolidated plan to HQ, US Air Force.

(6) The review process at HQ, US Air Force generally follows the pattern of the budget estimates with one exception: all requirements are accommodated within the obligating authority that Congress is expected to provide. Because requirements always demand more funds than are available, some lower priority requirements are sometimes canceled or deferred, and the operating program is rebalanced to fit available resources.

(7) The consolidated financial plan is approved by the Air Staff Board. The approved plan is the basis for the request for fund apportionments that the Air Force Director of Budget submits to OMB through the Secretary of Defense. Generally, OSD and OMB hold joint hearings on apportionment requests. These requests require support as detailed as that given to budget estimates.

(8) After HQ, US Air Force has received its apportionment, the normal execution phase of the cycle continues with the issuing of budget authorizations and allocations. Budget authorizations do not give the commands authority to spend; they are simply estimates of the amounts of funds the major air commands may reasonably expect to receive during the operating year. When the Director of Budget issues the authorizations, he also allocates to the major air commands their share of the funds apportioned for the first quarter of the coming fiscal year.

(9) When each major air command receives its allocation for the first quarter, it allots these funds to its subordinate commands. A form called the advice of allotment is used to tell each command the amount of its allotment. On 1 October of each fiscal year, the subordinate commands may start obligating funds allotted to them for the first quarter of that fiscal year. No organization may obligate funds before receiving its advice of allotment or supplemental written authority.

(10) Receipt of the advice of allotment permits the execution phase to progress into its next stage, administering the budget. Budget administration has two steps, reconciliation and control. If an organization receives an annual budget authorization showing that the amount of money authorized to it is less than the amount required, adjustments are made through coordinated staff action. This action permits all staff sections to consider the whole requirement so that the adjustments they make will be in the areas having lowest priority. Arbitrary percentage adjustments across the board usually result in an imbalance between mission objectives and mission support.

(11) The administration of funds is, to some extent, controlled to make certain that funding is used for its intended purpose. This control is vested in the commander but the comptroller, with the help of the other staff members, administers it for the commander. The comptroller continually monitors the program to insure it is properly administered. With the help of the office of primary interest, the comptroller may recommend adjustments to the commander.

(12) The final stage of execution phase is the keeping of records on allocation and obligations. HQ, US Air Force, the major air commands, and the subordinate commands all keep records of budget allocations and allotments. These records show management officials the amount of obligation authority that an organization has received and issued.

(13) The accounting office prepares reports showing how much money each organization has obligated. These reports are aids in evaluating progress. When the obligated funds are measured against the financial plan, it is possible to evaluate progress and see whether the obligations have been kept within the limits of the funds available.

(14) The Air Force is such a large, complex organization that its plans and programs must be phrased in general terms. For that reason, members of each staff must analyze these documents from HQ, US Air Force in order to formulate supplementary plans and programs which interpret overall Air Force objectives. These supplementary plans and programs then become the basis for the dollar computations that must be made before developing accurate budget estimates. Each staff agency uses its professional knowledge to determine what has to be done and how to do it. Although no exact procedures have been laid out, staff members insure accurate estimates by following these general steps:

(a) Determine their responsibilities in preparing the estimate. This is made on the basis of a thorough study of the call for estimates.

(b) Analyze program documents to determine what they mean in relation to budget needs.

(c) Develop supplementary program plans, outlining what must be done to meet command objectives and furnish any additional guidance required.

(d) Convert the information worked out in step 3 into dollar requirements.

(e) Justify the amount requested in terms of the supplementary programs developed in step 3.

(f) Review the final document and revise it to correct any weaknesses. Submit the revised estimates to the next higher echelon for review.

(15) The members of a staff follow these same steps in reviewing a budget estimate submitted by a subordinate echelon.

(16) When a budget estimate is sent forward, it is supported by a justification written in narrative form. The way the justification is written affects the reception given to the estimate as it passes from one reviewer to

another. To prepare a justification that will stand up under scrutiny, the staff officer who is responsible follows these suggestions:

(a) Make the justification brief, factual, and easy to read.

(b) Be specific.

(c) Follow a time sequence.

(d) Relate the requirements to programs, mission, and published authorities.

(e) Compare amounts requested for the coming fiscal year with past and present expenditures.

(f) State the source of prices used.

(g) Include the formulas used in making computations.

(h) Explain the beginning and ending inventories, unless they are self-explanatory.

24-58. Major item funding in the Marine Corps

a. Marine Corps major end item requirements are funded under the appropriation Procurement, Marine Corps. The Deputy Chief of Staff for Installations and Logistics is the appropriation sponsor. The Procurement, Marine Corps appropriation is divided into six separate budget activities as:

(1) Ammunition and ordnance equipment.

(2) Tracked combat vehicles.

(3) Guided missiles and equipment.

(4) Communications and electronics equipment.

(5) Support vehicles.

(6) Engineer and other equipment.

b. The Deputy Chief of Staff for Installations and Logistics is further assigned the responsibility of program execution. The Fiscal Director of the Marine Corps allots funds as recommended by the Deputy Chief of Staff for Installations and Logistics to support approved procurement programs.

24-59. Major item funding in the Defense Logistics Agency

The appropriation Procurement, Defense Agencies, is used by DLA to finance procurement of all items costing $3,000 or more which are required for operation and maintenance of its field activities, and for related industrial facilities. Through this account, DLA purchases materials handling equipment, automotive vehicles, mechanized materials handling systems, ADP equipment, office equipment, manufacturing equipment for the clothing factory, and other major equipment as required on a line item basis. These items are funded for both central and local procurement, depending on the nature of the item and procurement problems involved. As an exception, items of equipment for the Defense Documentation Center are financed from the appropriation for RDTE defense agencies. Unless otherwise approved by the Office of the Assistant Secretary of Defense (Comptroller), items of equipment for the Defense Property Disposal Service are expensed by the operation and maintenance appropriation.

Chapter 25
Resource Management Systems

25-1. Department of Defense

a. Introduction.

(1) Public Law (PL) 216, the first amendment to the National Security Act, established performance-budgeting and working capital funds (stock funds and industrial funds) throughout the Department of Defense (DOD). The performance-budgeting concept was established upon the idea that needs were to be based on the requirements of the programs to be accomplished. In 1955, the Second Hoover Commission recommended changes in accounting and budgeting procedures from which emerged the management concept of planning and controlling operations in terms of output (programs) rather than in terms of input (allotments, allocations, appropriations). This resulted in the performance budget, which provides the basis for most of the concepts which are included under resource management systems.

(2) In 1965, the Assistant Secretary of Defense (Comptroller) was directed by the Secretary of Defense to make major changes in programing, budgeting, and accounting systems by 1 July 1967. This portion of the effort was named Project PRIME (Priority Management Effort) to underscore the urgency of completing this task in such a short time. The Project PRIME was further emphasized by Presidential Memorandum in 1966.

b. Resource management systems.

(1) Prior to 1921, application of financial resources to specific objects was a task which Congress reserved to itself. The Executive was not directly in the fiscal process. Though this approach was feasible when the level of Government activity was low, it crumbled when activity became international in scope. The Budget and Accounting Acts of 1921 and 1950 gave the Executive the responsibility for the conduct of financial affairs, including the preparation and execution of budgets. The 1949 Amendments to the National Security Act and the 1956 Amendments to the Budget and Accounting Acts of 1921 and 1950 placed the President in the role of a business manager. In DOD, the concept of businesslike management was introduced by Secretary of Defense Robert S. McNamara through the installation of a programing system to bridge the planning and budgeting phases, and a set of management goals called resource management systems. These were intended to assist managers at all levels in applying financial resources to the production of defense output products and then measuring the effectiveness of the application decision. Goals are divided into five categories as shown in figure 25-1, categories of resource management systems.

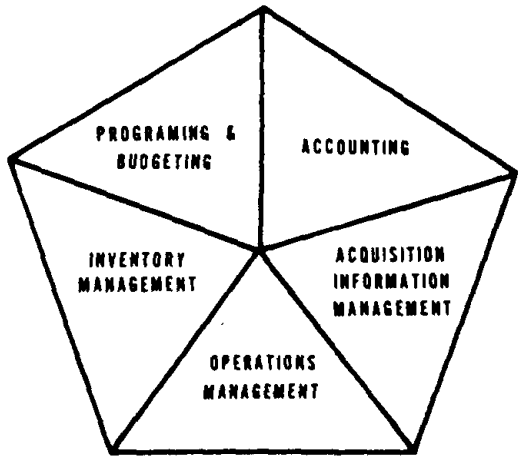

Figure 25–1. Categories of resource management systems.

(2) The objective of this category of resource management systems is to establish consistency and translatability between data identification codes. The programing system is structured in terms of resource output, e.g., force levels. Budgeting is structured in terms of sources of monetary resources; e.g., congressional appropriations. Since PL 216 and the Budget and Accounting Act of 1950 require a budget in terms of programs, it is necessary for defense managers to submit appropriation requests in both the functional input and program output formats.

(a) Programing. When Robert S. McNamara was appointed Secretary of Defense in 1961, his first management improvement was the installation of a programing system to bridge the gap between the planning and budgeting functions. Planning was a military responsibility and budgeting was the responsibility of the civilian defense secretaries. There was little opportunity for extensive formal coordination because the planning and budgeting functions were performed sequentially rather than simultaneously. The programing system divided the outputs of DOD into 10 major force programs. Each major force program is made up of program elements operated by the separate services.

The programing system is called the Five-Year Defense Program (FYDP) and covers an 8-year time frame. The first 5 years are displayed in terms of force levels and expected costs. The last 3 years list approved force levels only. The time frame covered by the FYDP coincides exactly with that of the Joint Strategic Planning Document. Programing is carried on simultaneously with planning and budgeting and is a continuous process. The FYDP contains the only approved operating program for the services. It is fully costed and is fiscally realistic. It includes only the force levels that can be financed from the current and expected appropriation levels. Figure 25-2 shows the FYDP and congressional defense budget relationship. Both reflect the same dollar requirement for the budget year.

(b) Budgeting. Budgeting is the process of assembling appropriation requests in the format required by Congress. With the advent of programing, budgeting is merely a translation of the force level data in the FYDP into functional appropriation categories; e.g., military personnel; research, development, test, and evaluation (RDTE); procurement; and military construction. Detailed narrative justification is provided for each of the appropriation categories. Once a budget is approved by Congress, there is a reverse translation back into the FYDP format, where it becomes a baseline for operations management. Both programing and budgeting fit the organizing portion of the management cycle. In the control phase of the management cycle, accounting systems gather operating data for comparison to the FYDP budget baseline.

c. Accounting systems.

(1) Accounting systems are used to provide timely, consistent, and uniform information to DOD managers, the President, Congress, and taxpayers. The managers are responsible for the effective and efficient operation of an entity. They are responsible for allocating resources in a manner that will produce the desired results. The process of providing accounting information for managers is called management accounting because this type of accounting is based on the needs of management.

(2) Those who provide the resources that finance an entity and its operations have an inherent right to know how the resources are used. For example, Congress requires accounting information on behalf of the taxpaying citizens who entrusted financial resources to congressional judgment. The law provides that a regular statement of the receipts and expenditures of the Government shall be made (by the executive branch) from time to time.

(3) The DOD Accounting Manual requires that both financial and management accounting information be gathered in a single integrated accounting system controlled under a single general ledger. This insures consistency of information in both the managerial and financial sense.

(4) Full-cost data are required in the business sector in order to make intelligent decisions about programs competing for scarce financial resources. A 1965 Defense Department study showed that the typical operating-level manager has visibility of only 25 percent of the financial resources that were required to operate his or her entity. Tangible resources about which the operating-level manager had no financial information were treated as "free." Such cost obscurity led to ill-founded decisions simply because the "big picture" was not visible. It is important that the operating-level manager have full visibility into the total costs required to operate his or her entity. The cost of all personnel, services, and operating supplies and equipments had to be reported to the responsible manager on a regular basis. It is felt that even though a manager may not have full control over all costs charged to the operation, the manager should be cognizant of the total amount of resources over which he or her has jurisdiction. Though the manager does not have full control over the input resource cost, the manager does have a great deal of control as to how the input resources will be applied to the task at hand.

d. Inventory management. In the private sector, inventories are a large consumer of the financial resources devoted to the operation of an entity. The same is true for the Federal Government. The recorded cost of the inventories; i.e., the personal and real property in the Defense Department is over $200 billion. This amount is nearly as large as the national budget, and is approximately twice the size of the annual defense budget. In the business sector, the application of inventories to the production task is an exacting process. If it weren’t, the cost of the final product would not be known and determination of profit would be impossible. Though profit is not an element of Government operations, knowing the cost of the product is an essential element to the decisionmaking process. The inventory management provision of resource management systems required that all services adopt the working capital fund concept for management of consumable inventories. Specifically known as stock funding, the concept introduces the business method to the Government by requiring the stock fund manager to purchase items of inventory that will be ultimately purchased by the operating-level managers and consumed in the production of a defense output product. As such, the stock fund manager would behave like a merchandising in the business sector. Also, the consumer would have full cost visibility into his or her operations because he or she would have to budget for and purchase the items needed to produce items of output. The long-range result of this concept has been a better identification of the cost

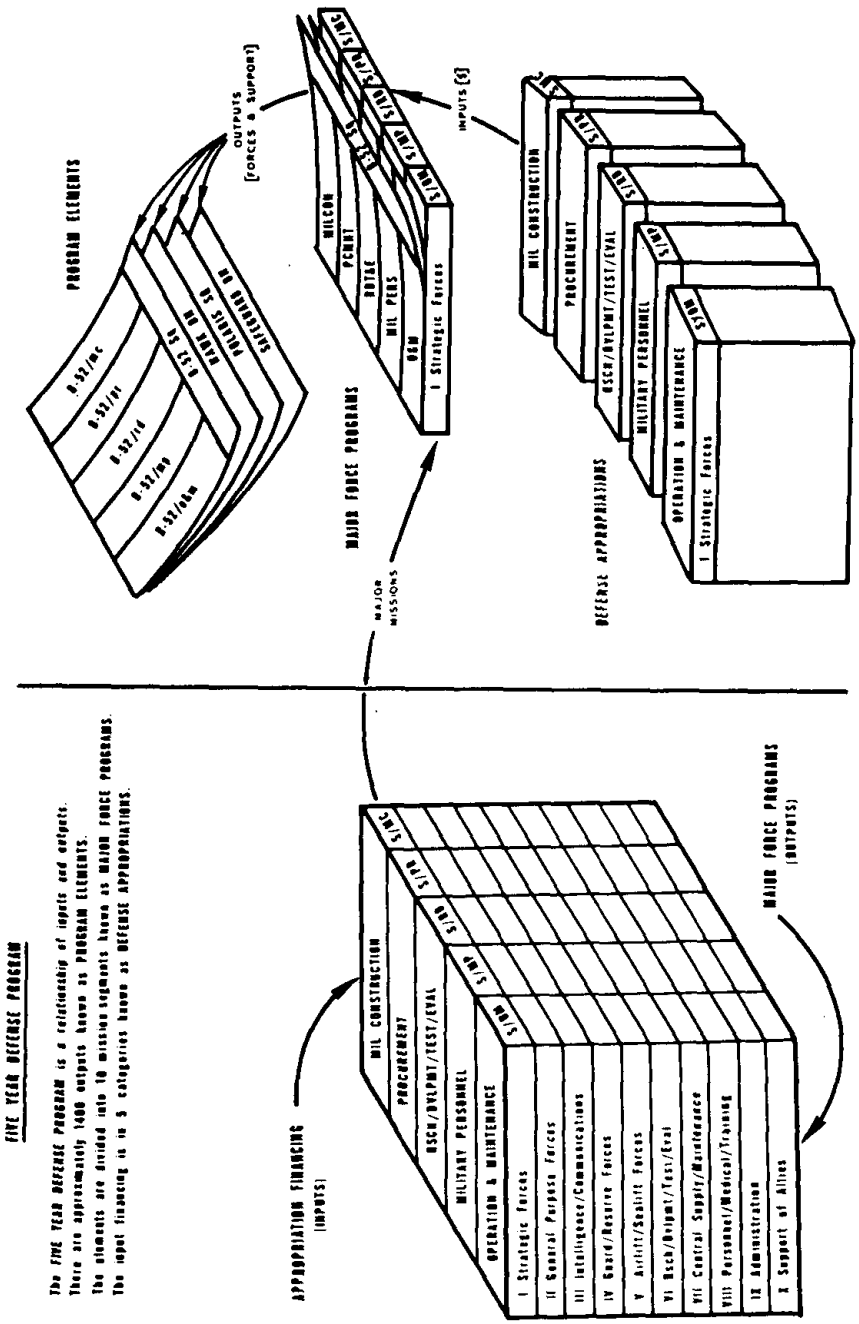

Figure 25–2. FYDP and congressional defense budget relationship.

per unit of output and better management of the consumable items acquired for the defense task. Other inventory management tools, such as financial inventory accounting, stratification, etc., come under this provision of resource management systems.

e. Acquisition information management systems.

(1) All previous systems in resource management dealt with information gathered from operations within the Defense Department. Since nearly all of the weapon and support systems for the defense task are acquired from the business sector on a cost-plus-profit-fee basis, there was a great need to acquire information from the business sector that would allow defense managers to monitor the progress of weapon/support system production. Prior to resource management systems, some data were gathered but not in a formally organized format. Resource management systems required specific data with respect to a contractor's cost and technical performance. Because of the need to develop and refine internal Defense Department management systems, many of the acquisition information management system's goals were temporarily postponed. Large cost overruns during the late 1960s brought pressure from Congress for better management of weapon system acquisition. As a result, new acquisition information systems were developed whose driving thrust is to extract data from the contractor's existing accounting system rather than to saddle the contractor with additional costly data accumulation systems.

(2) The selected acquisition information and management system is broken down into subsystems and the common source of data within the subsystems is in the accounting records of the contractors. The subsystems are:

(a) The economic information system is used jointly by DOD and the National Aeronautics and Space Administration (NASA). The information is obtained in two separate formats which are concerned with plantwide employment which shows employment in all kinds of plant work, and specific information about the largest individual projects. The data provided are to determine the relationship procurement dollars to workers so that the relationship of dollars to workers can be computed. Reports resulting from these analyses are furnished to a number of Government agencies.

(b) Cost information reports are concerned with collecting data for cost estimates for long-range planning. These estimates help DOD make better choices among competing development alternatives, help those who forecast fund requirements, and provide a crosscheck against contractor estimates used in the negotiation process.

(c) Performance measurement provides the information needed to reflect the contractor's progress on those contracts which involve high risk and technological uncertainty. The performance measurement insures that the desired weapon or support system will be delivered on time and at reasonable cost and will possess the technical features required by the contract.

(3) The performance measurement subsystem on the selected acquisition information and management system uses the contractor's internal planning and control system as the basis for performance reporting to the Government. However, this means that the contract must have a control system which meets the Government's criteria and it must be the same system which the contractor used for internal management performance.

(4) Reports are designed and regulated by each service as necessary, using the same information and cut-offs as the contractor.

(5) Typical elements of data which may be collected include: applied direct costs, budgeted cost of work performed, actual cost of work performed, latest revised estimate of cost at completion, recurring and nonrecurring costs, etc.

(6) With the information furnished by the contractor, the defense manager can exercise management control which is the process of insuring that resources are being used effectively and efficiently. This management approach uses summary or aggregated data under normal conditions, with full assurance that the detailed data, which might necessarily be requested in unusual situations, are on record and available from the contractor's system.

25-2. Resource management efforts in the Army

a. The Army management structure reflects the changes for Project PRIME implemented in 1968. The Army also "industrially" funded all maintenance depots and many research and development activities.

b. Purification of all Army accounts has been accomplished to identify an "expense," as required by DOD.

c. In addition, all Army installations have been given a "military personnel suspense authority" for the first time. Military personnel expenses are reported on a monthly basis.

25-3. Resource management efforts in the Navy

The implementation of the resource management system was effected in the Navy under standardized budgeting, accounting, and reporting procedures. Standard Navy-wide account numbers, related to functional efforts, are used to report expenses and work accomplished at the operational level. Summarized at the command level, these data provide the means of measuring performance in terms of functions performed and are related to the cost of the effort. The costs, expressed in terms of resources consumed, provide management

with meaningful tools for effecting operational improvements and economies.

25-4. Resource management efforts in the Air Force

Beginning on 1 July 1968, the materiel management systems in the Air Force were expanded to implement DOD resource management systems. To implement the revised DOD concept, expansion of the Air Force stock fund was required. The use of stock funds permits holding materiel in suspense until the time it is issued for use by organizations. Stock funds finance the purchase of materiel and are reimbursed for issues (sales of materiel to organizations). The new divisions of the Air Force stock fund are discussed in chapter 24.

25-5. Resources management in the Marine Corps

A resource management system designed to meet DOD objectives was implemented within the Marine Corps on 1 July 1968. The system effected standardized budgeting, accounting, and reporting procedures established by the Department of the Navy. Data provided are both monetary and quantitative, relate expenses to functional efforts, and provide the means of measuring performance of efforts performed. The data provide managers with a means of determining the cost of operation of an activity in terms of total resources consumed or applied to include military labor expense, thereby, enabling activity managers to effectively and efficiently manage resources made available as well as providing an ability to furnish other levels of management that degree of information necessary for effective coordination and control of resources.

Chapter 26
Planning, Programing, and Budgeting

Section I
The Department of Defense

26-1. Introduction

a. The basic national security policy which provides direction to our defense effort is formulated by the National Security Council (NSC).

b. NSC, discussed in chapter 2, is a major institutional device through which the President receives advice on basic national security policy. The characteristics, goals, and tempo of national readiness planning stem from considerations of high policy evolved from the deliberations of this council. Established by the National Security Act of 1947 and headed by the President, the NSC periodically appraises the Nation's foreign risks and commitments, its military strength, and its domestic economic capabilities; endeavors to strike a proper balance among them; and provides the medium for basic assumptions and national policy objectives on which military strategic planning and resources mobilization planning is founded.

c. It provides the President with coordinated statements of the situation in which the Nation finds itself; with estimates of probable trends in future developments; and with outlines of broad, long-term national security objectives, and of general courses of action to achieve these objectives. The council's recommendations to the President relate to:

(1) General political postures and attitudes to guide those agencies concerned with national security affairs.

(2) Programs to create or expand specific situations in the immediate future.

d. Such recommendations, when approved by the President, become the basis for all defense planning and, thus, provide the starting point for the determination of requirements.

e. After approval of a policy by the President, the basic military objectives are referred through the Secretary of Defense to the Joint Chiefs of Staff (JCS). As military advisers to the President, the Secretary of Defense, and the NSC, they present their views in the policymaking stage and, thus, have considerable influence on the council's recommendations to the President on national military policy. It is through them that the President and the Secretary of Defense exercise command authority over the unified and specified commanders and, thus, overall combat forces of the United States.

f. Along with assistance in the formulation of national policy, the JCS give broad leadership to the planning efforts of the military services. They periodically draw up specific strategic plans. These plans and their underlying strategic concepts guide the services in the translation of these requirements, into planned schedules of procurement and production, and in planning for the many other interdependent logistical elements in mobilization. The service requirements, thus, emerging from these strategic plans enter into the national planning program as a direct claim on resources, as the major determinant of war-supporting requirements, and as a factor affecting the availability of resources for civilian-consumer needs.

Section II
Joint Chief of Staff Plans and Documents

26-2. Joint Strategic Planning Systems

a. The JCS are charged* with certain strategic planning responsibilities. To discharge these responsibilities, the JCS prepare the Joint Intelligence Estimate for Planning, the Intelligence Priorities for Strategic Planning, the Joint Strategic Planning Document and its Supporting Analysis, the Joint Program Assessment Memorandum, the Joint Security Assistance Memorandum and its Supporting Analysis, and the Joint Strategic Capabilities Plan. Two other Joint Strategic Planning System documents, the Joint Long-Range Estimative Intelligence Document and the Joint Long Range Strategic Study, currently exist but are to be consolidated into a single, new, long-range document, the Joint Long-Range Strategic Appraisal, which will be published quadrennially beginning in October 1980.

b. The combination of all of the above documents and their relationships constitute the framework of the Joint Strategic Planning System. The principles, doctrine, and policies in JCS Publication 2, "Unified Action Armed Force" and JCS Publication 3, "Joint Logistics and Personnel Policy and Guidance," among others, relate to the Joint Strategic Planning System.

26-3. Joint Intelligence Estimate for Planning

a. The Joint Intelligence Estimate for Planning provides the principal intelligence basis for the development of the Joint Strategic Planning Document, Joint Program Assessment Memorandum, and Joint Strategic Capabilities Plan. It contains estimative intelligence for the short-range and midrange periods. The Joint Intelligence Estimate for Planning describes situations and developments throughout the world that could affect US security interests in the short-range and mid-range periods. It includes:

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*National Security Act of 1947, as amended and DOD 5110.1.

(1) A global appraisal with an estimate of the world situation and the nature of the military threat.

(2) Regional appraisals including estimates of the external and internal threats for countries of significance to the United States.

(3) Estimates of the Warsaw Pact and Asian Communist military forces and potential threats in the Middle East, Persian Gulf, Korea, and various Third World regions, including Soviet capability to project forces into these regions; particular attention is given to those regions emphasized in scenarios associated with the most recent Joint Strategic Planning Document/Joint Strategic Planning Document Supporting Analysis.

b. A Supplement to the Joint Intelligence Estimate for Planning, which is not approved by the JCS, consists of: significant changes in intelligence occurring between annual publications; and military capabilities, vulnerabilities, and force tables for selected countries. It is prepared, maintained, and distributed by the Defense Intelligence Agency (DIA) and is updated as appropriate. Changes are approved by the US Military Intelligence Board. The supplement bears on its face a statement to the effect that it is not a JCS-approved document.

c. The Joint Intelligence Estimate for Planning is published annually by the JCS on 1 January. A memorandum to holders of the document is issued by 1 June of each year to present significant changes in intelligence which have occurred.

26-4. Intelligence Priority for Strategic Planning

a. The Intelligence Priorities for Strategic Planning provides a comprehensive statement of substantive military intelligence priorities to support the Joint Strategic Planning System in the short-range and midrange periods and provides guidance for the tasking of Department of Defense (DOD) intelligence production, collection, and support activities. It establishes comprehensive military intelligence requirements categories and priorities for the shortrange through midrange period. The Intelligence Priorities for Strategic Planning provides:

(1) Advice of the JCS to the Secretary of Defense on the military intelligence priorities required to support the national military strategy.

(2) Intelligence planning advice to the chiefs of the services; commanders of the unified and specified commands; Director, DIA; Director, National Security Agency/Chief, Central Security Service; and the other defense activities with intelligence functions for the short-range and mid-range periods.

(3) Advice of the JCS to the Director of Central Intelligence on intelligence priorities required to support the national military strategy.

(4) Intelligence priorities identified by the JCS in support of Joint Strategic Capabilities Plan strategy and tasks upon which the commanders of unified and specified commands are expected to develop essential elements of information and intelligence objectives pertinent to their respective missions and responsibilities for each operation plan requiring intelligence support.

(5) Intelligence priorities upon which unified and specified commands, military services, and defense agencies base their resource requirements in annex A (Intelligence) to the Joint Strategic Planning Document.

(6) Detailed guidance for DOD intelligence production, collection, and support activities tasking.

(7) Prioritized collection and production guidance for continued intelligence activities necessary to provide basic data for developing, updating, and revising the Joint Intelligence Estimate for Planning.

b. The Intelligence Priorities for Strategic Planning is published by 1 April of each year.

26-5. Joint Long-Range Strategic Appraisal

a. As previously noted, the JCS have directed replacement of the Joint Long-Range Estimative Intelligence Document and Joint Long-Range Strategic Study with a new joint long-range document that will consolidate estimative intelligence, US strategic forecasts, broad force structuring implications, and likely future issues. The first edition of the new document, the Joint Long-Range Strategic Appraisal, was published in 1980 and will be subsequently revised on a year cycle.

b. The purpose of the Joint Long-Range Strategic Appraisal will be to provide a basis for transition from long-range to midrange strategic planning. It is intended to stimulate more sharply focused strategic studies, to provide a general framework for outlining such broad force structuring implications as may be identified, and to develop and assess military policies, plans, and programs having both midrange and long-range implications.

26-6. Joint Strategic Planning Document

a. The Joint Strategic Planning Document provides the advice of the JCS to the President, the NSC, and the Secretary of Defense on the military strategy and force structure required to support the attainment of the national security objectives of the United States. Additionally, it establishes the position of the JCS on matters of strategic importance to the security of the United States for reference in Presidential and NSC-directed actions.

b. The Joint Strategic Planning Document presents advice of the JCS derived principally from the Joint

Strategic Planning Document Supporting Analysis. It provides a comprehensive military appraisal of the threat to US interests and objectives worldwide, a statement of recommended national military objectives derived from national security objectives, and the recommended military strategy required to attain national military objectives in the mid-range period. A summary of the JCS planning force levels that are required to successfully execute, with reasonable assurance, the approved national military strategy is also included, as well as views on the attainability of these forces in consideration of fiscal, manpower, and materiel resources; technology; and peacetime industrial output. This appraisal includes an assessment of the international environment and a recommended strategic concept for employment of military force in the midrange period. The planning forces are used as a baseline against which the capability of the programed force to execute the national military strategy is assessed and the associated risks identified. This assessment, in conjunction with available assessments of current total force capabilities, provides the foundation for recommendations on DOD force planning guidance and changes to the Defense Guidance. Among these recommendations are often initial measures to reduce the most critical areas of risk between the programed and planning force levels.

c. Functional annexes are developed to supplement the Joint Strategic Planning Document. The annexes support the strategy and planning force and provide military assessments and advice in the functional areas indicated by their titles. Annexes are not used when the materiel can be presented concisely in the parent document. There are currently five annexes:

(1) *Annex A, Intelligence*. This annex:

(a) Provides a consensus of the unified and specified commands, JCS, services, and DIA on the major requirements for intelligence and supporting resources necessary to support the national military strategy and the planning force.

(b) Develops key intelligence requirements and insures that DOD intelligence programs and the National Foreign Intelligence Program resources are responsive to those needs.

(2) *Annex B, Nuclear*. This annex:

(a) Provides advice on the levels of strategic and tactical nuclear warhead necessary to support the planning force levels.

(b) Evaluates the total impact of these levels on the stockpile of special nuclear materials and the capabilities for additional production of special nuclear materials to meet the needs of nuclear weapons development programs.

(c) Includes the supporting rationale upon which these levels of tactical and strategic nuclear warheads are based.

(d) Compares these levels with currently projected levels, identifying shortfalls where they exist.

(e) Provides advice on modernization of the nuclear warhead stockpile.

(3) *Annex C, Command, Control, and Communications (C3).* This annex:

(a) Identifies strategic and tactical C3 system requirements to support the planning force.

(b) Develops C3 objectives and planning factors.

(c) Provides recommended C3 programing priorities.

(d) Appraises the risk associated with programed C3 assets.

(4) *Annex D, Research and Development.* This annex:

(a) Provides a succinct compilation, by mission area, of prioritized research and development objectives resulting from the military strategy and force requirements.

(b) Establishes the priorities of the JCS on major research and development efforts required to meet operational deficiencies in force capabilities in the mid-range and long-range periods.

(c) Provides discussion of research and development planning guidance and analysis of risk associated with programed research and development activity.

(5) *Annex E, Mapping, Charting, and Geodesy.* This annex:

(a) Develops major mapping, charting, and geodesy resource requirements to support the military strategy.

(b) Appraises the risk inherent in the programed mapping, charting, and geodesy efforts and recommends actions to correct shortfalls.

d. The Joint Strategic Planning Document Supporting Analysis is an internal Joint Strategic Planning System document that provides the principal supporting analysis for the Joint Strategic Planning Document. It is in two parts.

(1) Part I, Strategy and Force Planning Guidance. Part I provides military planners with the perception of the JCS on national military objectives, national military strategy, and planning guidance as stated in the Defense Guidance and other national security documents and expanded by the JCS for greater detail and focus. It states their view of the international environment and the threat to US interests and objectives in order to permit planners to operate from a consistent base. Part I provides the national military strategy and force planning guidance for development of force requirements and is provided to the unified and specified commands and the services in sufficient time to permit submission of inputs for the development of part *II.*

Part I includes the national military strategy; planning guidance for development of planning force levels: and specific guidance with respect to the scope, format, phasing, and forwarding of the inputs to support development of part II and the Joint Strategic Planning Document annexes. Where the JCS believe that existing strategy creates a serious risk to national security, they provide guidance for appropriate excursions.

(2) Part II, Analysis and Force Requirements. Part II develops the required planning force and support levels for strategic, general-purpose, theater nuclear, and allied and friendly forces. These forces reflect consideration of the Defense Guidance and part I, Joint Strategic Planning Document Supporting Analysis, by the services, unified and specified commands, and the JCS. Part II also:

(a) Develops planning force levels that the JCS consider necessary to provide reasonable assurance that the national military strategy can be successfully executed. This judgment is based on full consideration of the prospect of simultaneous conflicts, allied capabilities, and resolve the threat, risk, force mobility and flexibility, and mobilization capabilities. Strategic force levels are developed to execute the strategy under the strategic force scenarios outlined in part I, Joint Strategic Planning Document Supporting Analysis. General-purpose planning force levels are developed through consideration of the minimum-risk forces required to execute the strategy, assuming realistic projections of the availability and capabilities of allied and friendly nations, and the capability of potential enemies. When planning force levels have been developed, considerations of fiscal, manpower, and materiel resources, as well as technology and peacetime industrial output, are applied. If elements of the planning force cannot be attained in the mid-range period in consideration of these factors, advice is provided on actions necessary to redress the identified shortfalls.

(b) Summaries estimated manpower requirements and costs associated with the planning force levels and compares them with the most recent Five-Year Defense Program (FYDP) force.

(c) Includes an assessment of program force capabilities and associated risks using planning forces as a baseline. This risk assessment provides a basis for recommendations to the Secretary of Defense.

(d) Includes a summary of the mobility force requirements and a discussion of significant risks/problem areas.

(e) Provides the military assessment of the JCS of selected allied and friendly nations' force objectives, including the recommended priority for military security assistance and requirements for force development and improvements.

e. Analytical tools, such as war games and decision analysis techniques, are used to provide as rigorous a foundation as possible for the analysis and force-level requirements developed in the Joint Strategic Planning Document Supporting Analysis. The analysis uses and incorporates improved analytical techniques for assessing total force capabilities.

f. The Joint Strategic Planning Document is presented annually to the JCS in time for approval and publication 60 days prior to publication of the draft Defense Guidance, normally by 1 November. Annexes, with the exception of annex B, Nuclear, are also presented for approval and publication by 1 November. Annex B is published as soon as practical after approval of force requirements developed in part II of the Joint Strategic Planning Document Supporting Analysis. Part I of the Joint Strategic Planning Document Supporting Analysis, Strategy and Force Planning Guidance, is published biennially by 15 March (or as soon as possible after publication of that year's revised Defense Guidance) unless analysis of the Defense Guidance or an annual review of policy, strategy, or force planning requirements indicates a need to publish revised guidance during an off year. Part II, Analysis and Force Requirements, is also published biennially or as directed in part I. Part II consists of four books: Strategic Forces, General-Purpose Forces (Conventional), General-Purpose Forces (Theater Nuclear), and Allied and Friendly Forces.

26-7. Joint Program Assessment Memorandum

a. The purpose of the Joint Program Assessment Memorandum is to assist the Secretary of Defense in decisions on the defense program subsequent to submission of the Program Objective Memorandum (POM) by providing an assessment of the composite POM force recommendations, including the views of the JCS on the balance and capabilities of the overall POMs force and support levels to execute the approved national military strategy and on the allocation of scarce resources.

b. The Joint Program Assessment Memorandum provides the views of the JCS on the adequacy and capabilities of the total forces contained in the POM to execute the national military strategy and the risks inherent in those force capabilities. The Joint Program Assessment Memorandum is developed in memorandum format and includes:

(1) An assessment of capabilities and associated risks represented by the composite of the service POM force.

(2) The views of the JCS on the overall balance of the composite POM force.

(3) Recommendations of the JCS, where appropriate, on actions to achieve improvements in overall defense capabilities within to the extent feasible, the

alternate funding levels directed by the Secretary of Defense. This is not intended to be a critique of the POM.

(4) A mobility force analysis.

c. The JCS also develop a SALT-constrained strategic force and provide detailed recommendations on the nuclear weapons stockpile required to support these forces.

d. The Joint Program Assessment Memorandum is revised and presented annually to the JCS Staff in time for approval and submission 30 days following publication of the POM as established in the Program/Budget Review Schedule published each year by the Secretary of Defense. Recommendations on nuclear weapons stockpiles are published under separate cover as soon as possible, but not later than 30 days after the basic document.

26-8. Joint Security Assistance Memorandum

a. The purpose of the Joint Security Assistance Memorandum is to provide military views on alternate funding levels projected for the US-financed Security Assistance Program, security assistance manning levels, and key arms transfer policy matters. The assessment is based on an analysis of US military interests; security assistance objectives; desired force levels for allied and friendly nations established in part II of the Joint Strategic Planning Document Supporting Analysis; foreign military sales case, commercial, and other types of procurement; and the Joint Security Assistance Memorandum Supporting Analysis.

b. The Joint Security Assistance Memorandum and Joint Security Assistance Memorandum Supporting Analysis present a military assessment of individual country security assistance funding and manning levels proposed for inclusion in the Security Assistance Program. Primary emphasis is placed on the budget year. Organization of data is designed to facilitate use by representatives of the Office of the Secretary of Defense (OSD) and the JCS in interagency, zero-based budget deliberations as an expression of military views on Security Assistance Program funding and manning levels.

c. The Joint Security Assistance Memorandum is developed in memorandum format and includes:

(1) Security assistance objectives and general priorities used in the assessment of individual country programs.

(2) A description and evaluation of the budget year program which will be addressed by the interagency deliberations of the Arms Export Control Board.

(3) A worldwide ranking table of alternative funding levels for each country by type of funding; i.e., International Military Education and Training Program, Military Assistance Program (MAP), and Foreign Military Sales (FMS) Financing.

(4) An assessment of and recommendations on manning levels of oversea security assistance organizations.

d. The Joint Security Assistance Memorandum Supporting Analysis provides the supporting rationale for individual country security assistance funding levels proposed for inclusion in the basic document. It is based primarily on the Integrated Assessment of Security Assistance submitted annually by the Country Teams and incorporates the views and priorities of the area military commander, the Joint Staff, and the services. It includes regional overviews, regional priorities, and country programs, including security assistance objectives and an overview of the program for that country. A program assessment for the budget year is included to provide a detailed description of the alternate funding levels and risk/benefit assessment of funding that level. For those countries recommended for MAP and/or FMS Financing Programs, a prioritized list of equipment for the budget year and 2 out-years is included.

e. The Joint Security Assistance Memorandum is written and presented annually to the JCS in time for approval and publication 30 days prior to the interagency deliberations of the Arms Export Control Board on the security assistance budget. The supporting analysis is developed concurrently, but will not necessarily reflect a JCS appraisal in every instance. It is distributed as information for use in deliberations of the Security Assistance Program budget and the analysis of individual country programs by action/ desk officers.

26-9. Joint Strategic Capabilities Plan

a. The purpose of the Joint Strategic Capabilities Plan is to provide guidance to the commanders of unified and specified commands and the chiefs of the services for the accomplishment of military tasks, based on projected military capabilities and conditions during the short-range period. It provides the military strategic concept to support the national security objectives and the military objectives derived therefrom. This concept is based on projected available forces, the Joint Intelligence Estimate for Planning and other applicable intelligence, and subsequent guidance issued by the Secretary of Defense. It provides guidance on forces, logistics, intelligence, and the development of plans and assigns tasks to the commanders of unified and specified commands. The document consists of Volume I-Concept, Tasks, and Planning Guidance; Volume II-Forces; and the annexes.

(1) Volume I:

(a) Comprises the basic plan and contains the national security objectives and military objectives derived therefrom.

(b) Provides military strategic concepts that ap-

ply worldwide and to each of the major regions corresponding generally to the unified command areas.

(c) Assigns tasks to the commanders of unified and specified commands and, where appropriate, specifies for each task the type of plan required. Any new or modified tasks assigned subsequent to the publication of Joint Strategic Capabilities Plan is reflected as a charge to the current document or included in the next revision.

(d) Contains planning guidance governing the development of plans to accomplish the tasks assigned.

(e) Identifies the tasks to be appraised if an operation plan package appraisal, as described in the Joint Operation Planning System, is to be conducted during the ensuing fiscal year.

(f) Includes planning guidance to the chiefs of the services for the support of the unified and specified commands in the execution of assigned tasks.

(g) Requires that the JCS be advised should the commander of a unified or specified command determine that the forces made available for planning in volume II or those made available by the services are inadequate to accomplish an assigned task or that other serious limiting factors exist. Such notification includes:

1 A listing of force and materiel shortfalls, indicating those considered critical and the specific reasons therefor.

2 An estimate of the added risk incurred through force shortfalls, and estimate of the threat level for which available forces are considered adequate, and, if appropriate, recommended changes in tasks.

(h) Provides guidance for the development of time-phased force and deployment lists for operation plans that are prepared in complete format. Forces listed may not exceed:

1 Those major combat forces and other combat and support forces identified in pertinent sections of volume II and in the annexes as available for planning.

2 The other combat and support forces identified by each service, through its component commanders, as being available for planning.

(2) Volume II:

(a) Identifies the forces available for use in the development of operation plans.

(b) Provides force augmentation tables under appropriate contingency categories, depicting the availability of major combat forces (Active and Reserve components) at home/mobilization station, ready to deploy.

(c) Cites service documents available to aid in determining, for planning purposes, the availability of forces not shown in volume II or the annexes. *b.* Annexes to the Joint Strategic Capabilities Plan prescribe planning guidance, indicate capabilities, and assign tasks within the functional areas implicit in their titles. The annexes support volumes I and II and are mutually compatible and supportable. The purpose and scope of the annexes are:

(1) *Annex A, Intelligence*. This annex assigns intelligence tasks in support of the Joint Strategic Capabilities Plan and provides intelligence planning guidance to the commanders of unified and specified commands, the chiefs of services, and the Director, DIA, for the development of intelligence to support US and allied military operations required by the Joint Strategic Capabilities Plan.

(2) *Annex B. Logistics*. This annex provides logistics planning guidance and contains, as an appendix, statements by the services as to their capability to support the forces identified in volume *II.* The Defense Logistics Agency (DLA) has opportunity to provide a similar statement of its capability to support the services during the Joint Strategic Capabilities Plan period.

(3) *Annex C, Nuclear*. This annex provides guidance for the preparation and coordination of plans for the employment of nuclear weapons. The guidance encompasses all nuclear weapon associated tasks assigned in the Joint Strategic Capabilities Plan.

(4) *Annex D, Psychological Operations*. This annex provides guidance and assigns tasks for the planning and conduct of psychological operations, including propaganda activities, in situations short of and during open hostilities. The annex establishes psychological operations objectives, provides planning guidance, identifies the psychological operations forces of each service, and specifies tasks applicable to the commanders of unified and specified commands and the services.

(5) *Annex E, Unconventional Warfare*. This annex provides guidance and assigns tasks for the planning and conduct of unconventional warfare operations in support of the basic objectives and tasks established in volume I. The annex identifies unconventional warfare objectives and resources, establishes planning guidance, and specifies tasks applicable to the unified and specified commands and the services.

(6) *Annex F, Chemical Warfare; Nuclear, Biological and Chemical Defense; Riot Control Agents; and Herbicides.* This annex provides guidance for the preparation of plans for the conduct of chemical operations and for biological and radiological defense.

(7) *Annex G, Mapping, Charting, and Geodesy.* This annex provides mapping, charting, and geodesy planning guidance in support of US and allied military operations and indicates the capabilities of the DOD mapping, charting, and geodesy community to support projected military requirements during the Joint Strategic Capabilities Plan time frame. In addition, mapping, charting, and geodesy tasks are assigned to DOD Mapping, Charting, and Geodesy elements.

(8) *Annex H, Nuclear Weapons Damage Considerations, Civil Defense, Recovery, and Reconstitution*. This annex provides general considerations and guidance concerning:

(a) Possible impact of nuclear attack on US forces and resources.

(b) Possible effects of nuclear attack for use in:

1 Developing plans and measures to improve survival probabilities.

2 Planning for military support of civil defense and estimating requirements and postattack capabilities for military support of civil defense.

3 Preparation of plans for residual capability assessment, recovery, and reconstitution.

4 The introduction of nuclear damage considerations into strategic logistics base planning.

(9) *Annex 1, Communications*-Electronics. This annex provides guidance to the commanders of unified and specified commands, the chiefs of the services, and directors of defense agencies, as appropriate, for the accomplishment of military communications-electronics tasks, based on projected military capabilities and conditions for the Joint Strategic Capabilities Plan time period.

(10) *Annex J. Strategic Movement.* This annex, developed in conjunction with volume II, contains the strategic movement planning guidance to support the deployment of the major forces outlined in volume II and the necessary support forces. This annex specifies the airlift, sealift, and refueling resources available, the capability of these resources, and the guidance for their use in the development of operation plans. Transportation feasibility of operation plans is analyzed in accordance with Joint Operation Planning System procedures.

(11) *Annex K, Deception*. This annex provides guidance and tasks for the planning and conduct of military deception in support of strategic concepts.

(12) *Annex L, Civil Affairs.* This annex provides guidance and tasks to the commanders of unified and specified commands and to the services for the planning and conduct of civil affairs operations.

(13) *Annex M, Electronic Warfare.* This annex provides guidance and assigns tasks for the conduct of electronic warfare operations. The annex establishes planning guidance and specifies those electronic warfare tasks that are applicable to the commanders of unified and specified commands and to the services.

(14) *Annex N. Mobilization*. This annex provides appropriate supplemental guidance to the services for the development of supporting mobilization plans for those contingencies that require mobilization. The annex additionally provides guidance for the interface of mobilization planning with deployment planning.

c. The Joint Strategic Capabilities Plan is reviewed annually, published by the JCS biennially, and updated between cycles as provided for below.

(1) Volumes I and II and annexes B and J are published biennially by 1 March. All other annexes are published biennially within 45 days following approval of volumes I and II by the JCS.

(2) Volumes I and II and annexes B and J are reviewed in alternate years between the biennial publication and resulting changes promulgated by 1 March. All other annexes are reviewed in alternate years between the biennial publication, with resulting changes promulgated as soon as possible but not later than 45 days following promulgation of the results of the review of volumes I and *II.*

d. The Joint Strategic Capabilities Plan is updated between cycles when events or changes dictate. Changes necessary to update the plan (including any new or modified tasks assigned subsequent to the publication of document) and its annexes are promulgated in the form of page changes, or, when the situation requires, by message.

Section III
The Planning, Programing, and Budgeting System

26-10. Introduction

a. The Joint Strategic Planning Document covers the period 2 to 10 years from the current date. The use of resources that are considered to be reasonably obtainable is a portion of the plan. Because of this, it is the major planning document which provides objective guidance for programing. The Joint Strategic Planning Document objective force levels are specified as to type, model, and series of equipment and provide logistics planning guidance for development of logistics plans and programs to support those force levels. It also provides the Secretary of Defense with military advice for development of the annual military budget. In the programing activity, the military objectives formulated in the planning phase are used as a basis to develop dollar costs for resources involved in the accomplishment of these objectives. In the programing process, the specific materiel requirements are determined, along with their availability and cost.

b. The principal mechanism for allocation of resources in DOD is the annual budget. It is the one place where once a year all the varied programs and activities of the Defense Establishment are brought together at one time, thus, permitting each program to be weighed against all others in terms of its cost and, in a general way, its military worth. Moreover, it is the principal mechanism through which management controls the execution of the program; e.g., the apportionment, ob-

ligation, and expenditure of funds.

c. The defense budget, since the end of World War II, has been oriented essentially along functional lines. It was divided into five major functional categories: military personnel, operation and maintenance, procurement, research and development, and military construction. This, in itself, was a tremendous improvement over what existed previously and, in the time frame in which it was devised, was very logical. In fact, this arrangement of the budget still performs a very useful function, both for the Defense Department in managing certain areas of its activities, and for Congress in appropriating and controlling the use of public funds.

d. The Secretary of Defense desired that a method be developed for grouping and reviewing activities having similar missions and which would permit decisions to be made within these categories as to the forces and weapon systems that could be most efficiently used for the accomplishment of the mission. In this decision making process, various approaches to the accomplishment of the same mission could be examined and evaluated. Such analysis is referred to as a cost-effectiveness analysis. In addition, he recognized the need for extending the time frame of the programing process to reveal the long-range implications of these mission programs. Such information would also assist in the decisionmaking process. As a result of this type thinking by the top people in DOD and the military department’s staffs, and the push given to it personally by the Secretary of Defense, the program package concept was adopted. In the summer of 1961, the services were requested to restate their fiscal year (FY) 1968 program in this structure. It was a difficult task in that it required the assembly of total costs along the lines of mission, force, and major military task, rather than in the previous formats by which the majority of information was available; i.e., in the format of the appropriation structure.

e. Concurrent with the initial steps to set up the first program of this type, action was also started to refine the new system. In August of 1961, the Secretary of Defense issued a memorandum to the three service Secretaries in which he outlined an assignment to the Assistant Secretary of Defense, Comptroller. "To conduct a comprehensive review of the departments’ existing financial and nonfinancial information systems and to develop a plan for a DOD integrated system for relating programing, budgeting, and financing, accounting, and progress or status reporting."

f. Efforts to date by DOD and service staffs have resulted in the base program or a 5-year defense program, approved by the Secretary of Defense and maintained current through a change control system. The translation from the previous functional breakout to this new proposed structure was done by using such distribution techniques and experience factors as were available. As would be expected, the resultant display of information was not too accurate or supportable in hard fact. However, when the FY 63 budget was presented to Congress, a very comprehensive statement in the new program format was submitted as part of the justification. All budget submissions after FY 63 have been presented to Congress in the program structure as well as the appropriation structure. Guiding the development of these changes was the following philosophy: Programing serves as the bridge between planning and budgeting. Planning at department level is fundamentally an examination of strategy, organizational and tactical concepts, technological forecasts, and intelligence estimates which lead to a determination of the broad force requirements essential to meet assigned missions. Military plans are prepared on various force levels encompassing varying degrees of risk with limited regard to resource limitations. Budgeting, on the other hand, is concerned with the detailed application of resources in the execution of assigned missions. This involves not only the expression of plans in dollar estimates, but also the required financing, accounting, distribution of resources to major commands, analysis of resources utilization, and justification of financial estimates to higher authority in the form of a budget. The initial role of programing is to translate plans and objectives into specific scheduled actions and identifying in relatively precise terms the required resources. The program serves as a basis for determination of the budget estimate. In this way, programing serves as a bridge between planning and budgeting. Program decisions now tend to be preliminary budget decisions. Programing also serves as a basis for executing and controlling required activities for which resources have been allocated. Objectives of the new program system were:

(1) Planning oriented around major missions.

(2) Ability to relate resource inputs to military output.

(3) Coordination of long-range planning with budgeting.

(4) Continuous appraisal of programs.

(5) Progress reporting.

(6) Ability to make cost-effectiveness studies.

26-11. Five-Year Defense Program

a. As a result of this positive guidance from DOD and the combined effort of the services, missions, and objectives in the JCS, plans are translated into a DOD base program consisting of 10 major mission programs supported by annexes: the force basis, military and civilian manpower, materiel annex, construction, installation, and family housing. This program covers a 5-year period for costs and manpower, an 8-year period

for forces, and is referred to as the FYDP. Each of the major programs includes an interrelated group of program elements that are considered together because they either support each other or are close substitutes for each other in accomplishing objectives as expressed in the broadest terms. The unifying theme in each program is a common mission or set of purposes for the elements involved. Within each of these major programs are varying numbers of program aggregations and programs are varying numbers of program aggregations and program elements. A program element is a description of mission by the identification of the organizational entities and resources needed to perform the assigned mission. Resources consist of forces, manpower, materiel, quantities, and applicable costs. The program element is the basic building block of the FYDP. The 10 major mission programs are:

(1) *Program I* of the DOD program identifies the strategic retaliatory forces. The program includes all aircraft, land and sea based missile forces, and command control systems having the common mission of strategic retaliation; and those forces and command and control systems associated with continental air defense. Civil defense activities are included in this program.

(2) *Program 2*, General-Purpose Forces, is the force upon which the United States will rely to fight local or limited wars or theater engagement in general war. For the Army, this is the largest program and includes approximately 65 percent of its personnel and dollar resources. It also includes tactical airlift forces as well as Marine and Navy forces. Elements within this program are identified by type unit and major command. Aggregations group these elements by geographical location and by combatant forces or command and support forces.

(3) *Program 3,* Intelligence and Communications, includes intelligence and security, military assistance, national command and communications activities, and other miscellaneous activities.

(4) *Program 4* consists of the airlift and sealift forces and includes Military Airlift Command, Military Sealift Command, troop carrier aircraft, and related support units. Army port terminals are included in this program.

(5) *Program 5*, Guard and Reserve Forces, includes all Reserve and National Guard forces including the onsite air defense units. This program is quite similar to the Army's previous control program for Reserve and Guard forces. One major difference, however, is that the program is now costed. In the prior control program, the total costs for these activities were not related to the program as now constituted. The aggregation breakout identifies the general category of forces in a way similar to the major program breakout of regular forces; i.e., continental air and missile defense forces; general-purpose forces by priorities I, II, and *III*; Reserve and Guard forces; and airlift and sealift forces. Elements identify specific types of units; e.g., F-105 interceptors, Nike Hercules missile forces, division forces, support forces, and training and base units.

(6) *Program 6*, Research and Development, is very similar to the control program by similar name under the previous structure. Research and development activity in the new structure, however, is broken into five major aggregations: research, exploratory development, advanced development, engineering development, and management and support. Within each of these major groupings, program elements generally parallel the research and development project list, with each project being a program element. Again, research and development costs are projected over a 5-year period.

(7) *Program 7*, Central Supply and Maintenance Activities, consists of supply depots, supply management, and centralized procurement activities, logistics headquarters, first and second destination transportation, industrial preparedness operations, and other diverse logistics support functions not organic to other program elements, depot maintenance overhaul, engineering, and training.

(8) *Program 8*, Training, Medical, and Other General Personnel Activities, consists of training, medical, and other activities associated with personnel, but excludes training specifically identified with other program elements. Also excluded are housing, subsistence, medical, recreational, and similar costs that are included in other program elements (such as base operations).

(9) *Program 9*, Administration and Associated Activities, includes administrative support of departmental and major administrative activities, and field commands not included in other programs.

(10) *Program 10*, Assistance to Other Nations, consists of military assistance activities.

b. Currently, there are over 1,100 program elements within the 10 programs which have been selected to reflect data pertaining to Army, Navy, Marine, and Air Force activities. This number may vary based on program refinements, new weapon systems, or changed activities. Each of these program elements is defined by a five-digit code which permits it to be identified individually or in aggregate with others in the data processing procedures.

c. Information relating to each element is presented on a program element definition form (DD Form 1643). The program element definition form contains considerably more information that the name of the form might imply. Included is information which assists in identifying all resource categories and costs by year for a 5-year period. Force data are an exception, for which an

8-year breakout is indicated. To obtain this mass of data on a timely basis requires the use of automatic data processing (ADP) equipment. The program element definition form is the basic medium for continuous maintenance of the FYDP.

d. Force data indicated specific component force structure of the program element, such as air defense missile forces with sites, battalions or batteries, and missiles. For each component, approved year and quantitative values are indicated for the current and succeeding 8 fiscal years.

e. Financial requirements for each program element (referred to as total obligation authority) are estimated for a 5-year period beyond the current year. Program element definition forms show these costs by year in three major cost categories. As defined in DODI 7045.7 (The Planning, Programing, and Budgeting System), these program cost categories are:

(1) *Research and Development*-those program costs primarily associated with research and development efforts including the development of a new or improved capability to the point where it is ready for operational use. These costs include equipment costs, funded under the Research, Development, Test, and Evaluation (RDTE) appropriations and related Military Construction appropriation costs. They exclude costs which appear in the Military Personnel, Operation and Maintenance, and Procurement appropriations.

(2) *Investment*-those program costs beyond the development phase required to introduce into operational use a new capability; to procure initial, additional, or replacement equipment for operational forces, or to provide for major modifications of an existing capability. They include Procurement appropriation costs except those associated with the operating category defined below, and all Military Construction appropriation costs except those associated with research and development. They exclude RDTE, Military Personnel, and Operation and Maintenance appropriation costs.

(3) *Operations*-those program costs necessary to operate and maintain the capability. These costs include Military Personnel, Operation and Maintenance, and recurring Procurement appropriation costs (such as replenishment spares). They exclude RDTE, and Military Construction appropriation costs.

f. The above breakout of program element costs tends to associate the costs of the element to the appropriation structure, particularly the capital costs. Program decisions tend to become budget decisions during the time frame involved, and the annual segments of the program provide guidance for the development of the annual budget requests to Congress.

g. Manpower data include total approved year-end manpower spaces (to the nearest hundred) for the current year and each of the succeeding 5 fiscal years for officer, enlisted, direct hire, contract and foreign national civilians as applicable.

h. Net changes since last submission are also included along with an explanation of the basis for the changes.

i. The collective program element definition forms describe the major programs in detail. Cost data from all applicable appropriations are identified by fiscal year segment for a 5-year period as are manpower requirements.

j. The assembly of data as required by these forms further explains the thinking of OSD in establishing the requirements of the system. The program elements provide a decisionmaking structure as to resources required. Control and program execution is in terms of resource categories, which represent the resource inputs into the program elements. They can be viewed as a segment of the total of a program element resource; e.g., a line item of materiel. A resource category is defined as either a unique type of resource or a homogeneous grouping of related resources. All applicable major items and equipment, major construction, facilities, and personnel are associated with each element. Resource input to any element can, therefore, be determined.

k. The sum of all program elements constitutes the total military output, and the sum of all resource categories equals the total resource input to defense programs. The input and the output show both sides of the same basic overall program. Neither one gives sufficient information for all planning and control; both taken together provide a complete picture of the sources and uses of resources among the various defense activities.

26-12. Program element concept

a. Program elements are the building blocks of the programing and budgeting system. They may be aggregated within a program to display the total resources assigned to a specific program; they may be aggregated to families of weapon and support systems within a program, or they may be aggregated to select only identified resources, such as operating costs. They may be aggregated in one way for programing purposes, in another way for budget review, and in still another way for management purposes.

b. A program element is a grouping of forces, manpower and costs associated with an organization or a group of similar organizations. Each program element normally consists of these ingredients. The three need not, however, be represented in each element since in some program elements only manpower and costs appear, while in still others only costs are shown. Since dollars are used as the common denominator to which

all resources may be identified, costs are given for every program element. *c.* The program element concept allows the operating manager to participate more fully in the programing decision process since both the inputs and outputs are stated and measured in program element terms. The operational manager receives more meaningful decisions and is better echeloned when they are being conveyed by use of program elements.

26-13. Program element content

a. The following criteria are used to aid in the definition of program elements and in planning the grouping:

(1) The Office of the Secretary of Defense specifies the information needed to meet its requirements for planning and control, and identifies these requirements by defining program elements within the structure. In addition, some resources within program elements are also defined to allow collections needed for special purposes; e.g., detailed supply costs.

(2) Operations costs are measured costs. Costs are not allocated or prorated to program elements. For special analysis, prorations of costs are built up for "cost models" as necessary to fit the needs of the analysis.

(3) All costs are identified to the host activity unless specifically chargeable to a tenant.

(4) A program element is identified with the program having the lowest number to which the total of its output could most logically be associated. For example, the Strategic Air Command and Control System program element is assigned to program 1 instead of command-control and communications in program 3.

(5) Program elements in the mission programs are thought of as organizational entities which display their associated costs (such as B-52 squadrons) as opposed to a collection or display of things (such as B-52 aircraft). Data in the FYDP which represent things (force tables) are related to program elements, but may be in greater detail.

(6) Mission program elements are such that they do not split organizational units. Elements consist of identifiable components or organizations. This precludes allocation or proration of resources.

(7) A program element, such as B-52 squadron, is normally identified with a planned mission or identified with an output to be attained, such as base operating support.

(8) Program elements are classified into two types: mission or service. Mission program elements are always charged with the cost of services which are relatable and measurable, and which are obtained from service units, in addition to the operation and investment costs routinely chargeable to the element. Service program elements reflect only those costs which are not charged to mission elements.

(9) Separate program elements have been established for operational costs that would otherwise have to be allocated or prorated to two or more program elements.

(10) Support program elements (such as base operations) that relate to two or more elements within a single program are located directly below the group of elements to which they relate.

b. Component identifier codes are used by all DOD components contributing to the FYDP. The codes are used as the last digit of each program element. New codes or changes to the codes require the approval of the Deputy Assistant Secretary of Defense (Systems Policy and Information).

26-14. Resource identification codes

a. Resource identification codes are used to identify specific resources assigned to each program element. Most organizational entities identified in a program element consist of three basic resources; e.g., forces, manpower, and costs. In some instances, all of these resources are used to completely express an element. In other instances, forces are excluded and in still other instances only dollars (costs) are involved, since they are the common denominator of the system. The purpose of the resource identification code is to permit recognition of the precise kind of resources included in each element.

b. Each contributing component has been assigned codes to use when reporting specific data for inclusion in the FYDP. The input of data by these resource identification codes by program element allows the retrieval of data in a way which contributes to accuracy of analysis and permits validation of data in the approved program. A detailed explanation of these codes can be found in Handbook 7045.7H (DOD Five-Year Defense Program Structure, Codes and Definitions).

26-15. Program budget review schedule

The Secretary of Defense publishes an annual memorandum providing a schedule of significant events for the current year. This memorandum is issued prior to the submission of the Joint Strategic Objectives Plan, volume 1, and is revised as necessary. It identifies:

a. The base program from which all proposed changes will be made by publication of an "as of" date.

b. The schedule for the submission of the Joint Strategic Planning Document the Joint Research and Development Objectives Document, and the Joint Program Assessment Memorandum, by the JCS.

c. Specific dates for the submission of the POM.

d. Schedules for the issuance of Secretary of Defense Strategic Guidance, Fiscal Guidance, Logistics Guidance, and Program Decision Memorandums.

e. Dates for the submission of the DOD budget estimates.

f. Identification of special reviews and studies to be conducted during the calendar cycle and identification of the primary action office.

g. A date for the inclusion of an additional year to the FYDP.

h. Date for the major budget issue meetings between the Secretary of Defense, the Chairman of JCS, and the military department Secretaries. The date for a similar meeting to discuss major force issues is announced by the Secretary of Defense as necessary by separate memorandum.

i. Other items having an impact on the decision making cycle.

26-16. Fiscal guidance

a. Annually, the Secretary of Defense issues tentative 5-year fiscal guidance to define the total financial constraints within which the DOD force structure will be developed and reviewed. The fiscal guidance is by major mission and support category for each military department and defense agency. The first fiscal guidance is issued for comment by JCS, military departments, and defense agencies, following the issuance of the final Strategic Guidance Memorandum. The Secretary of Defense specifies in the fiscal guidance the nature of the fiscal planning constraints, and the assumptions used in its preparation. After review of the Joint Strategic Planning Document, volume II, the Joint Research and Development Objectives Document, and the comments on the general fiscal guidance, the Secretary of Defense issues revised fiscal guidance. The Secretaries of the military departments participate in the development of the revised fiscal guidance. In developing the revised fiscal guidance, consideration is also given to the current budget, the FYDP, program deferrals, inflationary trends, gross national product estimates, and other economic considerations.

b. For planning purposes, the totals of the fiscal guidance for each program year and each military department or defense agency are considered firm. To insure increased flexibility in developing balanced programs, reallocations of funds are permitted between major mission and support categories unless specifically stated otherwise in the Secretary of Defense Fiscal Guidance Memorandum. Fiscal guidance is used by the JCS in the formulation of the Joint Program Assessment Memorandum and by each military department and defense agency in the formulation of the POM. *c.* Fiscal guidance normally pertains to specific major missions and support categories. On a selected basis, additional program aggregations by be identified for separate visibility. These are specifically stated in the Fiscal Guidance Memorandum. Representative examples of the major mission and support categories are:

(1) Strategic offensive and defensive forces.

(2) Land forces.

(3) Tactical air forces.

(4) Research and development.

(5) Training.

26-17. Program Objectives and Program Objective Memorandums

a. JCS plans and documents outline the program objectives pertaining to the defense effort of the United States. The objectives are covered in detail in the section of this chapter covering JCS plans and documents. For example:

(1) Volume II of the Joint Strategic Planning Document, in addition to other objectives, highlights major force issues which require decisions during the current year.

(2) The joint Program Assessment Memorandum compares costs and support of the recommended forces with the approved FYDP baseline as stated in the annual Program and Budget Review Schedule.

(3) The Joint Research and Development Objectives Document provides the research and development objectives responsive to the strategy and force recommendations in the Joint Strategic Objectives Plan as well as long-range and technological objectives for capabilities expected to be needed in the 10to 20-year period.

b. Annually, the military departments and defense agencies prepare and submit to the Secretary of Defense a POM. The POM is based on the strategic guidance as stated in the Joint Strategic Planning Document, volume I, as modified by Secretary of Defense Strategic Guidance Memorandum. The POM expresses total program requirements. The memorandums provide force, manpower costs, materiel recommendations, and rationale for proposed changes from the approved FYDP base and the joint program assessment and military advantages to be gained. Costs are programming costs within the scope of fiscal guidance issued by the Secretary of Defense. Supporting information is in program element terms except that procurement for other than major weapon systems may be provided in the form of procurement listings.

c. The POM may be revised after submission when the originator believes that such a revision will result in a better balanced program. Recommended changes are made only when the change can be submitted in time to permit comparative analysis with the original POM; that is, in advance of a Secretary of Defense decision. Revisions include an identification of equal cost trade-offs within annual military department defense agency totals to preclude increases to the fiscal

constraints. They also identify equal or greater effectiveness in addition to cost trade-offs.

d. Late changes are processed to the Secretary of Defense using a program change request, provided the change will increase military readiness significantly and is considered urgent enough to require review out of cycle, or involves interservice functional transfers which create manpower authorization increases to end-year strengths.

e. The specific Tentative Program Decision Memorandum issue dates are announced by the Secretary of Defense in the revised annual Program or Budget Review Schedule Memorandum. Each Tentative Program Decision Memorandum and Development Concept Paper is supported by a "resource annex" which provides a translation of resources into the program elements of the FYDP. Decisions are transmitted to the JCS and appropriate military departments or defense agencies for analysis, the submission of comments, and the updating of the FYDP.

26-18. Component comments

a. Within 2 weeks after receipt of each Tentative Program Decision Memorandum, the JCS and appropriate departments or defense agencies, submit comments to the Secretary of Defense. Comments are basically narrative and address each issue to insure that the views of the JCS, the service Secretaries, and the defense agency directors, are represented.

b. Comments present the extent of program impact that may be expected as a result of the decision. If a dissenting view is expressed, any additional or clarifying information or justification not stated in the POM must accompany the statement to allow a reevaluation of the issue.

c. Comments submitted by the JCS address the total DOD program balance as weighed against the Joint Program Assessment Memorandum. The JCS would be expected to advise the Secretary of Defense with an assessment of the risks involved and inherent in the tentatively approved programs, and to provide an evaluation of any strategic implications resulting from the program if adopted.

d. The Secretary of Defense directs a staff review of all comments. At the completion of this review, Amended Program Decision Memorandums are issued that incorporate any changes and provide final programmatic decisions.

26-19. Decision Implementation

a. Secretary of Defense decision documents provide the basis for updating the FYDP data file. The military departments and defense agencies apply the approved forces, manpower, and cost data to the FYDP data base, as stated by the decision, by program element, even though their comment expresses a dissenting position. Decisions are incorporated as outlined by paragraph *VI.*B of DODI 7045.8, Updating the FYDP.

b. On an "as-required" basis, the Assistant Secretary of Defense (Comptroller) issues a program change decision which directs the FYDP updates to be submitted. The direction includes any special update and program structure changes necessary for the specific update. Military departments and agencies maintain their FYDP data files as prescribed in DODI 7045.8 to insure a rapid response to a specific update request.

26-20. Budget estimates and decision package sets

a. Annually, each military department and defense agency will submit its budget estimate to the Secretary of Defense in accordance with DODI 7110.1 and Manual 7110.1 (Guidance for the Preparation of Budget Estimates, Budget Execution Programs, Apportionment Requests, and Related Support Materials). These budget estimates include the budget year and the two prior fiscal years in accordance with currently established procedures. Budget estimates are submitted based on the approved program resulting from the incorporation of all decision documents received through a predetermined date to be announced by the annual Program or Budget Review Schedule Memorandum. Specific detailed instructions for the submission of budget estimates are separately prescribed for each year.

b. The Secretary of Defense directs a staff review of the budget estimates received from the military departments and defense agencies. Based on review and analysis, the Secretary of Defense publishes a series of decision package sets. They address specific budgetary issues and are related to the appropriations and budget activity structure of DOD. Included are the budget year and prior years as appropriate. The decisions also include an estimate of the impact on the future program years.

c. Package sets are transmitted to the military departments and defense agencies for insertion into the FYDP. Reclama statements are submitted to the Secretary of Defense. Budgetary reclama statements are concise, complete, and based on new facts or justification not previously submitted in order to provide a basis for a reevaluation. The Secretary of Defense directs a staff review of all budgetary reclama statements and issues a specific decision for each reclama.

d. In addition to the submission of reclama statements, service Secretaries identify major budget issues to the Secretary of Defense after completion of their review of the decision package sets. Issues must be of sufficient priority in the opinion of a service Secretary

to warrant a personal Secretary of Defense and service Secretary discussion. A major budget issue meeting is scheduled and announced in the Secretary of Defense Program or Budget Review Schedule Memorandum. Decisions resulting from this meeting are included in revisions to decision package sets.

26-21. Approved program changes

a. The receipt of a document reflecting the decision of the Secretary of Defense constitutes a newly approved program base when entered into the FYDP by the military departments or defense agencies. Changes to the approved base for the budget and program years are made only by subsequent documents, or by military departments for defense agencies within the established parameters specified in DOD instructions. Changes to levels of research and development in the FYDP are controlled by the Director of Defense Research and Engineering.

b. Subsequent to the receipt of a Program Decision Memorandum and prior to the next military department or defense agency POM submission date, Secretaries of the military departments, and directors of defense agencies are permitted to make changes to the FYDP without prior approval by the Secretary of Defense when such changes are confined within the following parameters, and are further qualified as indicated below:

(1) Forces.

(a) Current year-Only those changes within the approved total obligational authority subject to limitations imposed by DODI 7250.10, Implementation of Reprograming of Approved Funds.

(b) Budget and program years-Any force change within or among elements within available inventory not requiring additional manpower or total obligation authority. Forces are identified as those forces approved by the current Secretary of Defense Program Decision Memorandum.

(2) Manpower.

(a) Current year-Only those changes within the total manpower end-year strengths. Included are the transfer of both military and civilian authorizations and drill pay among elements.

(b) Budget and program years-Only those changes where the net effect will not increase the total military or civilian end-year strengths. Changes which are the result of interservice agreements for functional exchanges and authorizing manpower in excess of 100 military or 100 civilians for a gaining military department or 25 military or 25 civilians for a gaining defense agency, OSD, or the JCS, will not be accomplished until a confirmation program change request has been submitted by the gaining activity, and the transfer approved.

(3) Costs.

(a) Current year-Any change within the approved total obligational authority, subject to the limitations imposed by DODI 7250.10 with respect to reprograming actions.

(b) Budget year-During the period July through December changes may be made within the approved total obligation authority by cost category unless such authority has been negated in the annual budget estimate submission instructions or by separate memorandum. During the period January through June, no changes are made since the President’s Budget will have been established and submitted.

(c) Program year-Except as outlined by specific research and development decision documents or negated by other authority, changes may be made within the approved total obligational authority by appropriation.

c. The FYDP changes for the budget and program years which are accomplished by their Secretaries of the military departments and directors of defense agencies are permitted without explanation only when such changes for a program element remain below a cumulative total for a single fiscal year of $10 million or, in the case of manpower, below 300 military or civilian authorizations. Military departments and defense agencies are required to submit a memorandum to Office of the Assistant Secretary of Defense (Comptroller) to accompany the FYDP update in which the change is recorded explaining the changes which have exceeded the cumulative total obligational authority or manpower change parameters since the last explanatory memorandum. Approval of programs does not constitute authority to either commit or obligate funds.

26-22. Program Objective Memorandum

a. POMs are provided to the Secretary of Defense on an annual basis by each of the Secretaries of the military departments and the directors of defense agencies. Submission dates are announced in the Program or Budget Review Schedule issued by the Secretary of Defense. POMs are submitted to the Director for Program and Financial Control, Office of the Assistant Secretary of Defense (Comptroller). A separate POM is expected from each military department or defense agency for each of the major mission and support categories and special program aggregations identified in the Secretary of Defense Fiscal Guidance Memorandum.

b. The POM represents a comprehensive and detailed expression of the total resource requirements associated with the total commitment of submitting activity and contain, as a minimum, that amount of data and information prescribed for a program change request.

c. The format for an individual POM is left to the discretion of the submitting activity, provided it allows separation of the individual segments directed by the mission and support aggregations of the Secretary of Defense Fiscal Guidance Memorandum. For example, a POM must be a single input consisting of as many volumes or parts as there are major mission and support categories identified in the fiscal guidance which impact on the activities' total program. Computer products meeting or exceeding the data and information requirements of a program change request are encouraged.

d. POMs are forwarded as total packages and are not acceptable in increments. Due dates are not subject to negotiations because of the impact an extension would have on the remainder of the decisionmaking process.

e. The processing of a POM and the specific information that should be contained therein is covered in detail in DODI 7045.7, enclosure 1 (The Planning, Programming, and Budgeting System).

26-23. Program change request

a. Program change requests are prepared on DD Form 1570 (Program Change Request) and DD Form 1570-1 (Program Change Request-Cost Detail), DD Form 1570-2 (Program Change Request-Manpower Detail), and DD Form 1570-3 (Program Change Request-Force Detail).

b. A program change request may be submitted over the signature of the Secretary of a military department, Chairman of the JCS, Director of Defense Research and Engineering, Assistant Secretaries of Defense, and the directors of defense agencies.

c. Secretaries of the military departments or the director of a defense agency may delegate authority to sign proposals, not considered major issues, to his Assistant Secretary for Financial Management or Defense Agency Comptroller, or an official at a comparable level of authority within a defense agency. Program change requests are transmitted to the Director for Program and Financial Control, Office of the Assistant Secretary of Defense (Comptroller).

d. An economic analysis which includes all information relevant to the evaluation of the proposal and documentation of the decision including international balance of payments impact is included on the forms submitted. When such information as procurement objectives and procurement acceptance or "cost to complete" is considered necessary to the evaluation of the proposal, continuation sheets are used.

e. Program change requests are prepared to confirm Secretary of Defense decisions expressed by other than recognized decision documents when the decision is not in sufficient detail to allow FYDP update action. Recognized decision documents are: Program Decision Memorandums expressing a Secretary of Defense decision in program element terms by means of a "resource annex" development concept papers, accompanied by a "resource annex," program change decisions, decisions package sets, reprograming actions, and Secretary of Defense memorandums expressing a decision in sufficient detail to allow FYDP update action.

f. Program change requests are prepared using programing costs and include resources identified to both direct and indirect elements. Direct elements are those which contain resources directly affected by the proposal being made, whereas, indirect elements are those which change because of a change made to a direct element; e.g., base operations, training, command, housing and elements in programs 7, 8, and 9, when the direct element is a force element.

g. The program change requests summary sheets summarize the total implication of the change. When more than one program element is involved in a proposal, supporting formats for forces, manpower, and costs as applicable are appended for each element included in the proposal.

h. Program change requests explain all factors used in their preparation. Those submitted without adequate explanation of data and factors used for justification may be returned for resubmission. Details concerning specific forms and processing instructions are contained in DODI 7045.7.

26-24. Program change decisions and decision package sets

a. Program change decisions are used to announce certain program decisions of the Secretary of Defense. Decision package sets are used to announce all budget decisions incident to the annual review of the formal budget submission to the Secretary of Defense.

b. Program change decisions are organized in a manner to make them compatible with the program change request, thereby, allowing the responses to be in the same terms as the submissions.

c. Program change decisions are used to announce Secretary of Defense decisions as well as responding to program change requests; however, they are not used to confirm decisions made by Program Decision Memorandums, development concept papers, or reprograming actions which are other forms of decisions.

d. The specific entries, decision data, and other information required in program change decisions and decision package sets are contained in DODIs 7045.7 and 7045-7-H (Codes and Definitions Handbook).

26-25. Updating program data in the FYDP

a. General information. DOD components process program changes to the FYDP data files as frequently

as necessary during any Today period to insure the availability of current data if needed by OSD.

(1) All OSD decisions (Program Decision Memorandums, development concept papers, program change decisions, decision package sets, reprograming decisions, and Secretary of Defense Memorandum decisions) received during the previous Sunday period, and those decisions approved by the head of a DOD component as authorized by DODI 7045.7 are included in the file.

(2) Data are submitted for review and final acceptance by the Deputy Assistant Secretary of Defense (Comptroller), program/budget, no later than 8 working days after the end of the preceding month for which an update is scheduled. Decisions dated prior to the 16th of the preceding month are included. Those received later are included if feasible.

(3) Standard data elements and codes are used in reporting the information to the extent possible. Some data elements and codes are interim (nonstandard) and subject to change after undergoing standardization in accordance with DODI 5000.12 (Data Elements and Data Codes Standardization Procedures).

b. Data review and acceptance. Following review and analysis of the FYDP, update submission and the update of the OSD data file, the Deputy Assistant Secretary of Defense (Comptroller) transmits to the appropriate DOD components the newly approved FYDP, together with an identification of and explanatory rationale for any changes made to component submissions. Military departments and defense agencies conform their programs to the newly approved FYDP prior to the next scheduled update submission. The approved program is transmitted to the department by a program change decision.

c. Preparation and processing of program data for updating the FYDP (base file). FYDP data are submitted by DOD components directly to the Deputy Assistant Secretary of Defense (Comptroller) on punched cards or magnetic tape. Transmittal is by memorandum which state the "as-of" date of the date (normally, the end of the prior month), security classification, and other comments.

(1) All resource changes to the base file are on a "net change" basis; that is, data currently in the file are revised (plus or minus) by an incremental amount to reflect the new approved position.

(2) Program element codes and titles, resource identification codes, and component identifier codes are as prescribed by DODI 7045.7-H (Five-Year Defense Program Codes and Definitions Handbook) and in approved decision documents.

(3) DLA, for example, prepares all revised program data and submits by punched card on an "as-required" basis, for review and final acceptance by the Deputy Assistant Secretary of Defense (Comptroller).

(4) Detailed procedures for submission of changes to the FYDP data are contained in DODI 7045.8 (Procedures for Updating Program Data in the FYDP). This instruction also applies to "program element summary data tape layout, input format (control record), and input format (net change/add record)."

26-26. DOD budgeting

a. DOD Planning, Programing, and Budgeting System is not intended as a substitute for budgeting. Rather, it serves as the essential link between budgeting on the one hand and military planning and requirements determination on the other. All three are interlocking phases of a single planning-programingbudgeting process, entailing:

(1) Planning and review of requirements.

(2) Formulation and review of programs extending several years into the future.

(3) The development of the annual budget estimates.

b. The approved program, which results from the planning and programing phases already discussed, provides the base for preparation of the annual budget in the fall of each year.

c. The exact number of missiles, aircraft, tanks, guns, etc., determined through the programing system are again reviewed and priced in this third phase of the planning-programing-budgeting cycle. Detailed production schedules, leadtimes, activity rates, personnel grade structures, prices, status of funding, and all the many other facets involved in the preparation of the annual defense budget are scrutinized in the budget review. Decisions are made in terms of program elements under the mission-oriented structure, but the program is also managed in terms of those activities to be performed and resources to be acquired and used.

d. Translation of the FYDP into activity rates, scheduled actions, and resources is made through derivative program documents within the military departments. These derivative documents contain considerably more detail than the FYDP to meet major command operating, programing, and budgeting needs. They are advised at set intervals and as necessary to incorporate all approved changes to the FYDP including those changes below DOD thresholds. Major commands base their financial and operating programs, and budget submissions upon these derivative documents which are adhered to except in specific areas identified in the documents.

e. Although procedures may vary among the services, program guidance documents normally are forwarded to major commands initially in December, 19 months in advance of the fiscal year to which they apply.

They are revised at least quarterly to update the approved program so that a current base is available from which to determine fund requirements.

f. Shortly after these derivative documents are forwarded to major commands (about 18 months prior to the fiscal year to which they apply), the military departments issue calls to the major commands for their budget estimates. About March, command submissions of their estimates are due in the military departments. These submissions are intensively reviewed, analyzed, and revised to insure than resource requirements are valid and that resources are properly allocated.

g. Some time in late September, the military departments are requested to submit their budget estimates to DOD for the next fiscal year, prepared on the basis of the approved programs. These estimates are reviewed by the Secretary of Defense and his staff during October and November so that the final estimates may be submitted to the President by early December for review and submission to Congress in January.

Section IV
Planning, Programing, Budgeting, and Execution System (PPBES) in the Army

26-27. Introduction

The Army PPBES interfaces with the DOD system and Joint Strategic Planning System. It is designed to provide input of Army views to the Secretary of Defense and JCS with respect to policy, strategy, force objectives, and other considerations. Internally, it is used to furnish guidance to the Army Staff and commanders. The principal documents of the Army PPBES are the Army Strategic Appraisal, the Army force guidance, the PCM, the Army Force Program, the Army Budget Estimate, and the Army Capability Plan.

26-28. The Army Planning System

a. The Army Planning System is the first phase of the Army PPBES. It is a portion of the resource management function and is performed by HQDA. It pertains to development of national military strategy, policy, force objectives, and force capabilities. Resources needed for the execution of Army roles and missions are determined in this planning phase.

b. The system encompasses the structure of the Army Staff engaged in or managing such planning, the actual execution of the planning, and the products resulting from the planning process. It does not specifically address contingency planning, but assists in providing a basis for such planning. Conceptually, the Army Planning System supports:

(1) *National strategy*-the art and science of developing and using the political, economic, and psychological powers of a nation, together with its armed forces, during peace and war to secure national objective.

(2) *Military strategy*-the art and science of employing the armed forces of a nation to secure the objectives of national policy by applying force or the threat of force.

(3) *Objective force planning*-planning to develop forces required within a finite time frame to accomplish the national security objectives; addresses division forces and their support.

(4) *Resource requirements planning*-planning to determine the resources necessary to support the national security objectives; addresses supplies, equipment, personnel, facilities, funds, and research and development. Resource requirements planning is an essential complement to objective force planning.

c. The Army Planning System provides professional military advice and assistance to the Secretary of the Army and serves the planning needs of the Chief of Staff who, as an additional responsibility, supervises the execution of approved plans.

d. Army plans are kept as current as possible. At this level, revisions are generally necessitated only by those decisions which cause major changes in force levels or in the needed resources.

26-29. The Army Strategic Appraisal

a. The Army Strategic Appraisal is the basic strategy planning document. Included is an analysis of the threat, which forms the basis for the strategy. It covers the midrange period and provides the Army’s views on military policies and strategy. These views are stated in response to pronouncements by the President, NSC, and OSD. Specifically, the Army Strategic Appraisal contains:

(1) Identification of national security interests and objectives, and major national security policies.

(2) An analysis of the threat to IJS interests and objectives, and identification of gaps in required intelligence.

(3) Regionally oriented appraisals, strategic concepts, and military objectives to achieve the national security objective.

b. The Deputy Chief of Staff for Operations and Plans (DCSOPS), in coordination with the Assistant Chief of Staff for Intelligence, is assigned primary Army Staff responsibility for the preparation of the appraisal. It is reviewed annually, but is republished only when there is significant change in strategy or threat.

26-30. Army guidance

Comprised of four volumes, the Army Guidance is prepared from staff input by the Director of Program Anal-

ysis and Evaluation. Volume I instructs command in assessing the Army program approved the preceding cycle and guides command participation in developing the program force. Volume II specifies programing procedure for both the staff and commands. The volume includes instructions for preparing command Program Analysis and Resource Review documents and Modernization Resource Information Submissions. The volume responds to Defense Guidance and decisions taken in Program Decision Memoranda and OSD-OMB budget review. Volume *III* includes the Army plan, addresses long-range planning, summarizes Army goals, and forwards DA directed Program Development Increment Packages to major commands for costing. Volume IV gives instructions for writing the POM.

26-31. Army Force Program

a. The Army Force Program develops in detail the Army force structure approved by the Secretary of Defense for the current and budget years. The objective of the program is to develop a balanced Army force that can be supported with sufficient resources. Approved planning forces from the POM, in conjunction with command troop list submissions, form the basis for structuring the programed force. The approved programed force is sent to the field for implementation. The Army Force Program:

(1) Establishes the Active Army approved force (troop list) for the current and budget years.

(2) Establishes the Active Army military and civilian manpower programs for the current and budget years.

(3) Identifies, in detail, the Reserve component force structure.

(4) Develops force programing guidance for the Army Staff and Army operating commands and agencies.

(5) Provides a projection of asset demands and availability allowing Headquarters, Department of the Army (HQDA) to assess its capability to support the force.

(6) Presents a schedule of activations, inactivations, reorganizations, and deployments.

(7) Supports the Army budget requests through the entire budget cycle.

b. Army Staff responsibility for preparing the Army Force Program rests with the DCSOPS. The program is continually updated as required.

26-32. Army Plan

a. The Army plan provides administration and operational guidance to Army agencies, Army commands, and Army component commands of unified commands for the employment and support of Army forces in the short-range period. It reflects specific tasks and capabilities attainable with existing programs and budgetary limitations. It employs the same planning assumptions that are used in the Joint Strategic Plan, and is the Army's tool for implementing their portion of this joint plan. Specifically, the Army Plan:

(1) Documents the Active Army forces available to execute operational plans.

(2) Presents the mobilization schedule and force together with planned availability for developing these forces.

(3) Presents joint strategic concepts.

(4) Assigns tasks to commanders of major Army commands.

(5) Provides personnel, intelligence, and logistics guidance.

(6) Provides guidance for special operations, with and without mobilization.

(7) Provides guidance required to plan for mobilizing units and individuals to meet established force requirements to expand the Active Army, if necessary.

(8) Outlines the Army's concept of and role in security assistance.

b. Army Staff responsibility for preparing the Army plan is assigned to the DCSOPS. It is continually reviewed and updated.

26-33. The Army Programing System

a. The Army Programing System is the second phase of the Army PPBES, and is concerned with translating planning and programing guidance from OSD into a comprehensive and detailed allocation of forces, manpower, and funds covering a 5-year period. The Army estimates of these requirements are submitted to OSD in the POM.

b. The program cycle is initiated annually upon receipt of the Defense Guidance Memorandum, which contains OSD guidance on:

(1) Current forces, elaborating on policies in force planning terms regarding the missions and tasks that the forces must be prepared to perform and the assumptions to be made in sizing forces and allocating resources.

(2) Materiel support planning which insures, within fiscal guidance constraints, a reasonable balance between combat forces and materiel support capability for US forces and those of selected allies. It further requires an efficient allocation of resources between new acquisition and maintenance of existing assets.

(3) Fiscal constraints and specifies the total obligational authority which may realistically be assumed to be available to the Army over the 5year period. Total obligational authority limits are specified if necessary to insure specific objectives.

c. The Defense Guidance Memorandum is analyzed by the Army Staff to identify its effects on forces and

resources which may require additional guidance from the Chief of Staff. These issues are reviewed and alternatives are identified by the Program Budget Committee, which then recommends a course of action to the Select Committee. The Select Committee reviews the alternatives, makes modifications when appropriate, and forwards its analysis and recommendations to the Chief of Staff/Secretary of the Army for necessary decisions. These decisions provide the additional guidance necessary to initiate the preparation of the POM. The decisions are disseminated to the staff by guidance memorandums from the Select Committee and the Program Budget Committee.

d. The Director, Program Analysis and Evaluation, has the primary staff responsibility for preparing the POM. Each major staff agency furnishes data. In developing the memorandum, each program/ appropriation director presents and defends a program before the Program Budget Committee. This committee may recommend approval or modification of the program. After all programs have been reviewed, the Select Committee is briefed on the analysis and recommendations of the Program Budget Committee. The Select Committee then forwards its own analysis and recommendation to the Chief of Staff. After Chief of Staff and Secretary of the Army give their approval, the POM is forwarded to the Secretary of Defense.

e. The next action is the receipt of issue papers from OSD. These documents analyze the POM proposals in terms of their relation to the policy and planning guidance: the balance between force structure, modernization, readiness, and efficiency trade-offs. They also define the issues, list the alternatives, and evaluate the capabilities and costs of those alternatives in terms of their ability to fulfill the missions of DOD. Primary Army Staff action for review and comment is determined by the nature of the issue paper. The appropriate staff agency prepares the draft reply and processes it through the Chief of Staff to the Secretary of the Army for signature and forwarding.

f. The issue papers with the Army comments are submitted to the Secretary of Defense and the Deputy Secretary for Defense. The decisions made in review of the issue papers are released as a Tentative Program Decision Memorandum.

g. The tentative memorandum is analyzed by the Army Staff to identify those major issues which the Secretary of Army should personally discuss with the Secretary of Defense. After the major issues meeting, OSD issues the Amended Program Decision Memorandum containing the final program decisions.

26-34. Program/budget interface

a. The complexities of programing and budgeting and the extended cycles necessitated by these complexities led the Army to revise procedures both in HQDA, to provide a closer interface between the people doing programing and the people doing budgeting, and in major Army command inputs to the DA to eliminate redundant submissions and data which were not used. A central feature in these changes is the adoption of program development increment packages as a means of expressing programmatic thrusts, objectives, and decisions in sufficient detail to track and use in budget formulation and review. All items and activities between the lowest zero-based level and the highest are described in program development increment packages which contain the direct and supporting dollars and manpower necessary to carry out a programmatic decision. Program development increment packages are prioritized by the Army and may be broken down into decision packages or aggregated into consolidated decision packages when either of these levels is required by the Secretary of Defense.

b. Significant features of the Army Program Budget System as it relates to major Army commands are:

(1) Program Analysis and Resource Review is an opportunity for commands to suggest initiatives and changes in the direction of the Army. The Program Analysis and Resource Review is submitted in January based upon resource levels specified in the October program and budget guidance and program development increment packages developed by the Army Staff which decrements programs to the lowest level to be addressed in zero-based terms. Each command is constrained both as to dollars and numbers of issues which may be detailed in the Program Analysis and Resource Reviews; however, the commander’s statement may address as much or as little as desired by the individual commander. Following DA review of Program Analysis and Resource Reviews, they are discussed by senior commanders in a session with the Chief of Staff.

(2) Command Operating Budget addresses primarily the upcoming year of execution but does include any late-breaking changes to the data contained in the Program Analysis and Resource Review. New issues may not be introduced and previously addressed issues are not readdressed at this time. The greatest reduction in major Army commands in the workload of program/budget documents has taken place in this July submission.

26-35. The Army Budgeting System

a. The third phase of the Army PPBES is the budgeting phase and includes both budget formulation and budget execution. The budgeting process translates programing decisions into budget estimates which are justified before OSD, OMB, and Congress. It considers the requirements of the commands based on their estimates, current year budget execution, and prior year

reports. The comptroller of the Army is responsible for Army budgeting and discharges that responsibility through the Director of the Army Budget and through the Program Budget Committee.

b. The Army PPBES is extended to field agencies by Program and Budget Guidance provided by HQDA. This is a statement of those resources which have been programed for allocation to each command or agency involved together with statements of objectives, goals, and workloads for which these resources will provide support. Each command and agency receives a summary volume and a separate volume applicable to its specific resources.

c. After receiving dollar and manpower guidance in the Program and Budget Guidance, commands and agencies submit budget year data to HQDA. This relates to the budget year estimates in the POM. It provides a detailed base for HQDA, to use in formulating the annual budget. This base may be updated in the Command Operating Budget if required; however, new issues normally may not be introduced at this time.

d. The Army Budget Estimate is submitted annually to the Office of the Secretary of Defense. This estimate includes the prior, current, budget, and 4 additional years. Specific detailed instructions for submitting budget estimates are prescribed in DOD 7110-1-M and augmented separately for each year. OSD and OMB review, adjust, and approve the Army budget which is to be included in the President’s budget. The results of this action are expressed in Program Budget Decisions issued by OSD. The Comptroller of the Army has staff responsibility for preparing and submitting the Army Budget Estimate.

e. Following issues of the decisions, the Secretary of Defense convenes a series of major budget issues meetings which are attended by the service Secretaries, JCS, and representatives of OSD. The purpose of these meetings is to settle those major issues not resolved in the initial decision process.

f. Following the Program Budget Decision process and the major issues meeting, the budget is again reviewed by OMB, sent to the President for his review, and discussed with the President by the Secretary of Defense. The final results incorporated into the overall Federal Government budget (the President’s budget). The decisions also serve as a basis for updating the FYDP.

26-36. Apportionment and funding

a. The Command Operating Budget is submitted to HQDA by commands and agencies receiving allocations from HQDA. The purpose of the Command Operating Budget is to provide necessary data for developing annual funding programs for certain accounts and to provide backup materiel required in support of the budget estimates submission.

b. Apportionment requests are prepared by the Army based on field input and on congressional actions relative to the appropriation bill which are being considered by Congress. The apportionment is the OMB control of the rate of use of funds that have been or will be approved by Congress or the President.

c. The annual funding program, prepared by HQDA, is a forecast of funds that will probably be made available to a field command during the coming year.

Section V
Planning and Programing in the Navy

26-37. Introduction

The Navy Planning and Programing System is the basis for the coordination and execution of planning and programing within the Office of the Chief of Naval Operations. It includes the formulation, development, and concepts of the Navy planning and programing documents, discussed in detail below, which are an integral part of the system. It provides for the development and continuous updating the Department of the Navy Five-Year Program and the Navy’s portion of the FYDP.

26-38. Planning and programing

a. The Department of the Navy Planning and Program System integrates plans and programs of the Navy Department, the Naval Material Support Establishment, and the Operating Forces of the Navy. Together with the plans and programs of the Marine Corps and, when operating as part of the Navy, the Coast Guard.

b. The purpose of Navy planning and programing is to develop Navy concepts, requirements, and objectives for use as Navy input to joint, DOD, and budget planning; to translate strategic and operational concepts, technological and intelligence forecasts, and guidance from higher authority into research and development; to determine force levels, personnel and support plans, and objectives; and to provide guidance and direction in the use of current capabilities.

c. Strategic and naval warfare systems studies are conducted continuously in support of the Navy planning and programing system. Although not related specifically to the major documents in the system, these studies are timed to provide necessary information and assistance in the updating process.

26-39. Navy planning

a. Navy planning spans the period from the current fiscal year through 20 years in the future. The major documents used in the Navy planning system are the

the Navy Strategic Study, the Navy Capabilities Plan, and the Navy Support and Mobilization Plan.

b. The Navy Strategic Study is developed by the Director, Strategic Plans, Policy, and Nuclear Systems Division under the Deputy Chief of Naval Operations (Plans and Policy) to provide concepts and philosophy concerning future naval contributions to national defense and to provide basic guidance for Navy long-range and midrange planning. It appraises the world situation for these periods, outlines the potential threats and the national and military policy, objectives, and strategy. It also summarizes the Navy's roles and tasks. The Navy Strategic Study, with annexes described below, is issued annually on 1 January, covering the period 5 to 20 years in the future from the end of the current fiscal year.

(1) *Annex A to Navy Strategic Study*-Navy Midrange Guidance projects qualitative force and research and development guidance for a 5-year period commencing 1 July, 5 years after the end of the fiscal year in which approved. It provides a basis for the development of research and development goals, and with the basic document, provides a basis for the Navy input to the Joint Strategic Objectives Plan strategy and mid-range strategic guidance.

(2) *Annex B to Navy Strategic Study*-Navy Long-Range Guidance provides long-range research and development guidance for a 10-year period commencing 1 July, 10 years after the end of the fiscal year in which approved. It is the primary basis for the Navy input to the Joint Long-Range Strategic Study and the Joint Research and Development Objectives Document.

c. The second major planning document, the Navy Capabilities Plan, supports the Joint Strategic Planning Document. In conjunction with the Navy Support and Mobilization Plan, discussed below, it provides direction and guidance for:

(1) Mobilizing, organizing, training, and equipping naval forces for prompt and sustained combat.

(2) The administration and support of naval forces assigned to the operational control of unified or specified commands.

(3) Employment of naval forces not assigned to the operational control of unified or specified commands.

(4) Planning by the commanders of unified or specified commands and their naval component commanders for the employment of assigned combatant forces.

(5) Employment and operation of the US Coast Guard when operating as a service in the Navy.

d. The Navy Capabilities Plan lists the naval combatant forces to be assigned to unified and specified commands; assigns responsibilities for the readiness and performance of the operating offices; and provides direction and guidance for support of the operating forces and for mobilization of the Naval Establishment and the coordination of logistics support. Prepared by the Director, Strategic Plans, Policy, and Nuclear Systems Division, under the Deputy Chief of Naval Operations (Plans and Policy), the Navy Capabilities Plan is effective for the fiscal year which corresponds to the time period of the effective Joint Strategic Planning Document; i.e., the Navy Capabilities Plan-75 covers the time period of 1 July 1975 to 30 June 1976.

e. The third major planning document in the system is the Navy Support and Mobilization Plan which is published separately from, but is part of, the logistics annex to the Navy Capabilities Plan. Prepared by the Director, Logistics Plans Division, under the direction of the Deputy Chief of Naval Operations (Logistics), the Navy Support and Mobilization Plan is the Navy mid-range plan, covering the current year and 8 years in the future. The plan, within the strategic framework of the midrange period, provides policy and guidance for the support of approved forces and for phased expansion of the Department of the Navy. It sets forth approved inactive force levels and support capabilities for the current fiscal year and approved force levels and support objectives for the following 8 fiscal years under peacetime, contingency, and general war conditions. Approved inactive force levels are compatible with the FYDP, and are based on current estimates of capability to effect inactivations from reserve sources.

f. Various echelons of command prepare operation and logistics plans to support the Navy Capabilities Plan and the Navy Support and Mobilization Plan. Communications plans are the responsibility of the Commander, Naval Telecommunications Command. Operational plans are prepared by commanders of fleets, forces, sea frontiers, and other echelons to support the Navy Capabilities Plan. Navy component commanders of the unified and specified commands use the information contained in the Navy Capabilities Plan in developing plans prepared in support of the unified and specified command plans. Major commanders prepare logistics support and mobilization plans in support of the Navy Support and Mobilization Plan.

26-40. Navy programing

a. The basic purpose of the programing phase is to translate Department of the Navy-approved concepts and objectives into a definite structure expressed in terms of time-phased resource requirements including personnel, monies, and material. This is accomplished through systematic approval procedures that "cost out-force" objectives for financial and manpower resources 5 years into the future, while at the same time displaying forces for an additional 3 years. This gives the Secretary of Defense and the President an idea of the impact that present-day decisions have on the future defense posture.

b. The Navy Programing System is described in detail in the Department of the Navy Programing Manual. The purpose of this manual is to describe the Navy Planning, Programing, and Budgeting System which is an integrated process for the establishment, maintenance, and revision of the DOD FYDP and the budget. The Navy system includes two major program documents: the Department of the Navy POM and the Department of the Navy Year Program. Each of these has its own program change control system by which changes to approved forces and programs are requested, reviewed, and acted upon.

c. The Department of the Navy POM is the Secretary of the Navy's annual recommendation to the Secretary of Defense for the detailed application of Department of the Navy resources. The POM is developed within the constraints imposed by the Secretary of Defense fiscal guidance and satisfies all assigned functions and responsibilities during the period of the FYDP. The POM is the instrument through which programing under fiscal constraints is implemented. It is also the primary means of requesting revision to Secretary of Defense-approved programs as published in the FYDP.

d. The POM is structured by the major mission and support categories and special program aggregations as identified in the Planning and Programing Guidance Memorandum. It represents a comprehensive and detailed expression of the total resource requirements associated with the total commitment of the Department of the Navy. Assessment of risks and military advantages of the proposed programs, as measured against those currently approved in the FYDP, must be addressed. Supporting detail is prepared in program element terms. The POM is forwarded to the Secretary of Defense as a total package and, upon submission, included programs are considered "locked." Changes are permitted only if they are timely enough to be considered with the initial submission, contribute significantly to effectiveness, and identify equal cost trade-offs within previously submitted programs.

e. The POM is developed by the Director, General Planning and Programing Division on the staff of the Chief of Naval Operations. The Deputy Chief of Staff (Plans and Programs) provides Marine Corps inputs. It is reviewed by the Chief of Naval Operations and the Commandant of the Marine Corps. After approval, it is promulgated by the Secretary of the Navy normally in late May.

f. The Department of the Navy Five-Year Program is the Navy portion of the DOD FYDP. This publication records, summarizes, and displays the decisions that have been approved by the Secretary of Defense as constituting the DOD program. It is a management tool that keeps management informed of what has been accomplished in the past and what is to be accomplished in the future to support the national strategy decisions. The FYDP displays the manpower and dollars involved in these approved programs for the FYs 1962 through the current year plus 5 additional program years. Force authorizations are also displayed for 3 additional years to include the current year plus 8 program years.

g. These displays of manpower, dollars, and forces are further categorized in terms of major programs; that is, those programs in which the major decisions are required to insure that the DOD resources are expended to provide the capabilities dictated by the national strategy. The structuring in the major program, therefore, alines the resources with the operating budget activities. *h.* Major updating of the FYDP occurs at least twice each year in October and January. The October update records the final Secretary of Defense programing decisions: the January update records the President's congressional budget decisions. These updates reflect the Secretary of Defense's decisions up to that time and obligations as of that time. Minor updating occurs as the Director, Department of the Navy Program Information Center may consider necessary in accordance with the programing manual.

26-41. Navy budgeting

a. The Assistant Secretary of the Navy (Financial Management) is also designated as Comptroller of the Navy. Directly responsible to the Secretary of the Navy, this civilian assistant is authorized to act for the Secretary of the Navy within an assigned area of responsibility. As Comptroller of the Navy, his responsibilities include formulation principles and policies and prescribing procedures in the area of budget preparation and administration, as well as coordinating all matters concerning his office with the Comptrollers of DOD, Army, and Air Force and departments and agencies of the executive and legislative branches of the Government.

b. As stated earlier in this discussion, the Chief of Naval Operations has responsibilities not only in the areas of operations and planning, but also in budgeting for the operating forces of the Navy.

c. Each bureau, systems command, and office, such as Naval Sea Systems Command, Naval Supply Systems Command, Bureau of Medicine and Surgery, Chief of Naval Personnel, and Office of Naval Research, is responsible for budgeting in respective area based on guidance provided by the Chief of Naval Operations. All these budgets are reviewed by the Chief of Naval Operations and used as inputs to the Office of the Comptroller of the Navy, which then coordinates the budget for the Navy. This document proceeds for appraisal and approval through the Secretary of the Navy to the Secretary of Defense.

Section VI
Planning and Programing in the Air Force

26-42. Introduction

a. The objectives to which the Air Force builds its peacetime force structure are developed from an analysis of many factors, including the expected availability of funds and production capabilities. When the application of these factors results in program objectives different from those indicated in the war plan, adjustments must be made in the war plan, or a means developed to meet this difference by a change in peacetime objectives. For example, a programing decision to base a unit in peacetime must consider the wartime deployment and mission of that unit. Similarly, when a war planner specifies deployments to particular bed-down bases, the war planner must consider present capability and programed development. Basic information on the programing process is presented in headquarters Office Instruction 72-1 (DOD Program System) and Air Force Regulation 27-9.

b. Although inherently different, the planning and programing processes are independent. Plans provide basic guidance for programs; in fact, plans for wartime activity provide goals for peacetime programs. There is much cross guidance between the processes; the planner rises the program as much as the programer uses the plan. To emphasize the importance of coordination, the example of deployments is used again. In scheduling the positioning of global forces, programers are required to have a thorough knowledge of requirements specified by war planners. This information helps in programing unit deployments in peacetime for maximum effectiveness in case of war.

26-43. Essentials in Air Force planning

a. At any level of command, a plan identifies the objective and provides the guidance needed to attain it. Because it is the design for accomplishing a mission, a plan clearly defines what has to be done; why, when, and where it has to be done; and who is to do what. Air Force planners at all echelons of command are required to be familiar with the basic guidance for preparing plans, as given in Air Force Regulation 28-3.

b. Access to timely and accurate data is essential to effective planning. The Worldwide Military Command and Control System is designed to provide upto-the-minute information to the National Command Authority. The system also provides a means of assessing data related to plans and required resources in order to determine the feasibility of carrying out a plan. Further, the system offers the means of determining the forces and resources available in the event of a crisis.

c. Although the downward flow of information between successive echelons of command is essential to planning, the principle of coordination requires the exchange of information in both directions. Plans written in response to JCS tasking are reviewed and approved by the services in coordination with the Joint Staff.

26-44. Air Force planning documents

The Air Force war and objective planning documents have been developed at, or required by, HQ, US Air Force to provide continuity in planning and the means by which the Air Force can direct its efforts toward common objectives. The major planning documents prepared at HQ, US Air Force are the US Air Force Planning Concepts and the US Air Force War and Mobilization Plan.

26-45. Long-Range Capability Objectives

a. Long-Range Capability Objectives is designed to provide long-range guidance to Air Force planners. It expresses Air Force objectives in terms of the concepts, strategies, and force structures required to achieve national security objective, with emphasis on the period approximately 15 years into the future. Long-Range Capability Objectives is the primary vehicle for disseminating Air Force planning guidance; providing the basis for objective planning by the Air Staff and Air Force commands. Additionally, it serves as a source for Air Force inputs to the Joint Strategic Planning Documents, the Joint Strategic Objectives Study, and the Joint Research and Development Objectives Document. Long-Range Capability Objectives interface directly with the major systems acquisition process. It helps direct Mission Area Analyses, identifies those mission elements for which existing or projected capabilities are deficient, and indicates opportunities for enhancement of capabilities.

b. The contents of the Long-Range Capability Objectives consist of:

(1) An assessment of the technological, political, and economic trends which will shape the future world.

(2) The development of the Air Force strategy and concepts for employment of aerospace forces.

(3) A statement of long-range capability objectives for the Air Force.

c. Long-Range Capability Objectives are published and revised as necessary by the Directorate of Programs, HQ, US Air Force.

26-46. US Air Force War and Mobilization Plan

a. The War and Mobilization Plan covers the time period over which the US Air Force and financial programs are being studied. It is revised annually on a time-phased schedule, and is continuously in effect. It directly supports the Joint Strategic Capabilities Plan for

the planning year and extends through the remaining 4 years of the force and financial program. It provides for continuity in short-range and midrange war and mobilization planning. The War and Mobilization Program provides the Air Staff and the US Air Force commanders' current policies and planning factors for the conduct and support of wartime operations. It establishes requirements for the development of mobilization and production planning programs to support sustained contingency operations of the programed forces; it encompasses all functions necessary to match facilities, manpower, and materiel resources with planned wartime activity.

b. The War and Mobilization Plan is published in six volumes.

(1) Volume 1, Basic Plan and Supporting Annexes (War and Mobilization Plan-1).

(2) Volume 2, Plans Listing and Summary (War and Mobilization Plan-2).

(3) Volume 3, Combat and Support Forces (War and Mobilization Plan-3).

(4) Volume 4, Wartime Aircraft Activity (War and Mobilization Plan-4).

(5) Volume 5, War Consumables Factors and Requirements (War and Mobilization Plan-5).

(6) Volume 6, Basic Planning Data (War and Mobilization Plan-6).

26-47. Basic Plan (War and Mobilization Plan-1)

The War and Mobilization Plan-1 is developed as a five-paragraph plan. It contains:

a. Task organizations.

b. Situation (paragraph 1). Describes the world situation, the strength and disposition of enemy forces, and provides appropriate assumptions and necessary definitions.

c. Mission (paragraph 2). Describes the total Air Force mission under conditions for cold war, general war, and contingency operations.

d. Execution (paragraph 3). Specifies the tasks of Air Force commander reporting directly to HQ, US Air Force, as well as tasks of the air component commanders.

e. Administration, Logistics, and Personnel (paragraph 4). Because of the number of Air Staff functional areas included in this paragraph, a separate annex is required for each area.

f. Command and control (paragraph 5). Because of the volume of the material, detailed guidance is included in an annex.

g. Annexes. The War and Mobilization Plan-1 includes a total of 26 annexes. These annexes provide detailed guidance pertaining to specific Air Staff functional areas and their associated operations. These functionally oriented annexes may appear either as annexes or appendixes in command operation plans.

26-48. Plans Listing and Summary (War and Mobilization Plan-2)

The War and Mobilization Plan-2 contains a consolidated listing of major command plans, HQ, US Air Force plans and those unified or specified command plans for which the Air Force develops supporting plans.

26-49. Combat and Support Forces (War and Mobilization Plan 3)

The War and Mobilization Plan-3 reflects the US Air Force position on wartime availability of combat forces (flying) by type of equipment and geographical area. Additionally, part 2 of this document contains data on support forces (nonflying) available to support the combat (flying) forces. Part 3 provides a listing of unit-type codes for the various Air Force units and includes mission capabilities statements, along with total transportation requirements for the deployable units. The War and Mobilization Plan-3 is prepared annually and is based on the fourth quarter US Air Force Program Series documents.

26-50. Wartime Aircraft Activity (War and Mobilization Plan-4)

The War and Mobilization Plant reflects the planned positioning and utilization of available combat forces in support of joint operations. It is the basis for developing supporting documents and other actions required to attain and maintain the readiness posture to support the national strategy.

26-51. War Consumable Factors and Requirements (War and Mobilization Plan-5)

The War and Mobilization Plan-5 provides approved US Air Force planning factors for expenditure of war consumables. It also includes missile, missile launcher, chemical, and riot control agent requirements. These factors, together with data provided in the War and Mobilization Plan-4, provide the basis for planning procurement and pre-positioning of war reserve materiel in the near (1-year) time period for forces in being and for computing war reserve materiel requirements through the balance of the program period (second through fifth year).

26-52. Basic Planning Data (War and Mobilization Plan-6)

The War and Mobilization Plant reflects Air Force planning data to be used in developing programs to

support Air Force wartime requirements. This volume is structured in six parts.

a. Part 1 contains wartime sortie rates and durations by type aircraft. Those data are used to determine the wartime sortie/flying hour generation capability of the programed force, on which all attendant support programs are based.

b. Part 2 contains the sortie allocation and summary table by type aircraft and area. Allocations reflect the attired sortie generation capability of available War and Mobilization Plan-3 forces when developed consistent with planned aircraft activity detailed in War and Mobilization Plan-4.

c. Parts 3 and 4 provide wartime force utilization data used in the development of logistics support requirements and industrial preparedness planning programs.

d. Part 5 provides flying hour allocations to support the programed force during the first 30 days of worldwide wartime operation. These data establish the flying hour planning base for computing wartime aircraft engines and engine spares.

e. Part 6 contains sortie computation tables which are used to determine the sortie generation capability of combat units deployed at various intervals after D-day. The sortie tables are published to aid planners in the development of wartime aircraft activity, War and Mobilization Plan-4.

26-53. The operation planning process

a. Air Force Regulation 28-3 serves as the basic guide for Air Force war planning. It describes the planning documents of both the JCS and Chief of Staff, US Air Force. In addition, it provides war planning guidelines, standard formats, and administrative procedures which are compatible with the Joint Operation Planning System for use by Air Force components of the unified commands, the Military Airlift Command, as a transportation operating agency, specified command, and the Strategic Air Command as a specified command. It encompasses the procedures which commence with the assignment of a planning task through the point at which implementation of the operation is directed. Further, it designates the review requirements for Air Force operation plans and provides guidelines to the major air commands for the preparation of plans written in support of US Air Force unilateral plans.

b. Air Force Regulation 28-3 explains the planning process, a coordinated staff procedure used by a commander to determine the best method of accomplishing assigned tasks and to direct the action necessary to accomplish the mission.

c. The planning process begins when a task is assigned to a commander and is completed when the guidance and direction to subordinate commands are issued in the form of a plan. Air Force officers at all organization levels who participate in the preparation and development of wartime plans normally follow the sequential steps of the planning process: (1) Analyze the task. Preclude lost motion and false starts with a clear analysis of the task received from higher headquarters. (2) Issue guidance to the planning staff at each level concerned. Guidance may be issued by letter of instructions or by conference to insure early and concurrent planning. (3) Prepare staff estimates and develop possible courses of action. These preliminary documents help the commander evaluate the impact of all factors upon a particular course of action.

26-54. Organization for Air Force programing

a. Air Force war planning documents are prepared to cover the activity of the forces during cold, limited, and general war situations.

b. As peacetime activity, the Air Staff develops and publishes each year, a series of documents known collectively as the US Air Force Program. The programs form the basis for the development of budgets, procurement of materiel, the procurement and training of personnel, military construction, and peacetime operations by the Air Force commands. These peacetime operations are conducted for the purpose of developing and maintaining a combat capability.

c. The implementation of the DOD programing system has significantly affected the management of resources. As programing is performed within the Air Force today under the integrated system, responsibility is shared by the Air Staff, which makes proposals and implements decisions; the Secretary of the Air Force, who manages the submission of proposals and the implementation of decisions; and the Secretary of Defense, who reviews proposals and makes decisions.

d. In functional organizations as large as HQ, US Air Force, much of the total staff effort is directed toward the analysis of Air Force tasks, the statement of obtainable objectives, the determination and coordination of courses of action, the preparation of specific proposals to take the selected course of action, and the implementation and management of decisions made by higher authorities. Air Staff operating procedures are keyed to concepts of staff action between offices of primary responsibility and offices of collateral responsibility. However, it is recognized that control associated with planning, programing, and financial management may be required to coordinate staff activity and administer the resulting action.

e. In HQ, US Air Force, the Directorate of Programs in the Office of the Deputy Chief of Staff, Programs and Evaluation, is responsible for the collection and

publication of program data. The Directorate of Budget in the Office of the Comptroller of the Air Force provides centralized control of the financial management of the program.

f. Although overall control of Air Force programing is centered in two directorates, practically every Air Staff office has some interest in programing actions across functional lines in HQ, US Air Force without undermining the authority of functional officials. This procedure permits a concentration of talent and rapid coordination on specific staff actions, most of which will affect or determine the future structure and posture of the Air Force. The procedure for programing is carried out by an organization made up of a council, a board, three committees, and several panels. These bodies advise the Air Force Chief of Staff on objectives for war planning and programing and on future weapons and force structure.

g. The Air Staff Board consists of the Air Staff Board permanent committees and such panels and select groups as are required to carry out responsibilities. The Chairman is the Director of Programs who is responsible to the Vice Chief of Staff. Other members of the board include the Assistant Chief of Staff for Studies and Analysis and the Directors of Operational Requirements and Developments Plans, Budget, Personnel Programs, Plans and Logistics Plans and Programs. Also included are representatives of the Air Force Systems Command and the Air Force Logistics Command for designated system only.

h. The Air Force Council, ranking in position above the Air Staff Board, is composed of the Vice Chief of Staff as Chairman; Assistant Vice Chief of Staff; the Comptroller; the Inspector General; and the Deputy Chief of Staff for Manpower and Personnel, Operations, Plans and Readiness; Programs and Evaluation, Research, Development, and Acquisition; Logistics and Engineering.

i. Program change requests to initiate changes to the approved programs are processed through the Directorate of Programs and Analysis. However, all staff activities are responsible for contributing specialized data or assistance.

j. The Air Force Program is developed each year and submitted to the Secretary of Defense as the POM. The Secretary of Defense issues his decisions on the Air Force program in a Program Decision Memorandum. The Air Force can submit reclamas to the Program Decision Memorandum to request program changes. Other requests may be initiated by the Air Staff when a change to an approved program is desired. Program change requests are functionally reviewed by the Air Staff and may, if appropriate, be addressed by the Air Force Board Structure for consideration on important decision matters which do not lend themselves to resolution by the functional staff.

26-55. Air Force program documents

Major Air Force programs consist of the Force and Financial Program, the PSeries Resource Programs, and Systems Research and Development Program documentation.

a. Force and Financial Program. This document reflects the program approved by the Secretary of Defense and is consistent with an extension of the DOD FYDP. It provides considerable expansion of detail over the FYDP for Air Force program elements. The Force and Financial Program projects force data through 8 years beyond the current fiscal year, and costs and manpower data for 5 years beyond the current fiscal year by the program element. Each element represents a combination of men, equipment, and facilities constituting a related mission or force capability or activity and the resource implications thereof. The Force and Financial Program is published in the following formats:

(1) *Major program volumes*. Provides approved forces, funds, manpower, and descriptive data for each of the ten DOD programs.

(2) *Summary volume*. This volume provides overall summaries of force and equipage, aircraft and missile procurement, flying hours, manpower, and drill pay data. Cost data are summarized by major program, appropriation, cost category, and cost element.

(3) *Construction annex.* Lists the approved construction program by major command, base construction line item within category code and with program element identified. Data are subdivided for the active establishment and the Air Force Reserve. A separate document is produced for the Air locational Guard.

(4) *Materiel annex (weapons dictionary)*. Includes a series of materiel data sheets for procurement items designated by OSD. Items on the procurement list are those in the Air Force inventory and in research and development which exceed certain cost levels.

b. The P-series documents. For the purpose of management, the US Air Force P-series documents present the approved DOD FYDP in terms of activity rates, scheduled actions, and resources. The six principal documents in this series are:

(1) *Program guidance.* One of the most important resource program documents in the P-series is the program guidance document, which covers a 5 1/2year period, starting with the third quarter of the fiscal year in which published. Issued each January and revised semiannually, it provides the Air Staff and Air Force commanders with strategic guidance, objectives, priority of forces, assumptions, and the development of the approved Air Force programs; and defines the planned development of the US Air Force structure. The program guidance document provides guidance to major commands for planning and budget preparation. It and the other P-series programs are used to adjust financial

plans and to provide data on the D-day inventory for war planning documents.

(2) *Bases, units, and priorities*. The bases, units, and priorities document; another resource program document of the P-series, is published semiannually and is the principal guide for installations and operational planning. It shows the use of each installation, the command to which it is assigned, and programed base activations, inactivations, and transfers. Priorities for manning and equipping units and information on the Security Assistance Program are given separate sections. This document is used principally to:

(a) Implement the schedule of unit actions during the program period.

*(b)*Implement the approved program for the use of installations.

(c) Provide guidance to the Air Staff in its daily operations.

(d) Provide guidance to major commands for peacetime operations, for distribution of critical resources, and for preparation and revision of financial plans and budgets.

(e) Provide guidance for peacetime and wartime planning.

(f) Prepare and review the military construction program.

(g) Provide D-day inventory data for wartime planning.

(h) Establish relative priority of Air Force units in obtaining materiel support action.

(3) *Aerospace vehicles and flying hours.* This resource document is published quarterly in three volumes:

(a) Volume I, Aircraft and Flying Hours by Mission Design and Series, shows the programed inventory of aircraft phased by quarters for 8 1/4 years.

(b) Volume II, Aircraft and Flying Hours by Command, presents the same information contained in volume I, but arranged to facilitate use by major commands.

(c) Volume *III*, Missiles, Remotely Piloted Vehicles, and Drones, specifies the allocation of the missiles and drone program to the commands.

(d) Volume IV, Space Systems, specifies the allocation of the space systems to the commands. (The principal uses of the Aerospace Vehicles and Flying Hours document are to compute maintenance and modification requirements; to compute replacement items and fuels related to flying hours; to provide input information to priorities document, to appendix B to program guidance, and to war plans; and to provide basis for command operational planning).

(4) *Nuclear weapons capabilities arid equipage.* This resource document is published semiannually and projects program data through 5 fiscal years. It provides information on the equipage of Air Force units with special weapons by type, the priority for equipping, the current and projected capability of units, the capabilities of special weapons support activities, and special weapons training of support units. This document is used for computing special weapons requirements, budget estimates, buying programs, and weapon allocation.

(5) *Manpower and organization*. The manpower and organization document is produced by the Director of Manpower and Organization, US Air Force and produced in two volumes-volume I, Regular Forces, and volume II, Reserved Forces. Published quarterly, they contain the programed authorizations for manning all organizations in the Air Force. Personnel strengths are shown by command, base, and unit, and by category-officers, warrant officers, airmen, and civilian personnel. Army and Navy units requiring manpower support from the Air Force are included, as are personnel in a transient or student status. The manpower and organization program is phased by quarters for the first 2 1/2 years and by year-end positions for 3 additional years. Prior to publication of this document, HQ, US Air Force informs each major command of the total number of personnel it can expect for the program period. Each command uses this figure as a ceiling in allocating manpower resources to its bases and units. The command then informs HQ, US Air Force how it has allocated manpower to its bases and units, and this information is included in the manpower and organization program document. The manpower and organization document is used in planning for manpower, military construction programs, and subsistence requirements, training needs, and medical support requirements, in computing base personnel requirements, and in developing specific data, such as the number of personnel who receive hazardous duty pay, oversea deployment by theater, and forecasts of skill requirements.

(6) *Communications-electronics.* This resource document presents the official Air Force communications-electronics program. It is published semiannually and contains program information for 5 1/2 years. The document is divided into three parts. Parts A and B cover the major program categories used within the DOD programing system. Part C contains major approved class V modifications and proposed programs. The communications-electronics document is used to show communications-electronics facilities and systems approved for operations during the program period and indicates scope and timephasing dates; to provide major commands with a basis for performing communications-electronics implementation plans; to provide major commands, air staff and higher authorities the direction and scope of additional communications-electronics intentions for the program period; and to supply information about communications-elec-

tronics facilities for preparing budget estimates and financial plans.

c. Supplementary P-series documents. These amplify a particular resource or commodity of the overall program. Some of the more important are:

(1) *Flying training program*. Each year the Air Training Command publishes the flying training program document, using information obtained from the Strategic Air Command and the Tactical Air Command. The document provides information on the entry, flow, and production of crew members in the flying training programs conducted by the Air Training Command, the Strategic Air Command, and the Tactical Air Command. The Director of Personnel Training and Education, HQ, US Air Force, provides guidance for the types of data to be included.

(2) *Technical training program*. Quarterly, or as often as required, HQ, Air Training Command, publishes the technical training program document, which is based on guidance furnished by the Director of Personnel Training and Education, HQ, US Air Force. This program provides official guidance on all technical training as a basis for preparing budget estimates, financial plans, advance plans, and actual training programs. The document is also used to determine the requirements for technical training of Air Force personnel by the Army, Navy, or other governmental agencies. The program contains detailed information on the technical training accomplished.

(3) *Communications-electronics support program.* The communications-electronics support program is published in the form of an automatic data processed machine listing of all Air Force communications-electronics requirements. This program is based on command requirements authorized in the communications-electronics document. It provides details on the requirements for communications-electronics equipment and the status of such equipment; descriptions of facilities; and engineering, installation, and operating data for worldwide Air Force installations. This program is distributed to all commands.

(4) *Systems research and development program documentation.* Various regulations cover documentation of the research and development program. The principal ones are: System Programs (Air Force Regulation 800-2); Research and Development Documents (Air Force Regulation 80-2); and Operational Requirements Documents (Air Force Regulation 57-1).

26-56. Programing by major commands

a. The major commands participate in planning through frequent personal contacts between their representatives and members of the Air Staff, through briefings made by the commands to the Air Staff, through periodic reports, through correspondence, and through War Plans and Programs Review Conferences held annually at HQ, US Air Force. These annual conferences are attended by major commanders and members of their staff. Usually, conferences are scheduled during October or November so that there is time to integrate the thinking, requirements, and planning of major commands into the overall Air Force program.

b. In addition to assisting in the preparation of the major programs of the Air Force, each major command prepares its own supplemental programs and publishes its own series of programing documents. The documents of any one major command are based on portions of the overall Air Force program and on portions of the programs of other major commands that apply to that command. For example, a program of the Strategic Air Command shows inputs of personnel from the Air Training Command, as outlined in their programs, and it includes information on equipment and facilities obtained from programs of the Air Force Logistics Command.

c. Command programs contain detailed data applicable to each base and unit in the command. Whereas the programing documents published at HQ, US Air Force are seldom distributed below the level of the numbered Air Force, applicable portions of the programing documents published by each major command are distributed to the command bases or units.

d. The systems of programing vary widely because each major command has a different mission requiring special methods of management and control. Some commands do not publish formal documents but maintain control and direction of programing through staff actions. The control exercised over the preparation of programs also differs from one command to another, as each command tailors its system to the job required.

e. Some commands use the programing plan as a staff management tool. Programing plans identify the staff agency responsible for a particular action and specify the date on which the action is to be completed. Staff actions are time phased to accomplish objectives outlined in the programs with minimum disruption to the current command or unit mission. On receipt of information copies of the command plan, the numbered air forces prepare and publish their own programing plan, outlining staff actions required at that level. Copies of these plans are furnished to the wing bases concerned so that they, in turn, have the information needed to prepare their plans.

f. In order to make programing plans completely functional, it is not necessary to follow rigid patterns for format or content. For example, a programing plan prepared by Tactical Air Command for a peacetime redeployment of tactical fighter units need not be prepared in the same format as a programing plan prepared

by Strategic Air Command for the conversion of a wing to FB-111 aircraft; and the nature of the content of the two plans will, of course, be different. Generally, however, each programing plan includes a statement of objectives, an analysis of the problem, the agreed courses of action, and the necessary implementation. The implementation section, the heart of the programing plan, identifies the actions required by each staff section to insure accomplishment of the program within the allotted time.

26-57. Budgeting and implementation of the program

a. Program documents reflect important decisions made by OSD and the Secretary of the Air Force. The data contained in these documents represent the resource requirements considered by these authorities to be attainable within the expected ceilings on manpower and funds. However, the program documents are not a means for obtaining funds. Budgets must be prepared to obtain funds from Congress. Budget preparation, then, can be considered the final step in the programing process. The Air Force budget can be correctly referred to as a priced program.

b. After approval of the Air Force budget, the Air Force programing documents are adjusted to reflect changes required as a result of the appropriation act. This does not mean that adjusted program documents constitute authority for implementing programed action. With the exception of the aerospace vehicles and flying hours program and the communications-electronics program, both of which are directive in nature, Air Force programs are not official directives. They must be implemented by a number of different types of directives.

c. Directives for implementing programs include manpower authorization vouchers, which allot both military and civilian manpower spaces to Air Force commands; and Air Force general orders, which activate, deactivate, or transfer control of Air Force installations.

d. Programs requiring the development and acquisition of weapon systems are implemented and managed under the Air Force systems management process. This process provides for centralized control of collective efforts in the development and acquisition of weapon systems. Further, it reduces long leadtimes and eliminates duplication of effort. Through systems management the program weapon system, together with its support equipment and facilities, can be developed and delivered concurrently.

26-58. Analysis of programs

a. Analysis begins immediately after programs have been put into effect. Continuous monitoring and analysis of Air Force programs are required by OSD to identify deviations from approved schedules, to take corrective action, and to improve further programs.

b. In general, the program analysis is focused on two areas: the content of the program itself, and the progress that has been made toward reaching milestones established in the program schedules. Analysis of program content consists of an evaluation of program elements to determine whether they are balanced and are effective from the standpoint of costs. Milestone analysis consists of a comparison between forecasted progress and actual progress made in carrying out the program.

c. Initially, program analysis begins as objectives are being developed. Projections of the enemy threat, international commitments, and long-range developments are reexamined in the light of the capability of the programed force structure to perform the tasks outlined in the war plan. In addition, the programed force structure is evaluated for its attainability in the face of resource limitations. Estimates of program costs must be reviewed continuously.

d. Program analysis does not stop even though program objectives are revised in an initial reevaluation. The Air Staff, in a continuous effort to improve overall capability to perform wartime missions, analyzes proposals to modify the approved program. Through working groups, panels, committees, and boards, the Air Staff conducts exercises to examine proposed changes to the program from the standpoint of cost-effectiveness and consistency with objectives and policies.

e. Milestone analysis is detailed, particularly when discrepancies are noted and causes must be determined. As an example, progress on military construction projects or on the production of weapon systems, when compared against program schedules, must be assessed in terms of the impact it will have on the planned deployment of equipping of units, as well as in terms of the effect it will have on other program elements. This type of analysis depends on promptly obtaining complete historical data. The analysis is made not only to check on the status and progress of program elements but also to insure that the program as a whole is being managed effectively.

Section VII
Planning and Programing in the Marine Corps

26-59. Introduction

a. The Marine Corps Capabilities Plan supports the Joint Strategic Planning Document in the next fiscal year. It presents current and anticipated assignments and employment of available forces and resources during that period under conditions of cold, limited, and general war.

b. The Marine Corps Midrange Objectives Plan outlines the objective for 9 fiscal years following the current fiscal year. It provides guidance for establishing the Marine Corps position in the Joint Strategic Planning Document and for use in all Marine Corps planning.

c. The Marine Corps Long-Range Plan states objectives and concepts regarding its organization and structure. It provides guidelines for concepts on moderrn amphibious operations and the overall character of the Marine Corps during the period of 10 to 20 years in the future, and for research and development.

d. On the basis of the plans and goals stated in the planning documents, the Marine Corps develops programs which translate these plans and approved objectives into schemes of action. These programs fall into seven functional fields: Troop and Organization, Research and Development, Manpower, Training, Materiel, Installations, and Aviation.

e. The Materiel Program Document is concerned with the establishment, display, and management of the materiel and related supply logistics requirements of the Marine Corps to support the programed organization, and employment and deployment of forces. The Materiel Program Manual specifically:

(1) Establishes the objectives, priorities, and guidance for the procurement, utilization, and modernization of Marine Corps supplies and equipment.

(2) Provides guidance for phasing in new equipment and phasing out obsolescent materiel.

(3) Provides guidance for Marine Corps participation in the Military Assistance Program.

(4) Contains detailed information on materiel support required from, and to be furnished to, other services and agencies.

f. The objectives of the planning and programing system within the Marine Corps are to systematically determine and present objectives, alternatives, requirements, and capabilities for the total Marine Corps. When approved, the programed requirements become the basis for formulation of the budget. Although designed to meet the management needs of the Commandant of the Marine Corps, the system incorporates to the maximum extent possible the techniques, terminology, and formats of the JCS, DOD, and Department of the Navy planning and programing systems.

Section VIII
Planning, Programing, and Budgeting in the Defense Logistics Agency

26-60. Introduction

a. The DLA PPBS is designed to provide a formalized integrated system for the development and maintenance of a 5-year program compatible with applicable provisions of DODI 7045.7 and documenting the DLA resource requirements necessary to accomplish the agency's mission, including tasks assigned by the Defense Guidance document and other OSD-directed actions; to complement the DOD PPBES, through the establishment of a DLA focal point with the Assistance Secretary of Defense (Manpower, Installations, and Logistics), the Assistant Secretary of Defense (Comptroller), the Director, Program Analysis and Evaluation, and other OSD elements; to insure early identification and valid justification of the DLA resource requirements; and to provide an effective means for continued year-round evaluation of the agency's program requirements and resource posture.

b. The DLA PPBS has been developed to insure continuing effort to identify, document, justify, and obtain recognition for all necessary resources for a 7-year period, and to obtain a sound basis for resource distribution. It is particularly important that resource requirements for the 7 program years be given more concern and consideration at all levels of management.

c. The DLA PPBS is a cyclic process containing four interrelated and overlapping phases planning, programing, budgeting, and execution. Totally, the PPBS covers a 33-month cycle-21 months for the planning, programing, and budget phases, followed by execution of the current year operating budget. Throughout the DLA PPBS cycle, HQ, DLA principal staff element program managers, DLA primary level field activities, program analysts in the Office of Plans, Policies, and Programs, and Office of the Comptroller budget analysts identify areas of DLA operations that require additional resources, as well as those from which resources could be withdrawn to support new or expanding programs.

26-61. Planning

During the planning phase, studies are conducted and documented, and plans are prepared for implementation of approved study recommendations and directed courses of action. The headquarters, principal staff elements and primary level field activities propose studies and obtain approval prior to the authorization of resources. Information developed in the planning phase is used in developing the DLA position in response to the various OSD guidance documents provided for review, comment, and use in subsequent phases of the PPBS.

26-62. Programing

a. The programing phase provides continuous program review and updating throughout the year. Periodically, prior decisions are reexamined and analyzed from the viewpoint of the current environment and are either reaffirmed or modified as necessary. Using the DOD PPBES, guidance documents, the Assistant Di-

rector, Plans Policies, and Programs identifies the major issues which impact agency plans or programs and prepares preliminary DLA program planning guidance.

b. The programing phase continues as the various DOD planning, programing, and guidance documents are issued. Using these documents and the DLA Planning and Programing Document. DLA Office of the Comptroller prepares the first draft POM in coordination with HQ, DLA principal staff elements. The final draft POM is then prepared, including a display of programs which could not be funded due to fiscal constraints, and distributed to the HQ, DLA principal staff elements for review and final coordination. The POM is then presented to the Program Review Committee, DLA Council, and the Director, DLA.

c. After the POM is submitted to OSD, DLA Office of the Comptroller is designated the DLA negotiator to discuss tentative issues and possible resolutions with members of the OSD staff. In support of the negotiators, a DLA POM overview briefing may be required to be present to members of the OSD staff. This briefing is reviewed and approved by the Director, DLA. Upon receipt of the OSD Program Decision Memorandum, possible follow-on actions are coordinated with appropriate principal staff elements and a recommended course of action is presented to the Director, DLA for approval and submission to OSD. Close liaison is maintained with members of the OSD PPBS staff during the major issue meetings leading to issuance of the Amended Program Decision Memorandum. The completion of these programing actions provides an approved program for use in the budgeting phase. Projects not approved for funding through the programing cycle may possibly be reconsidered through the ensuing budget allocation process.

26-63. Budgeting

The Comptroller, DLA (Office of the Comptroller), in conjunction with DLA Office of Plans, Policies, and Programs, has principal responsibility for the budgeting phase, which begins with the development of the detailed budget estimates for the budget year portion of the approved program. Workload projections are determined by the program managers in coordination with DLA primary level field activities and submitted to the DLA (Comptroller). These estimates are reviewed, analyzed, and translated into budget estimates for review by the DLA Council and the Director, DLA for approval and submission to OSD. The decisions from OSD are expressed in decision package sets and are incorporated into the President’s budget. After congressional reaction, the budget is apportioned, and the DLA Annual Operating Budgets are developed by DLA (Comptroller) and distributed for execution.

26-64. Planning and Programing Document

a. Documentation of DLA PPBS actions is provided in the DLA Planning and Programing Document, which includes summaries of primary level field activity programs and MBO plans and represents the official DLA program. This provides a comprehensive guidance document for the major elements of the PPBS, with more detailed resource data provided in the annual operating budgets. *b.* The DLA Planning and Programing Document is the instrument for recording DLA plans and programs and changes thereto, and provides a medium for translating planning and programing decisions into budget estimates.

Chapter 27
Principles of Review and Analysis

27-1. Introduction

The overall responsibility of management is to create, within each organization, the environment which will bring about the accomplishment of its objective. In creating conditions conducive to efficient work, the manager plans the operations of his subordinates, selects and trains them, organizes task relationships, directs their work, and measures actual results. Planning is a form of decisionmaking in which the manager selects among alternatives with respect to objectives and the policies, programs, and procedures for accomplishment. Controlling is the measurement and correction of the performance of subordinates to insure that the organization's objectives and the plans made to attain them are accomplished. Review and analysis (R&A) is one means used by the manager to perform the control function. The manager's ability to make sound decisions and to conduct an effective R&A Program depends, in large measure, on the understanding of these underlying principles. Public Law (PL) 429, 81st Congress, enacted in 1949, states that, "Each department shall make systematic reviews of the operations of each of its activities, functions, and organizational units on a continuing basis."

27-2. Definitions

a. Comparison of actual performance and resource usage with planned performance and budget resources to identify deviations from the plan forms the "review" portion of the R&A. Determination of the causes of these deviations, or explanation of the occurrence constitutes the "analysis."

b. R&A is defined by the US Army Training and Doctrine Command (TRADOC) as, "A general term applied to the administrative processes employed to compare and evaluate actual performance to planned performance. R&A is a basic element of a management control system."

c. Other associated terminology which requires definition includes:

(1) *Performance measure*. A statistic that is used to compare actual performance with a planned performance to determine the degree of progress toward objective.

(2) *Measure of progress.* A performance measure used to evaluate cumulative performance as a function of time.

(3) *Standard*. A performance measure used to evaluate actual or average performance in a given period of time.

(4) *Management indicator*. A performance measure which has been determined to represent a key result, and which is selected for monitoring at staff and command level incidental to the system for management control.

(5) *Desired performance level*. A specific result expected when actual performance is expressed in terms of an established performance measure.

(6) *Acceptable performance range*. The upper and lower deviation from a desired performance level beyond which performance is considered abnormal and requires command attention.

27-3. Purpose of R&A

a. In order to cope with the complexities of management faced by the commander or supervisor, three things are necessary:

(1) *A definite objective*. This sets forth what is desired and is commonly expressed by means of measurements or standards.

(2) *A means of measuring progress toward the established objective.* A mechanism of appraisal determines how well the work was done and how efficiently resources were used. Standards or other performance measures or indicators are employed to determine what constitutes good or satisfactory performance. These performance measures should ideally be on a future basis so that deviations may be detected in advance of their occurrence and avoided by appropriate remedies.

(3) *Correction of deviations.* Assuming that unsatisfactory performance is detected, corrective measures must be applied.

b. For effective management of operations, efficient utilization of resources, and intelligent planning for the future, commanders and supervisors at all echelons require periodic appraisals of progress in the performance of programed activities and the accomplishment of assigned missions, operating programs, activities, and projects. These appraisals, called R&A, involve: Assembling, analyzing, recording, and reporting data; interpreting the data in relation to program objectives and schedules; evaluating performance to determine status, progress, and trends; identifying excellencies, deficiencies, and problems; and preparing a summation which can be used as a basis for decision and action. The summation applies the principle of "management by exception"; i.e., the giving of first attention and emphasis to unusual or special situations and problems.

c. Continuous appraisal (R&A) of progress provides each level of supervision with an evaluation of progress toward meeting objectives and of efficiency in the use of resources. Through R&A, the commander or supervisor is kept informed of accomplishments in each of the programed activities and, thus, has a means for evaluating the performance of the subordinates. The commander or supervisor can identify deficiencies and

imbalances and effect corrective action. The commander or supervisor is given assistance for reprograming activities and resources. A basis for future planning and budgetary estimates is provided. Also, the commander or supervisor can provide periodically a summary evaluation of the program performance to higher authority. Problems which cannot be resolved by the supervisor are presented to the commander and the staff for corrective action or, if required, for reference to higher authority for action or decision.

d. The Army Finance School has defined the objectives of R&A as: To provide information to facilitate the development and execution of plans; to increase the efficiency of operations; and to achieve economy in the use of available resources. A more simple description would be that "R&A is a tool for controllling current operations and facilitating future planning." The major purposes to which R&A is put are to:

(1) Evaluate performance in terms of the program to determine effectiveness, in terms of standards to determine efficiency, and in terms of costs to determine economy.

(2) Evaluate management.

(3) Provide a basis for changing the program.

(4) Plan, program, and budget.

(5) Provide a historical record.

27-4. R&A techniques

The application of established techniques for obtaining information, analyzing information, reporting information to management, and following up on directed actions are logical and necessary steps in the R&A process.

27-5. Obtaining information

The basic ingredient of the R&A process is reliable and valid data. The primary instruments of data collection are the internal records and reports provided by the management system for recording and reporting performance and the related costs of performance. When used in conjunction with the related detail program schedule, they provide the basic tools of analysis at the activity where the R&A process begins. Other sources of information include: external reports to higher headquarters, staff meetings, personal visits and contracts, visits and reports of visitors; command inspection reports; other inspection reports and audits; General Accounting Office (GAO) reports; minutes of staff conferences, briefings, and committee meetings; operating program and budget documents; and retrieval from computer files.

27-6. Analyzing information

Analysis of information is a deliberate consideration of what the facts and figures reveal. It is necessary to compare actual accomplishments to programed objectives, past performance, standards, or other goals. In evaluating performance, it is the exception to which attention should be directed. When actual performance equals or closely approximates the program or goal, no immediate corrective action is required. On the other hand, when a deviation occurs, corrective action may be in order, or at least an evaluation of the situation should be made to determine what, if anything, should be done. Concentration on the exception entails less work, for normally the number of items having deviations is small compared to the number where little or no deviation occurs. Managerial control is greatly expedited and increased by concentrating attention upon the significant exceptions to the expected results. Operating programs and budgets are the primary sources of data on objectives and goals (both quantitative and qualitative). In addition, specific objectives and standards for specific operations are provided in directives from higher headquarters. Feeder cost and performance reports provide activities with a comparison of actual to programed performance and costs. Percentage of effectiveness computations indicate how actual manhours compare with standard or programed man-hours to accomplish the workload. In areas where standards have not been established or developed, analysis of man-hours per work unit may indicate month-to-month trends which have managerial significance.

27-7. Reporting of information to management

The reason for reporting information to management in the R&A process is to provide it with the knowledge and facts required for sound management decisions and actions. Additional guidelines for effective presentation of information are:

a. Point out the meaning, significance, and relationships of events rather than merely recite statistics.

b. When problems surface, state what action has been taken to solve the problems or provide recommended solutions.

c. If improvements are shown, state reasons for the improvements.

d. Provide only the facts which are essential to the message.

e. Indicate adequacy of actions taken to correct previous problems.

f. Express the message as simply as possible.

27-8. Followup

Followup action is a necessary management technique for insuring the accomplishment of actions determined by the R&A process to be appropriate. Both good and bad performances are investigated, the purpose being threefold:

a. In the case of bad or poor performance, to lead to corrective action immediately and in a constructive manner.

b. In case of outstanding performance, to recognize it and, where feasible, provide for a transfer of knowledge to similar operations.

c. To provide a basis for improved planning and control in the future.

27-9. Critical point management

a. The establishment of standards furnishes the basis against which actual or expected performance is measured. In a simple operation, a manager might control by overall observation. As operations become more complex or a manager's authority becomes broader, this becomes increasingly difficult, or in fact at higher echelons, impractical. Since the planning, programing, and budgeting system (PPBS) and the Army management system are based on forecasts or future occurrences, the controls must also be forward looking. To determine if the operation is going as planned, the manager should select several critical points for special attention. These points are selected because they are either limiting factors or because they show better than any other factors whether planned or programed actions are being accomplished. By watching these critical points, the manager can insure that the whole operation is proceeding as planned. By this technique, the manager can also handle a larger number of subordinates and increase the span of control. This technique should not be confused with the management by exception technique. Critical point management recognizes the points to be watched. Management by exception watches the size of the deviations from the objectives, policy, plan, program, forecast, or standard. A deviation is significant if it is beyond the tolerance or control limit.

b. A form of critical point management is used very successfully by the US Air Force. Their command management control system is a detailed procedure for monitoring the status and performance of military units. To focus command attention on progress and on problem areas, certain steps are taken:

(1) A number of performance areas related to mission accomplishment are designated for command attention. These areas may change as mission requirements change or as operational problems requiring emphasis occur.

(2) Each designated area is assigned a point value. Neither the total number of points in the system nor the number of points assigned to each area is important. What is important is how the number of points assigned to one area relates to the number assigned to other areas. This relationship determines the relative emphasis placed on each area in calling it to the attention of management.

(3) Minimum and maximum standards of acceptable performance are established in each area, and the total number of points assigned to that area is allocated accordingly. If, for example, it is determined that the maximum supply response rate that can be expected is 85 percent of the items requested, then 100 percent of the points assigned the supply response rate area would be allotted to a unit achieving an 85 percent rate. If it is determined that the minimum acceptable supply response rate is 75 percent, then any unit achieving less than a 75 percent response rate would receive a score of zero. Units with supply response rates lying between 75 and 85 percent would receive proportionate percentages of the total points assigned the area.

(4) By means of this scoring system, data from existing management reports are correlated to produce a statement showing the performance of each unit in each area scored. Then the scores for the different areas are correlated to get an overall performance score for the command.

c. This system makes possible a concise analysis of the performance of the total organization. It points up areas of marginal or substandard performance within separate units and, at the same time, gives the commander at the next higher level a means of quickly comparing the performance of one organization with that of another organization.

d. The success of this management system depends on its use by commanders. It is monitored closely and kept responsive to changing requirements. This is done by adding or deleting functional requirements, changing point weights or changing standards. Placing a requirement in the system automatically attracts the attention of all levels of command. The number of points assigned determines the amount of attention. The command management control system cannot in itself create better unit performance. When properly developed and used, however, the system motivates operating management. In addition, it highlights problem areas.

27-10. Management by exception

a. Management by exception means that each level of management pays particular attention to deviations or variances from the program, or from expected results. The deviations may pertain to quantity, quality, or a variance in the budgeted cost. Significant deviation, or exceptional performance, usually means that the scope of the work or the actual cost of performing the work has deviated from the program by more than the predetermined acceptable tolerance; e.g., plus or minus 15 percent. The number of activities under the control of the manager, particularly the commander, is normally too large and detailed to warrant or permit complete coverage in the R&A process. The management

by exception principle is used in R&A, especially in supply operations to highlight only those activities in which there have been major accomplishments, significant deviations, exceptional situations, critical problems, and important actions which have a direct bearing on the execution of the missions of the organization. Exceptional areas are investigated for R&A purposes by means of sampling techniques. This principle requires the exercise of selectivity in choosing those areas where emphasis is to be placed.

b. The following excerpt from an article appearing in the Navy Management Review, although addressed specifically to Navy management, provides a vivid capsule of what the principle of management by exception really is:

(1) "One of the basic tenets in Navy management is that of ’management by exception.’ To many people, this is a textbook phrase, inapplicable to their everyday situation. Nothing could be further from the truth.

(2) "Taken too literally, it appears very simple-sit back and do nothing until a problem is brought to your attention. This is an easy way out-of a job! Subordinates hesitate to report their problems and failures to the boss, and often go to great lengths to hide them. Under laissez-faire management, the manager quickly loses touch with the organization and its problems. As a result, others more informed inherit the leadership role by default.

(3) "But management by exception does not mean sit back and wait. The manager cannot abdicate responsibility for his organization and expect to remain in charge. He must be continually aware of what is going on, alert to the changing situation, and in control of it. A manager is judged by how smoothly his organization operates and achieves its objectives, not by the degree to which he embroils himself in its operation, handling one crisis after another.

(4) "It is the manager’s responsibility to know the organization’s goal and its status in attaining it. He insures that everyone else knows what is expected of them and the best way of doing it. When there are problems, he finds out what is causing them and takes action to preclude their recurrence.

(5) "He keeps informed of the overall program, but detached from the turmoil of everyday operations he can concentrate on those problems which transcend the capabilities of his subordinates. This is management by exception."

c. R&As, as indicated previously, become more meaningful when actual accomplishments are measured against previously determined objectives. These objectives may be expressed in a variety of ways: Mission goals, operating programs, schedules, forecasts, estimates, targets, ceilings. Performance may also be measured against such criteria as standards, performance factors, ratios, yardsticks, or other units for measuring actual accomplishments against predetermined objectives. An important element of R&A is the provision of a quantitative, qualitative, and cost basis for evaluating the accomplishment of missions and the related utilization of resources.

d. The evaluation of accomplishments against objectives assumes added significance when reported variations from objectives are supported by analyses of the causes of deviations beyond established tolerances. The explanations of deviations may reflect on the soundness of the plans and programs rather than on the effectiveness of accomplishment. They may indicate that the objectives are unattainable, that the resources allocated are inadequate, or that unforeseen circumstances, such as the assignment of unprogramed and unbudgeted tasks, have occurred. They may reveal that shortfall resulted from ineffective utilization of the resources provided for missions. They may demonstrate that the predetermined standards are unrealistic and require revision. They may indicate that long-range trends or patterns are developing, or they may reflect seasonal variations or unusual circumstances. In essence, the analysis of significant deviations converts static facts and figures into dynamic meanings in terms of cause and effect.

e. To permit the principle of management by exception to become a practical matter, tolerances or "acceptable ranges of performance" are established. Three essential measurements of program performance are possible:

(1) Measurement of workload accomplishment;

(2) Measurement of cost of accomplishing that workload; and

(3) Measurement of man-hours. For example, measurement of manpower utilization relates to performance analysis which is an evaluation of the effectiveness of an operation in terms of the productivity of manpower. In performance analysis, common practice is to focus attention first upon those work areas where percent of effectiveness-work performed stated as a percentage of the established standard of performance-is less than 80 percent. Next, attention is directed to those work areas where percent of effectiveness is more than 120 percent. Last, work areas where the percent of effectiveness is between 80 and 120 percent will be explored if resources permit. With respect to standards of performance forecasts, the usual tolerance established at the depot, for example, is plus or minus 15 percent. This same percentage is applied to resource consumption. This tolerance generally means that if actual performance falls within the range of 85 to 115 percent of that forecast, the mission of the installation is being satisfactorily accomplished. The qualitative side of per-

formance is less susceptible to being placed within an acceptable tolerance range. Furthermore, no overall tolerance limits are established for deviations from standards or objectives which are not related directly to programed workload or costs. Such deviations, however, should be considered and analyzed to determine their effect upon program accomplishment.

f. It is also necessary to modify application of the management by exception principle to provide coverage of topics of timely interest to the commander. Examples of such topics might include areas in proper perspective but reflecting an adverse trend, prior commitments based on directed actions and areas, reflecting important management improvements. R&A presentations are considered as action and decisionmaking sessions, rather than informal briefings. Subject matter is directed toward this objective.

27-11. Use of standards in R&A

a. A system of goals, objectives, or standards is vital to good management control. These are "benchmarks" to which performance may be related. Basically, standards are essential to provide a target at which to shoot, and to provide a "benchmark" against which actual results may be compared in order to measure control; that is, to determine the degree of efficiency with respect to attainment of goals.

b. In order to control, it is necessary to have some basis for comparison. Measurement, especially in supply operations, provides this basis and makes it possible to compare the actual performance with the expected. By this means, knowledge is gained on such things as efficiency, economy, and relative accomplishment by the members of the activity. Without measurement, a manager is forced to guess or employ "rule-of-thumb" methods which may or may not be reliable. Measurement can be defined as a method of determining the amount, quantity, or capacity of a well-defined entity. Measurement requires a measuring unit. In management, the unit of work, of cost, or of energy expended is most common. When the measured quantity is established and used, it is referred to as a "standard."

c. Standards are fundamental to effective management control. If a supply activity is to justify its needs for funds, where possible, the justification should be based upon units of measurement which are identifiable and objective. If it is to expend the funds in conformity with operating requirements, the units of measurement must be realistic and sufficiently flexible to cope with volume fluctuations and other normal deviations from planned workload. If management is to fulfill its responsibility for measurement of performance, the unit of measurement must be directly related to the unit of work by adequate standards. Thus, standards are necessary for the satisfactory accomplishment of three major requirements:

(1) Justification of the need for funds.
(2) Planning expenditures.
(3) Measurement of performance.

d. Standards may be based on either man-hours or on dollars. When they are expressed in terms of dollars, they are often referred to as cost standards. Cost standards are derived by the application of dollar prices to standard units of consumption, such as direct labor hours or quantities of materiel. These standard units of consumption are related to output by calculating the number of direct hours or amounts of materiel it will be necessary to consume in order to produce one unit of output. Once an appropriate labor cost standard has been determined for a particular unit of output, such as an item received or a transmission rebuilt, it will remain constant until it is influenced by one of three factors: The dollar price may change because of fluctuations in labor rates; the market price of materiel and resources consumed may change; or the job process or methods of operation may change.

e. There are other types of standards, such as quality, material, and time standards. Performance analysis deals only with time standards and uses three types, each of which is defined:

(1) *Installation performance standards*. Installation performance standards are the established amount of time assigned to perform an established amount of work at an installation. The amount of time may be determined by:

(a) Engineered standards. Engineered standards are based on work effort, methods, operations equipment, layout, and working conditions which are specifically prescribed for performing an established unit of work in accordance with an accepted quality standard. The established engineered time assigned may be developed through the use of time and motion studies, predetermined time standards, and standards data (precise timing methods); or sampling, frequency analysis, and similar methods of treatment.

(b) Statistical standards. Statistical standards are those developed from statistical analysis of past performance data. For performance analysis purposes, statistical standards are expressed as "man-hours per work unit." To the extent practicable, statistical standards are based upon prescribed or commonly accepted methods, equipment, operations, layouts, and working conditions for performing the unit of work in accordance with an accepted quality standard. Work simplification techniques can be used to effectively review and improve methods and procedures systematically prior to the establishment of statistical standards.

(2) *Command performance standards*. Command performance standards are statistically computed, commandwide time standards based upon installation per-

formance data for a measured work area which is common to more than one installation in a command. The command performance standards are expressed in the same manner as installation performance standards; e.g., man-hours per work unit.

(3) *Temporary standards*. When data for a work area are not sufficient to permit establishment of a firm standard, temporary standards may be developed based upon the best available data. This type of standard may be used by installations or commands until data are available for developing a firm performance standard.

f. In the military services, performance standards are generally used to:

(1) Establish individual production goals as a means of evaluating individual performance in terms of established standards. This may ultimately result in retention, promotion, or reassignment of individuals.

(2) Revise work methods (work measurements) to eliminate inefficient or uneconomical operations.

(3) Determine manpower requirements to accomplish a given workload and, thus, establish personnel space and fund requirements for budgeting purposes.

g. Properly developed and properly used performance standards are essential to good management at every level of operation. Inaccurate standards, developed from poorly defined units, incorrect data, or inefficient work methods, represent wasted time and effort. Furthermore, poor standards may be worse than none at all, particularly if they create personnel problems through unfair demand. On the other hand, good standards become a solid justification for needed personnel actions, fund requirements, or personnel spaces. Of great importance is the use of performance standards to determine the effectiveness of operations.

27-12. Management use of reports

The following are the major purposes of reports to management:

a. To measure progress in relation to plans and programs. Performance is the objective of management. Reports can render great assistance to management in evaluating and improving performance by measuring results in terms of quantity, quality, speed, or cost.

b. To help make day-to-day decisions and control operations. A good reporting system provides definite factual statements for all concerned and helps to avoid confusion arising out of a multiplicity of figures and ideas with respect to a given situation. It can place the selection of facts upon a systematic and routine basis.

c. To guide in the evaluation of managerial performance. To facilitate action, a larger organization such as a military service requires decentralization of authority in operations. A reporting system can make it possible to follow centrally the progress of such decentralized operations. Reports can indicate deficiencies and the need for corrective action, and provide an impersonal, objective basis for measuring the effectiveness of work.

d. To provide a base for future planning and programing. Management, no matter how able, cannot function properly without an adequate flow of information. To improve its future decisions and actions, it must have knowledge, through constant analysis, of the effect past decisions and actions have had an operations.

27-13. R&A procedures

a. Although there are a number of R&A procedures which might be appropriately covered in the Supply Management Reference Book, only three will be commented on here.

b. The use of the Budget Execution Review is one of the primary means for measuring operating results against those previously programed in the Command Operating Budget, and is the primary vehicle for requesting budget program transfers and changes to existing annual funding programs by the various echelons of command up to HQDA.

c. The Budget Execution Review is an annual report that reflects the status of available operating funds in comparison with existing and projected fund requirements necessary for mission accomplishment. The Budget Execution Review originates, sometimes in a changed format, at each installation or activity of the Army receiving allotments from the appropriations for Operations and Maintenance, Army; Operations and Maintenance, Army National Guard; Reserve Personnel, Army; and the Operations and Maintenance portion of the Defense Family Housing Management Account. The Budget Execution Review is consolidated, reviewed, analyzed, and adjusted at each succeeding level of command for submission to Headquarters, Department of the Army (HQDA).

d. The Budget Execution Review contains cumulative workload and obligation (cost) data for the current year, and reflects:

(1) Actual data for the first 4 months (October through January).

(2) Projections for the next 2 months (February and March) to arrive at an expected position at the end of 6 months.

(3) Projections for the last 6 months (April through September) to indicate anticipated fund requirements as of the end of the year.

e. In order to exercise the required overall management and control of financial resources during the year of execution, some commands have found it necessary to supplement the Budget Execution Review with reports prepared more frequently than annually. US Army Materiel Command (AMC) (formerly the US Army Materiel Readiness Command (DARCOM)), Regulation (DARCOM-R) 37-19 provides for the

quarterly submission of selected dollar, manpower, workload, and productivity data. These data are presented in quarterly arrays, with actual data replacing quarterly forecasts as the year of execution progresses. These reports provide the minimum additional data required for a continuing comprehensive R&A program performance and resource requirements of approximately 50 subordinate elements. The data are also used at headquarters level for the preparation of the Command Operating Budget and the Budget Execution Review.

f. Command Management Review and Analysis System was established by DARCOMRS 1-2 and 11-4, volume 11. This system is a completely independent R&A performed by the organization Comptroller or comparable element. The objective is to measure the degree of attainment of goals, objectives, internally and externally assigned performance targets, standards, and milestones. It provides independent and objective evaluation and judgment, and recommends courses of corrective action upon which managerial decisions can be based.

g. The Defense Logistics Agency (DLA) uses a closed-loop system concept. The total resources acquisition and control process is viewed as a closed loop (composed of six subsystems). It begins with the establishment of operating programs and budget requirements, and progresses through management accounting, reporting, evaluation, and review. Following is the role of each element of the system.

h. The Integrated Program/Budget System is the framework within which workload forecasts and resources programs are established for each functional program area. The workloads programed through this system provide the basic foundation the agency’s annual budget and staffing requirements and annual financial plans. The performance appraisal processes use the plans, goals, and objectives established as the basis against which actual operating results and resource utilization are evaluated.

i. The Cost Accounting System is related to the Program Budget System through a common management account structure or fractional classification. It provides the basis for the collection of manpower and cost/expense data reflecting the manner in which personnel and dollar resources are applied and consumed.

j. The Management Information System is the progress reporting medium. Through recurring management reports, it provides basic performance data reflecting operating program results. An integral part of the system is a central-based data bank that accumulates and stores manpower, cost, and performance data which are the basic ingredients for performance appraisal.

k. The Performance Evaluation Reporting System is a computerized analytical reporting procedure. It uses information from the central Management Information System data bank in evaluating resource utilization in relation to program operating results. This system acts as a barometer of changing workload/resources relationships. It is a primary management tool for appraising, on a continuous basis, relative efficiency and economy in the utilization of available manpower and funds in the performance of agency missions.

l. The Performance Standards Program is the implementation of the Defense Integrated Management Engineering System. This program develops engineered performance standards for use in determining manpower requirements and evaluating personnel productivity. In DLA, about 80 percent of the total annual operating budget is for personnel expenses. Therefore, evaluation of personnel productivity assumes a key role in the resource management process.

m. The Management Review System provides for recurring performance appraisal briefings to top management on a regularly scheduled basis. It provides a forum for collective consideration of actual or potential problems related to the efficient utilization of available resources, including monthly management reviews at DLA headquarters and presentations at quarterly conferences of the agency’s field commanders.

Chapter 28
Supply-Related Educational Programs

Section I
General Information

28-1. Introduction

Supply management, like any other discipline, requires of its participants a knowledge and understanding of its many facets. Modern strategic concepts and ever-increasing technological advances in weapons and equipment demand training and skills undreamed of only two decades ago. The training and education necessary to develop such skills must be obtained in an orderly and progressive manner. The military departments and agencies of the Department of Defense (DOD) have comprehensive programs for developing supply managers in the number and at the qualitative levels required. For the most part, these programs are rather narrow in scope and quite specialized in the earlier stages of the manager's career, but they are an integral part of the broader discipline of logistics management or defense management in advanced stages. Junior officers and civilians usually begin with assignment in the commodity-oriented specialties and in later stages of their careers they broaden the scope of this management spectrum.

28-2. Recognition of training needs

a. The need for adequate career programs and courses of training in logistics and supply management has been recognized and acted upon by DOD. Since officer personnel bear the responsibility of command as well as performance, they must be thoroughly competent leaders. Competence can be insured by making careers in logistics rewarding and by making available to the individuals the highest quality of education and training.

b. There is a need to develop career patterns and provide education to civilian personnel as well, since they bear a major burden of operating the Federal supply systems. They also provide the necessary continuity because they are not subject to frequent movement as are military personnel. Adequate career programs with the opportunity for training and education are intended to provide the incentives to the civilian work force for improvement and advancement and to insure retention of the most capable personnel in the logistics and supply management fields.

c. To meet both these needs, the military services have developed schools and courses which, in many instances, are more thorough than the ones provided in industry. However, the many changes, particularly in recent years, have necessitated considerable retraining and have indicated the requirement for a direct effort toward upgrading personnel for higher levels of responsibility. In November 1963, the Secretary of Defense chartered the Defense Logistics Management Training Board to survey the area of logistics management training. This board was subsequently expanded by the establishment of a Defense Management Education and Training (DMET) Board whose responsibilities for monitoring management education extended beyond the field of logistics. The scope of this board includes general management, functional management (such as personnel, finance, research and development, and logistics), and managerial analytical techniques.

d. The board pointed to a greater need for joint training. Defense emphasis on standardization, the board indicated, has resulted in more procedures common to all the services and defense agencies and an attendant need for middle and top management to understand the problems that are common to all logisticians and supply managers. New developments in such fields are value engineering, cost-effectiveness evaluation, maintenance management, contract administration, and technical data management, are common to all services and defense agencies. Other common areas that are new to DOD, such as the effect on the international balance of payments and on other Government programs in support of the economy of the United States, must be considered in planning, programing, and executing logistics actions. Specialized joint training, the board emphasized, would help improve performance; encourage the interchange of ideas among the managers of the services and defense logistics and supply systems; promote uniform implementation of concepts and procedures; eliminate duplication of effort; serve as a factor in selection of personnel for career advancement; and place stress upon concepts and intent rather than on procedures. The recent expansion of the board into broader aspects of management attests to its success and emphasizes the need for continuing efforts to train and develop the best managers for the future.

e. The supply manager of the future must respond to the changing nature of weapons support requirements. The supply manager will need to become a technoeconomist. The supply manager must embody the skills necessary to deal with the technician attempting to keep the intricate weapon system operational and effective on the one hand, and with the business community with its legalistic contracts specification problems, labor difficulties, and profit orientation on the other. The able practitioners of this dialogue require varied and time-consuming preparation. They must be formed through a cycle of work experience and format training that will provide officers and civilians who can participate in the Defense Establishment as practicing technoeconomists, for this is the shape of the future.

Section II
Supply-Related Educational Programs in the Army

28-3. Officer professional development programs

a. Commissioned officers of the US Army, with the exception of officers of the Judge Advocate General's Corps, the Chaplains Corps, and the Army Medical Department, are guided by the provisions of the Officer Personnel Management (OPM) System. The basic approach is dual specialty development; under which, the objective is for each officer to gain and maintain proficiency in a primary and an alternate specialty.

b. To meet Army requirements, 18 basic and advanced entry specialties have been established, each corresponding to a sphere of logistics activity. There are 12 basic entry logistics specialties, which are normally entered by logistics branch officers upon commissioning. The advanced entry logistics specialties which include supply management, are entered by officers serving in the grade of captain and above. However, one of the advanced entry logistics specialties, logistics management, is reserved for colonels.

c. Upon entry on active duty, all officers appointed in a logistics branch (Ordnance, Quartermaster, Transportation) have one of the logistics basic entry specialties designated as their primary specialty. Each officer attends a basic course appropriate to his or her branch and basic entry specialty. These basic entry specialties are either commodity oriented or related to transportation operations. The basic entry specialty training includes supply training as it pertains to a particular commodity. The basic course prepares the junior of officer to perform in his or her specialty at the platoon leader or equivalent level.

d. Some time between the fourth and eighth year of commissioned service, officers attend their branch advanced course. During this course, officers receive additional training in their primary specialty. This training is designed to prepare officers to be company commanders or battalion staff officers. Supply training continues to be oriented toward the commodity or transportation operations areas.

e. At the end of their eighth year of service, officers have their alternate specialty designated by the Department of the Army (DA). Many have supply management designated as their alternate specialty.

f. Between the 8th and 16th year of commissioned service, selected officers attend the Command and General Staff College, the Armed Forces Staff College, and postgraduate courses at civilian universities. Others may complete the Command and General Staff Course by correspondence.

g. The schools previously mentioned are oriented toward the Army in the field, and deal primarily with retail or user levels of logistics. Education in wholesale logistics or "producer" logistics is available through the US Army Logistics Management Center (ALMC) at Fort Lee, VA; the Army Management Engineering Training Agency at Rock Island, IL; and the Industrial College of the Armed Forces in Washington, DC. The Army uses the educational facilities of the other military departments such as the Air Force Institute of Technology at Wright-Patterson Air Force Base, OH, and the Naval Post Graduate School, Monterey, CA.

h. During this period, officers advance toward attainment of the professional development objectives established for their alternate specialty while maintaining proficiency in their primary specialty. They may do this through attendance at functional courses in military or civilian schools or by nonresident instruction.

i. As they advance their professional development, officers assume duties of increasing responsibility within the scope of their logistics specialties. Those in the grade of colonel will be considered for logistics management positions entailing responsibilities for more than two logistics functions or more than two commodities.

j. Officers from the nonlogistics branches have the opportunity to select supply management as an alternate specialty. They receive the same consideration for assignments and schooling as logistics branch officers.

k. The Officer Personnel Management System is addressed in DA Pamphlet 600-3, Officer Professional Development and Utilization.

28-4. Warrant officer professional development programs

a. Occupational Group 76 has been established for warrant officers in the supply area. Warrant officers with military occupational specialty 761A are assigned at unit/organization level, while those with military occupation specialty 762A are assigned to positions at the support unit level.

b. Basic and advanced instruction in supply is available for warrant officers at the US Army Quartermaster School, Fort Lee, VA. Selected warrant officers may attend the Senior Warrant Officer Course at Fort Rucker, AL.

28-5. Enlisted professional development programs

a. There is a Supply Career Management Field (CMF 76) for enlisted personnel under the Army's Enlisted Personnel Management System. Enlisted personnel are grouped into military occupational specialties covering material, stock control, storage, subsistence, and unit organizational supply men.

b. Enlisted instruction, including basic and advanced noncommissioned officer courses in retail supply are available at the US Army Quartermaster School, Fort Lee, VA, and the Academy of Health Sciences, Fort Sam Houston, TX. In addition, instruction in wholesale supply management is available at ALKIC, Fort Lee, VA.

28-6. Army civilian career development programs

The Army makes available to its civilian employees the courses normally available to its officers. Those employed in the wholesale logistics area are encouraged to take courses offered by ALMC and the Army Management Engineering Training Agency. Tuition assistance can be made available to civilian employees participating in job-related education at colleges and universities, and qualified civilians can receive financial assistance in completing graduate degrees. In addition, courses in logistics subjects given by other services are, in most cases, open to attendance by Army civilian employees.

28-7. Army school system

a. Introduction. The Army has a number of schools engaged in providing education and training in supply and logistics-related subjects. Foremost is the US Army Training and Doctrine Command (TRADOC) school system which provides the majority of retail supply training for the Army in the field. This is accomplished through 19 Army service schools, of which four, plus the Academy of Health Sciences at Fort Sam Houston, TX, are logistics dedicated. Training in the wholesale aspect of logistics is the responsibility of the US Army Material Development and Readiness Command (DARCOM) and includes the major schools listed in succeeding paragraphs.

b. The US Army Logistics Management Center, Fort Lee, VA.

(1) Perhaps the most comprehensive approach to the training of logisticians and supply managers was that taken by the Army in establishing ALMC. The center is the outgrowth of the Army Supply Management Course established for the purpose of training the Army’s senior supply managers.

(2) The center conducts resident instruction, assists other countries in their logistics management training, and assists operating logistics activities with education needed for new management techniques. Military and civilian personnel in management positions in the Army attend the resident courses and are drawn from all phases of logistics management Army-wide. Joint courses are attended by military and civilian personnel from all the services, DOD agencies, and General Services Administration (GSA). Allied studies may be enrolled in any of the courses presented and usually attend more than one course during their stay at the center. Army courses are taught by Army officers and civilians with backgrounds in logistics management and education; joint courses are taught tray instructors drawn from the Army, Navy, Air Force, Marine Corps, and the Canadian forces under joint staffing arrangements.

(3) The center conducts 58 different resident courses of instruction annually of which 46 are Army oriented. The other 12 courses are defense oriented and present instruction in the areas of Advanced Disposal, Advanced Procurement, Disposal Executive Development, Disposal Management, International Logistics Management, Inventory Managements Materiel Management, Metals Identification, Procurement Management, Property Disposal, Specification Management, and Management of the Quality Function.

(4) ALMC also offers off-campus education in logistics management which parallels and supplements resident instruction. The student body is drawn from DOD personnel, both military and civilian, who manage the logistics system. This off-campus logistics management education is for those who cannot attend resident courses and provides further educational development for graduates for resident courses.

(5) ALMC publishes the Army Logistician which is the official logistics magazine of the US Army. It provides timely and authoritative information on Army logistics plans, policies, doctrine, procedures, operations, and developments to members of the Active Army, Army National Guard, Army Reserve, and civilian employees of the Army.

(6) The Defense Logistics Studies Information Exchange (DLSIE) is a part of ALMC. It is the official DOD repository for logistics studies, models, and related documentation and provides information services to all DOD components their contractors and grantees, and other US Government agencies. It acquires, stores, organizes, and disseminates information pertaining to logistics studies and models and miscellaneous documents (technical journals, books, policy letters, speeches, and research papers), the content of which may be useful to logisticians. The exchange publishes a comprehensive annual bibliography, with quarterly supplements, for logistics studies and an annual catalog of logistics operations research/system analysis models and related documents.

c. The Army Management Engineering Training Agency, Rock Island, IL. Army and other Federal personnel, both military and civilian, are educated in management engineering practices by the subject agency.

d. The Army Management Intern Training Center, Red River Army Depot, Texarkana, TX. Supply, maintenance, and other interns are educated at the subject center.

e. The Joint Military Packaging Training Center, Aberdeen Proving Ground, MD. Military and civilian personnel of all military departments and the Defense Logistics Agency (DLA) are trained in the preservation, packaging, and packing of supplies and equipment by the subject center.

f. The Ammunition School, Savanna, IL. Armed Forces personnel are educated in all aspects of handling and processing conventional ammunition by the subject school.

Section III
Supply-Related Educational Programs in the Navy

28-8. Introduction

Logistics and supply management functions in the Navy are performed for the most part by officers of the Navy supply corps. These supply officers, the material logistics executives of the Navy, spend their careers in the supply and financial areas. As operational supply officers, they serve in afloat units of the operating forces as well as in ashore units; they operate the inventory management phase of the Navy supply system at Navy and DLA inventory control points (ICP); they serve at supply centers and depots, and in the supply departments of shipyards, air stations, and the miscellaneous activities within the supply distribution system; they run the Navy resale program (Navy exchange and commissary stores), the Navy food service systems programs, and Navy contracting offices. They serve in a host of other supply-logistics activities in the various systems commands, bureaus, and offices of the Navy departments and other defense components.

28-9. Navy supply corps officer career development program

a. The supply corps officer career development program consists of three phases:

(1) Basic.
(2) Functional development.
(3) Command/management.

b. The basic phase includes the initial 6-month training period at the Navy Supply Corps School covering basic afloat supply courses including: supply management, disbursing, retail operations, food service, quantitative management, leadership management education and training, material management, and orientation in automatic data processing (ADP) procedures. Next, male supply corps officers will normally be assigned to a shipboard supply department as the department head of a submarine or a small ship, or as an assistant on a large ship. Women supply corps officers will normally be assigned as an assistant in the supply department of a large ship, or to supply billets in the Continental United States (CONUS) or overseas.

c. The functional development phase normally includes a CONUS tour ashore, a foreign shore assignment, and a second tour in CONUS. During these tours, the supply corps officer will normally enter into one of the functional fields of specialization. The subspecialty fields include:

(1) Financial management.
(2) Subsistence technology.
(3) Retailing.
(4) Petroleum management.
(5) Acquisition and contract management.
(6) Systems inventory management.
(7) Physical distribution management.
(8) Operations analysis.
(9) Computer systems management.
(10) Weapons systems acquisition management.

d. Proficiency in one or more functional areas is obtained through duty assignments and educational programs. The educational programs may include attendance in a master’s level program in business administration, retailing, subsistence technology, or petroleum management; master’s program at the Naval Postgraduate School in acquisition and contract management, financial management, systems inventory management, material movement, material logistics, computer systems management, and operations analysis; and various service college programs at the Naval War College, Industrial College of the Armed Forces, Armed Forces Staff College, or National War College. Specializing officers normally spend two of every three tours in their functional subspecialty. Officers are usually assigned to tours in more than one functional subspecialty in order to develop their knowledge of the total system.

e. The command/management phase normally applies to officers of the rank of commander and above. Officers will continue to be used in their designated or preferred areas of functional proficiency to the extent necessary to meet the needs of the Navy.

28-10. Navy enlisted personnel development programs

a. Training and education programs available to enlisted personnel are categorized as:

(1) Training upon initial enlistment or induction which provides for general indoctrination and prepares the recruit for early adjustments to military life by providing skill and knowledge in basic military subjects.

(2) Class A: Provides the basic technical knowledge and skills required to prepare for job entry level performance and further specialized training including apprenticeship training.

(3) Advance schools: A Navy enlisted classification code may be awarded upon completion of certain of the following schools:

(a) Aviation. "C" School (shipboard uniform ADP system carrier/assault ships); "C" School (advanced aviation storekeeper/ reparables management).

(b) Disbursing. "C" School (joint uniform military pay system); "C" School (travel payments); "C" School (financial returns).

(c) Mess management. "C" School (food production); "C" School (management principles); "C" School (bachelor quarters management); "C" School (food service returns).

(d) Ships service. "C" School (laundry/ dry cleaning/laundry supervisor); "C" School (barbers); "C" School (Navy exchange/commissary store middle management); "C" School (ship store afloat management); "C" School (commissary store or Navy exchange officer management course).

(e) Storekeeper.

1 Sea-oriented courses. "C" School (financial management); "C" School (nuclear weapons supply); "C" School (technical publications used in material identification); "C" School (independent duty); "C" School (shipboard uniform ADP system).

2 Shore-oriented courses. "C" School (air transportation specialist); "C" School (air cargo specialist) "C" School (personal property traffic management); "C" School (transportation and storage of hazardous materials); "C" School (Military Standard Transportation and Movement Procedures/Over, Shore, and Damage Procedures).

(f) Senior Enlisted Refresher Training. For all E8s/E9s enroute to sea.

(4) Officer acquisition programs to provide undergraduate education and/ or indoctrination and basic training in fundamentals, preliminaries, or principles to midshipmen, officer candidates, and other newly commissioned officers.

b. Programs in each of these categories are available to the five supplyrelated enlisted ratings (aviation storekeeper, mess management specialist, disbursing clerk, ship’s serviceman, and storekeeper). These programs are combined with on-the-job training to provide necessary qualifications.

28-11. Specific educational programs

The following educational programs are open to Navy supply corps officers:

a. Advanced management programs.

(1) Harvard University Advanced Management Program.

(2) Program Management, Defense Systems Management College.

(3) Prospective Commanding Officer Shore Station Management Training, Washington, DC.

b. Postgraduate programs.

(1) Masters in Business Administration-University of Washington, University of Florida, University of California at Berkely, University of California at Los Angeles, Massachusetts Institute of Technology, University of Michigan, University of Pennsylvania, Stanford University, Harvard University, and University of Virginia.

(2) Financial Management-Naval Postgraduate School.

(3) Computer Systems Management-Naval Postgraduate School

(4) Material Management-Naval Postgraduate School.

(5) Operations Analysis-Naval Postgraduate School.

(6) Petroleum Management-University of Kansas.

(7) Acquisition and Contract Management-Naval Postgraduate School.

(8) Retailing-Michigan State University and Ohio State University.

(9) Subsistence Technology-Michigan State University.

(10) Systems Inventory Management-Naval Postgraduate School.

(11) Material Movement-Naval Postgraduate School.

(12) Advanced Education Program-various civilian universities.

(13) Olmsted Scholar Program-foreign universities.

(14) Doctor of Philosophy Studies-university of individual’s choice.

c. Undergraduate program. College degree program, various civilian universities.

d. Functional training.

(1) The Naval School Physical Distribution Management, Oakland, CA offers courses in shiploading and storage, warehouse operations, transportation, stowage of hazardous material, and management of transportation, air traffic, and marine terminals.

(2) The Navy petroleum Training Unit, Pacific, NSC San Diego, CA offers the Engineering Bulk Fuel Systems Shore and Shipboard Courses.

(3) The US Army Logistics Management Center, Fort Lee, VA offers Management of Defense Acquisition Contracts Courses.

(4) The Air Force Institute of Technology, Wright-Patterson Air Force Base, offers the Contract Administration Course.

(5) The Defense Institute of Security Assistance Management, WrightPatterson Air Force Base, offers Security Assistant Management Courses.

(6) The Navy Supply Corps School, Athens, GA offers the following courses:

(a) Basic Qualification Course. This course provides instruction in the duties of supply corps officers ashore and afloat. Emphasis is placed on the technical subjects of supply management, disbursing, food service, retail operations, and ADP. Particular attention is directed toward supply management afloat.

(b) Foreign Officer Supply Course.

(c) Fleet Data Processing Officer Course.

(d) Joint Aviation Supply and Maintenance Material Management.

(e) Shipboard Uniform ADP System.

(f) Commissary Store Management.

(g) Navy Exchange Management.

(h) Uniform ADP System Stock Points.

(i) Senior Supply Corps Officer-Refresher Training.

(j) Fitting Out Outfitting Supply Management.

(7) Naval Postgraduate School offers the Practical Comptrollership Course.

(8) Defense Language Institute, Presidio of Monterey, offers foreign language training.

e. Training programs.

(1) Navy Acquisition Contracting Officer Career Development Program.

(2) Navy Petroleum Management Intern Program.

(3) Business Financial Management Career Development Program.

28-12. Navy civilian career management programs

a. Navy civilian career development involves a comprehensive approach to quality staffing through college recruiting programs, training programs, and promotion programs. About 50 occupational fields have been identified as appropriate for employment of college graduates or other people of similar potential. In these fields, attractive career development patterns have been established; minimum qualification requirements by OPM are a prerequisite to entrance. Additionally, training programs involving formal classroom, directed reading, and structured on-the-job training and prescribed performance standards tied to the critical elements of each position have been established. There is a wide variety of courses available to civilians within the Navy and other DOD components, as well as in educational institutions. After-hours college courses have been established at the major supply installations, and special college-level courses in scientific inventory management and purchasing have been developed in cooperation with several universities. Quality selection criteria have been incorporated in promotional programs which are used to identify employees who possess capabilities needed to cope with the increasing complexity of supply management. Secretary of the Navy fellowships are offered on a competitive basis annually to employees in supply management and related fields which allow for full-time participation in graduate-level programs at colleges and universities.

b. Navy civilians attend classes at the following major schools:

(1) US Army Defense System Management College, Fort Belvoir, VA.

(2) Navy Acquisition/Logistics Management Training Center, Naval Station Anacostia (Washington, DC).

(3) Naval School, Transportation Management, Oakland, CA.

(4) US Army Transportation School, Fort Eustis, VA.

(5) Joint Military Packaging Training Center, Aberdeen Proving Ground, MD.

(6) US Army Logistics Management Center, Fort Lee, VA.

(7) US Army Management Engineering Training Agency, Rock Island, IL.

(8) Air Force Institute of Technology, Wright-Patterson Air Force Base, OH.

(9) Naval Material Command (headquarters and field locations).

(10) Department of Defense Computer Institute, Washington Navy Yard.

Section IV
Supply-Related Educational Programs in the Air Force

28-13. Air Force officer career development programs

a. The logistics career pattern in the Air Force is divided into the following occupational fields: Logistics Plans and Programs, Maintenance Engineering, Transportation, Procurement and Production, and the various fields of Supply Management. Officers in the logistics plans and programs field perform duties related to planning, programing, and managing the materiel and human resources of logistics, pertaining to systems design, development, acquisition, storage, movement, distribution, facilities maintenance, evaluation, and disposition. Officers in the transportation field are involved in managing and operating transportation facilities. Officers in maintenance engineering perform a wide range of functions including depot maintenance, production control, aircraft and missile maintenance, and overhaul of associated equipment. Those in the production and procurement field are responsible for negotiating, administering, or terminating contracts de-

veloping production schedules, and monitoring quality control programs. Officers in supply management are responsible for program formulation, policy planning, and directing management and operation of all supply activities including design, development, and analysis of supply systems.

b. There are graduations in each field based upon experience or rank. In supply, for example, officers in the rank of second lieutenant through major may be assigned as a supply operations officer; those in the rank of major through colonel are assigned as supply management staff officers.

c. Duty assignments are integrated with courses of instruction in each of the occupational fields. Typical of these courses is the Supply Officer Course consisting of basic training in requisitioning, storing, packing and striping, recordkeeping, fund management, and the related function of organizational supply. The course is attended by officers of the rank of second lieutenant through captain. The Supply Staff Officer Course is attended by officers of the rank of senior captain and major, and is oriented to the management of supply and service programs.

d. In addition to its own courses, the Air Force sends logistics officers to civilian graduate schools of business administration and engineering sciences, to training programs sponsored by industry, and to the various courses at the schools of other services and of the Joint Chiefs of Staff (JCS).

e. For the development of senior logistician, the Air Force has established a graduate program in logistics at the US Air Force Institute of Technology. Graduates of the course are candidates for assignment in the commander and director specialties. One of these specialties, for example, is the Deputy Commander for Logistics/Resources. An officer assigned to this position directs materiel programs including supply, transportation, procurement, and maintenance, and serves as a chief advisor to the commander of an Air Force organization.

28-14. Composition of professional corps

The professional corps of supply officers is composed of 1,325 personnel; 31.6 percent is lieutenants, 31.1 percent is captains, 22.4 percent is majors, 12.2 percent is lieutenant colonels, and 2.7 percent is colonels. The majority of these of officers are Reserve Officers Training Corps or Officers Training School graduates.

28-15. Assignment of supply officers

In the Air Force, there is no supply corps. Rather, supply officers are line officers. They are introduced to the supply career field from three sources:

a. Officers not rated for aircrew duties. Normally, nonrated officers enter the career field through the Reserve Officers' Training Corps, Officers' Training School, or an academy.

b. Rated officers. Rated officers usually are assigned to operational duties for the first 5 to 8 years of active duty. After this initial flying periods some enter the supply career field.

c. Lateral transferees. A few officers are introduced into the career field from related experience in fuels, munitions, maintenance, etc.

28-16. Categorization of supply officers

Supply officers perform in two specialty categories. Supply operations officers, in the rank of lieutenant through major, account for about 53 percent of the authorized supply positions. The remainder are designated for fill by supply management staff officers in the rank of major through colonel.

28-17. The five phases of career development

There are five phases of supply officer career progression, each of which is related to years of active service, military grade, job assignments, technical and service schools, and education levels. These phases are flexible, in that they are influenced by Air Force needs and the officer's desires and ambitions.

a. Initial phase (0 through 2 years).

(1) *Assignments*. Normally, officers enter the supply field from Reserve Officers' Training Corps; School of Military Sciences, Officer; or a service academy. Prior to or within the first 6 months of the initial duty assignment, the officer completes the Supply Operations Course. During the subsequent 2 to 3 years, assignments normally are in base-level supply operations. Officers may be assigned as supervisors within the base supply complex, as materiel control officers for aircraft maintenance, communications, or civil engineer activities, or as supply officers for munitions or radar squadrons. Officers are rotated among positions that are commensurate with their rank. Through these rotations, they gain experience in more than one facet of base-level supply operations at their initial duty station.

(2) *Education and training*. Officers who enter this career field normally possess a baccalaureate degree in business administration, accounting, mathematics, or engineering, with a major in fields such as management, industrial management, marketing, or ADP. They complete the Supply Operations Officer Course as early as practical.

b. Intermediate development phase (3 through 6 years).

(1) *Assignments.* Officers continue to perform duties primarily at base level. Those desiring to advance into key managerial positions in a specialty need a depth

need a depth of experience in managing and supervising supply operations. Any officers who have not previously held management positions within the standard base-level supply organization do so during this phase. Supervisory and functional responsibilities are expanded. Some officers will gain staff experience at wing/group level. Some of the more capable officers are given an opportunity to perform at higher staff levels and in special assignments. Officers in this phase participate in activities (boards, courts, etc.) which interface with other base functions and broaden the officers in overall Air Force activities.

(2) *Education and training*. The officers take additional technical and management training, short courses, or correspondence courses applicable to the supply field. Offduty education courses prepare them for Air Force Institute of Technology graduate school education. They complete the Squadron Officer School in residence or by correspondence. Those interested in ultimately being assigned to the most responsible positions in the supply field apply for the Air Force Institute of Technology graduate education program after completing 4 years of active commissioned service. Graduate degrees in logistics management, industrial engineering, business administration, or data processing are preferable. Additional specialty education is available through the Air Force Institute of Technology Professional Short Courses covering the subjects of air logistics center-Directorate of Materiel Management and Initial Provisioning.

c. Advanced development phase (7 through 14 years).

(1) *Assignments*. A significant management consideration during this period is the rotation of officers into different echelons of command, major commands, and geographical areas. A multicommand background and exposure to diverse oversea operational conditions is greatly desirable. Highly qualified captains and majors occupy key branch positions in base-level supply. Management and procedures experience is a desirable prerequisite for eventual chief of supply duty. Officers who have not previously acquired the broadened exposure of a staff tour are encouraged to do so. Depot-level experience with DLA or Air Force Logistics Command and inspector general duty is desirable during this period. Some officers with outstanding performance credentials are selected for special category assignments such as HQ, US Air Force, Joint Staffs, Joint Agencies, and Military Assistance Advisory Groups. Officers rated for aircrew duty, who have the necessary academic backgrounds, are encouraged to seek broadening in the supply field. Lateral transferees enter the field only after completing the Supply Operations Officer Course. Supply of officers who desire to broaden themselves in related materiel and logistics areas, consider doing so during this phase.

(2) *Education and training*. Officers who enter the supply field in this phase attend the Supply Operations Officer Course, while experienced supply officers complete the Supply Management Staff Officer Course. Those transitioning from assignments outside the standard supply system to duties involving intimate knowledge of that system attend the Supply System Management Course. All continue to pursue short courses applicable to supply, in preparation for senior staff or command positions. The Air Force Institute of Technology Professional Short Course in Air Force Logistics Management is recommended. By this phase, officers should have completed Squadron Officer School in residence or by correspondence. Selected majors attend intermediate service schools, while the others complete Air Command and Staff College by correspondence or in seminar. The completion of a related graduate education program is a desired prerequisite for a number of key positions in the supply field. Officers who complete a related graduate education program are assigned to duties that will make use of their training to the maximum degree.

d. Staff phase (15 through 21 years).

(1) *Assignments*. Highly qualified officers are assigned as chief of supply. Additionally, normal assignments during this phase include staff duty with major commands and numbered air forces as well as key depot positions. All of these duties entail significant managerial responsibilities. Officers who have been consistently outstanding can expect assignments to HQ, US Air Force, or joint service activities. Some perform duties as Director of Logistics. Officers are encouraged to request assignments that will diversify their experience base and enable them to demonstrate ability to perform successfully both as line managers and as staff planners.

(2) *Education and training*. Selected lieutenant colonels attend Air War College. National War College, Industrial College of the Armed Forces, or comparable schools. As officers progress through this phase, they pursue advanced management and computer systems courses directed toward new techniques and their application to the supply field. Recommended courses include the Air Force Institute of Technology Professional Short Courses in Joint Service Maintenance Management Information Systems; Air Force Computer Simulation for Logistics Managers; Air Force Systems Program Management; and Air Force Integrated Logistics Support.

e. Executive/leader phase (22 years plus).

(1) *Assignments*. These officers occupy key management positions at major commands, HQ, US Air Force, or higher level. Included are executive-level depot positions with DLA, or the Air Force Logistics Command, staff directorate and division chief positions and assignment as chief of supply at major US Air Force installations.

(2) *Education and training*. Selected officers at-

tend the National War College, Industrial College of the Armed Forces, Executive Short Courses (Harvard, industry, etc) or comparable schools. It is desirable that all major schooling be completed prior to the 22d year of service.

28-18. Air Force civilian career development programs

The primary goal of the Air Force civilian career program is to develop employees with a strong base of professional, technical, managerial, and administrative skills necessary to satisfy its current and future Air Force mission needs. The program is centrally managed by the Office of Civilian Personnel Operations, at Randolph Air Force Base, TX, which is under the direct control of the Air Force Director of Civilian Personnel. Air Force Regulation 40-110 is the governing regulation for all Air Force career groups. Design for the career group programs provides for alining force structure with future functional requirements. This is done systematically by projecting future requirements through static and dynamic modeling techniques. This, in turn, facilitates development of realistic career pattern networks from which careerists can visualize clear lines of potential progression. Currently in being are programs with career developmental paths for most of the systems and logistics functions, personnel and commissary career groups. The remaining career groups will be included in the near future. An integral part of the program is career intern management which includes recruitment, identification, and initial development of highly qualified individuals who have potential to progress to midmanagement and executive positions. Careers of incumbent civilians are enhanced and completed by implementing, maintaining, and revising career programs to include the education, training, and career broadening needs for employees who exhibit the necessary executive potential and ambitions. The Office of Civilian Personnel Operations continually evaluates its career programs management in order to achieve an objective force structure and at the same time to insure that equal employee opportunities goals and objectives are administered.

28-19. Air Force schools

a. Introduction. The Air Force has a number of special schools engaged in providing education and training in supple and logistics-related subjects.

b. The Air Force School of Systems and Logistics.

(1) The School of Systems and Logistics located at Wright-Patterson Air Force Base, OH, a part of the Air Force Institute of Technology, has been designed to provide students with the managerial tools and techniques necessary to solve complex problems as they arise within the functional areas of logistics, as well as an understanding of the total logistics system. The broad objectives of the school are to develop a cadre of professional logisticians for eventual assignment to key positions throughout DOD, and to serve as focal points for the research and study of logistics problems with a view to producing and maintaining basic doctrine for use in designing and operating logistics systems.

(2) The School of Systems and Logistics is organized into two divisions: Graduate Education and Continuing Education. The departments under the Graduate Education Division are: Management Studies, Quantitative Studies, and Research and Communicative Studies. The Continuing Education Division departments are: Logistics System Integration, Maintenance and Supply, Procurement and Production, Special Management Techniques, and Nonresident Programs. The school provides two categories of courses:

(a) The Graduate Programs: 12-month courses leading to Master of Science Degrees. Admittance is restricted to senior captains and above and to civilians in the grade of GS-13 and above, all whom must hold bachelor’s degrees or their equivalent.

(b) The Continuing Education Program: approximately 35 courses ranging in duration from 2 to 13 weeks, is designed to provide continuing educational opportunities to both military officers and civilian personnel who are managers in systems and logistics or are engaged in the functional fields of maintenance, supply, transportation, or acquisition.

c. The Air War College. The Air War College located at Maxwell Air Force Base, AL, prepares senior officers and civilians for high command and staff duty by developing in them a sound understanding of military strategy in support of national security policy to insure an intelligent contribution toward the most effective development and employment of aerospace power. The curriculum includes the following subject areas related to supply and logistics:

(1) The economics of national defense and resources management.

(2) The fundamentals of analytical decisionmaking including simulations in inventory control.

(3) Systems analysis.

(4) Military capabilities and equipment including the JCS, services and support commands, and military research and development.

d. The Air Command and Staff College. The Air Command and Staff College located at Maxwell Air Force Base, AL, was established to improve the professional ability of selected officers (and certain civilians) for high-level or command and staff assignments normal to the field grades, and to contribute to the development of Air Force doctrine and command and staff practices. The curriculum includes the following subject areas related to supply and logistics:

(1) Resource management including logistics management.

(2) Military management including systems analysis, simulations, and computers. *e.* The Squadron Officer School. The Squadron Officer School located at Maxwell Air Force Base, AL, prepares selected lieutenants and captains to execute command tasks normally associated with squadrons and to perform staff duties encountered by them. They are provided with a foundation for further professional development. The curriculum includes the following subject areas related to supply and logistics:

(1) Management science including computers and ADP.

(2) Resource management including logistics concepts and materiel requirements.

f. Air University Institute for Professional Development, Professional Military Comptroller Course. The Professional Military Comptroller Course located at Maxwell Air Force Base, AL, is designed to develop in selected personnel an understanding of the role of the comptroller as a staff officer and head of a management service organization. This 12-week course is limited to majors and above and equivalent grade civilians. The curriculum includes the following subject areas related to supply and logistics:

(1) Economics for resources management.

(2) ADP.

(3) Decisionmaking in the management of resources.

g. Air Force Institute of Technology. The Air Force Institute of Technology, located at Wright-Paterson Air Force Base, OH, offers programs at the bachelor, master and doctoral levels in its School of Engineering, masters level at the School of Systems and Logistics, and all levels at selected colleges and universities. Special programs are also conducted at the resident schools of Systems and Logistics, the Defense Weapons Systems Management Center, and the Civil Engineering School at Wright-Patterson Air Force Base, in civilian universities, and in the training-with-industry programs conducted by various business and industrial organizations.

h. Air University Extension Course Institute. The Extension Course Institute at Gunter Air Force Base, AL, administers the Air Force correspondence program. Average enrollments are between 400,000 and 450,000 at any one time with about 50,000 new enrollments per month. Both military and civilian personnel are eligible for most courses. A number of comprehensive courses in materiel management, supply, procurement, transportation, and other logistics-related areas are offered.

i. Air Training Command Schools. The Air Training Command with headquarters at Randolph Air Force Base, TX, operates supply, maintenance, procurement, and other logistics-related schools for the Air Force. These schools are attended by enlisted and officer personnel.

Section V
Supply-Related Educational Programs in the Marine Corps

28-20. Introduction

The Marine Corps does not have a separate corps of supply officers. Officers assigned the military occupational specialty of supply are designated as "unrestricted" officers and, as such, are called upon to fill varying nonsupply billets during their career. Conversely, officers assigned military occupational specialties other than supply are periodically assigned to billets within the supply field as a normal step in career development. To meet skill requirements, a variety of schools is used. Some of these, such as the Marine Corps Service Support School, Camp Lejeune, NC, are organic to the Marine Corps. In addition, advantage is taken of existing Navy, Army, and Air Force schools; DOD colleges; civilian universities; and factory training on new items of equipment.

28-21. Career development programs

a. A special education program has been instituted by the Marine Corps. The goal of this program is to meet specific billet requirements specifying certain advanced education, and to provide an inventory of officers trained in the numerous specialized and management areas required within the Defense Establishment.

b. Billets requiring the knowledge and the skill of a postgraduate school are noted in tables of organization. Special controls are applied to insure appropriate assignment. Officers’ records contain a complete history of all schools attended.

c. Home study courses are offered by the Marine Corps Institute and provide study in the area of supply management. A Marine Corps Computer Science School has been established at the Marine Corps Development and Education Command, Quantico, VA. A Marine Associate Degree Completion Program has been implemented which offers degrees in various areas to qualified enlisted personnel. Also, enlisted personnel are trained in supply operations at the Marine Corps Service Support School. Courses range from basic supply courses for qualifying Marines in the supply occupational fields to refresher course for senior staff noncommissioned officers.

d. Marine Corps officers, enlisted personnel, and civilian employees are selected for attendance at schools

of the other services such as ALMC; the Air Force School of Systems and Logistics; the Navy Postgraduate School; the Air Force Institute of Technology; or the Industrial College of the Armed Forces. As with the other services, the Marine Corps also provides for post-graduate training at civilian universities and training tours with industry.

Section VI
Supply-Related Educational Programs in DLA

28-22. The Defense Logistics Agency (DLA) civilian career management program

a. The DLA provides civilian career management programs for approximately 19,000 civilian employees, grade GS-5 and above, through the media of non DLA civilian career programs. These programs are constructed around occupational skills as they interrelate within a primary functional environment. Relationships for career development are established between qualifications, experience, training, and education. These relationships depict a master design for development through the span of intern professional/technical, managerial and executive career levels.

b. In addition. DLA is supporting long-term educational programs encompassing graduate study at non-Government facilities such as the Education for Public Management Program under which individuals of high potential are chosen for a year of study at selected universities. In addition, increasing use is being made of senior-level service schools to provide executives opportunities for growth and development in the logistics management field. Extensive use is also made of short-term courses such as the US Civil Service Commission Executive Seminars.

c. DLA is also using an employee exchange program. Personnel are detailed to positions and given assignments in other specialty areas. This broadens their knowledge and experience in the full range of logistics support functions.

d. DLA has instituted a centralized career management intern program for supply whereby interns are trained in general supply, program management, inventory management, distribution and storage, packaging and preservation and supply cataloging.

e. Evaluation of the effectiveness of these programs is being accomplished by personnel measurement techniques which form the basis for projecting career development requirements.

Section VII
Joint Service Schools

28-23. Industrial College of the Armed Forces

The Industrial College of the Armed Forces operates under the direction of the JCS. The mission of the Industrial College of the Armed Forces is to conduct graduate-level courses of study in national security, with emphasis on management of national resources under current and predicted environments. Such studies include both national and world interrelated military, economic, political, scientific, and social factors, with the objective of enhancing the preparation of selected military officers and civilian personnel for positions of high trust in the national and international security structure.

28-24. Defense Weapons System Management Center

The Defense Weapons System Management Center is designed to prepare selected military and civilian personnel of the military departments to exercise major program (or project) manager responsibilities for major weapon systems and supporting subsystems. The curriculum contains a balanced emphasis on the problems of technical development activities, procurement, budgeting, programing, cost and schedule analysis, production, facilities, logistics support, management problems display and analysis, and the regulations peculiar to the various services. The solution of typical weapon system management problems is stressed, and a close relationship is maintained between the curriculum and actual problems encountered in this work, thus giving purpose and meaning to the training.

28-25. Armed Forces Staff College

The Armed Forces Staff College operates under the direction of the JCS. Its mission is to conduct a course of study in joint and combined organization, planning, and operations, and in related aspects of international security, in order to prepare selected military officers for duty in all echelons of joint and combined commends. Instruction includes coverage of the strategic tactical, and logistics responsibilities of commanders.

28-26. National War College

The National War College is a joint educational institution that functions under the direction of the JCS. The mission of the National War College is to conduct a course of study of those agencies of Government and those military, economic, scientific, political, psychological, and social factors of power potential which are essential parts of national security, in order to enhance the preparation of selected personnel of the Armed Forces and State Department for the exercise of joint and combined high-level policy, command, and staff functions, and for the planning of national strategy.

Section VIII
Interagency Training Programs

28-26. Introduction

a. The Government Employees Training Act introduced the concept of interagency training through the Federal Government in 1958. Since then, interagency training has proved one of the most effective means of improving program operations by providing development opportunities for employees. Executive Order 11348 directs each agency and department head to:

(1) Extend agency training programs to employees of other agencies, and assign employees to interagency training whenever this will result in better training, improved service, or savings to the Government.

(2) Establish interagency training facilities in areas of substantial competence as arranged by the Civil Service Commission.

b. Interagency training programs are listed in the Interagency Training Programs Bulletin and Monthly Calendar published by the Bureau of Training, United States Civil Service Commission.

28-27. Courses

Numerous supply and logistics-related courses are available through interagency training. For example:

a. Automatic Data Processing Programing.
b. Systems Analysis.
c. Management Information Systems.
d. Operations Research.
e. Financial Management.
f. Federal Supply Schedules.
g. Small Purchasing.
h. Contracting by Formal Advertising.
i. Contracting by Negotiation.
j. Contract Administration.
k. Inventory Control.
l. Economic Order Quantity.
m. Storage.
n. Automatic Data Processing in Supply Management.
o. Transportation.
p. Statistical Science.

Chapter 29
Summary

29-1. General

a. Supply management in the Department of Defense (DOD) is continually affected by the changing national and international situations by advancing military concepts and technology, and by the introduction of improved management techniques. It is evident from the review of the many forward-looking projects and programs which have been initiated in the past 20 years that the supply management elements of the Defense Establishment are constantly seeking to develop a more flexible and balanced system, capable of providing readily whatever degree and kind of support might be required by national policies.

b. Some of the techniques that have been developed, such as variable safety levels, economic inventory policies, selective inventory management, and the application of scientific methods of investigation and research to the solution of complex logistics problems, are more refined than similar techniques employed in comparable industrial situations. There has been a willingness to experiment, to increase the use of scientific management tools, and to fully explore all avenues that might lead to more effective supply support of the combat forces. Considering the complexity of the task, the accomplishments of military supply managers have been impressive and well timed.

c. The principal objective of military supply management, as set forth in the basic regulations is to "achieve efficient, economical, and practical operation of an integrated supply system to meet the needs of the military departments without duplicate or overlapping operations or functions." Put in simpler terms, it is to "appraise and control the cost of supply without impairing the ability to supply, on time, at the right place and in the required quantities." Realization of this aim requires that the individual supply manager examine his operations continuously in terms of what is being done and how efficiently it is being done.

d. The emphasis in the past has traditionally been placed on the effectiveness of supply operations rather than the cost to supply; to make materiel available when and where they are needed. This concentration on supplying using units, sometimes at a high cost, is, of course, a legitimate emphasis; failure to provide troops with needed weapons and equipment can be disasterous. The supply managers fully recognize that the inefficiencies of the past have been or are being rapidly eliminated. Supply managers also realize that supply requirements make up a large portion of the annual budget: and that it is possible to provide effective and economical supple management by buying only what is needed and at the lowest sound price. This is evidenced by the success of the Cost-Reduction Program.

e. DOD has adopted a concept for tying together military plans, programs, and budgets into a single system that permits a more rational allocation of resources and facilities to meet military requirements.

f. In general, this Planning, Programing, and Budgeting System (PPBS) makes four major contributions to defense management. First, program proposals are evaluated not from the relatively short-range perspective of the annual budget cycle, but in the context of approved military plans stretching at least 4 years beyond the budget year. Second, the proposals are judged not as those of a particular military service but in the light of their potential contribution to a specific defensewide mission. Third, the full financial implications in each program element are calculated, including not only research, development, procurement, and investment costs but also the cost of deploying, operating, and maintaining a proposed force or weapon system through its total effective lifetime. Finally, alternative ways for achieving specific objectives are developed and their total costs estimated, thus providing a range of choices that permits a judgment on the basis of costeffectiveness. The PPBS is designed to supplement, not supplant, established financial and budgetary procedures. Much remains to be done in order to obtain the full benefits inherent in the new system.

g. Concurrently with the establishment and streamlining of the PPBS, efforts are continually being made to improve long established financial management tools. Methods of accounting for reimbursable transactions are being simplified and modernized, and the use of revolving stock and industrial funds continues to contribute to more efficient management.

h. The DOD Cost-Reduction has made great strides in achieving greater operating efficiency at lower cost. Savings of over $15 billion were reported and audited under the program during its first 6 years. By a more precise analysis of combat effectiveness of individual weapons in relation to targets to be attacked and by the use of more realistic wearout and loss factors based on current standards of reliability, the services have been able to make significant reductions in materiel requirements. Large reductions in inventory requirements for repair parts and supplies have been made possible by the sharp contraction of the time required to procure, produce, deliver, and maintain items; by discarding old concepts under which needlessly large quantities were kept as an insurance reserve; by basing forecasts on the proven reliability and durability of components and parts; and by the use of improved requirements techniques. Inventory managers are constantly searching their stock-and that of other managers-to find the same item or a usable substitute before em-

barking on procurement. By constantly challenging design specifications and eliminating unnecessary qualitative features in items in the military, large savings are produced annually. Unnecessary overhead and personnel expenses are being eliminated through the consolidation of common support functions and by standardization of operating procedures and practices previously performed separately by the military departments.

i. There is ample evidence that the military services have recognized the value of modern techniques in improving the business aspects of logistics. In DOD, 100 critical problems were identified in 1960 for detailed analysis by individuals or task forces comprised of representatives of the services. For example, Project 80 resulted in the reorganization of the Army 1962; Project 100 culminated in the establishment of the Defense Logistics Agency (DLA) in late 1961; and Project 60, requiring a consolidated effort in Defense Contract Administration Services (DCAS), was assigned to DLA and implemented in 1965. The establishment of the Defense Logistics Studies Information Management Center (DLSIE) at the US Army Logistics Management Center (ALMC) in mid-1962 provided for the first time a central repository from which researchers can obtain information on logistics studies performed or in process, and can aid in the prevention of repetitious and duplicative studies.

j. In general, the logistics research efforts take three forms. First, there are fundamental investigations dealing with the physical sciences. These investigations involve operations research using linear programming techniques, mathematical modeling, simulation, and other scientific tools, almost always tied in with the use of computers. They are sometimes accomplished by contract with universities, other institutional research activities, and industry; at other times on a joint military-contract basis; and by research activities wholly within the services. Second, there are applied research projects, sponsored by almost all levels of military logistics management, to solve specific problems generally using techniques employed in the fundamental operations research investigations. The third form, involving participation at the operating levels and usually accomplished at command level, aims to identify problems and gather data for use in applied efforts.

k. It was pointed out the military departments and DLA have had to segregate their entire range of items into meaningful categories. It is virtually impossible for DLA and the military services to have identically the same breakout. The categories used by them have been developed over the years on the basis of the very nature of the items themselves, their relative importance to the supply system as a whole, their behavior within the system, and their suitability for segmented management within each system to attain maximum supply effectiveness. In all instances, the task has been broken down into comparatively homogeneous groupings. In the Army, the various commodities are assigned to the major subordinate commands of the US Army Materiel Command (AMC). In the Navy, responsibility for major end items rests in the hardware systems commands, while the bulk of the support items comes under the management of the Naval Supply Systems Command. In the Air Force, the five air logistics centers of the Air Force Logistics Command directly support some 2,800 customer bases and activities located throughout the world.

l. Within each of the services and DLA are inventory control points (ICP) responsible for all or a large number of technical and supply functions relating to item management, such as requirements computation and the direction of procurement, distribution, overhaul, and disposal.

m. Each of the services, however, has found it necessary to cross all commodity groupings for selective management of weapons and equipment systems of highest priority and critical importance, called "system managers" in the Air Force and "project managers" in the Army and Navy, and vested with relatively great authority, the responsible individuals coordinate all supply actions relating to their systems. The effectiveness of this superimposed selective management concept has been amply illustrated by the rapid development and deployment of the Polaris and the Minuteman systems, among many, and the concept will undoubtedly be kept in use by the supply management organization.

n. DLA has relieved the military departments of their responsibility for the wholesale management and inventory control of common supplies and service, thus, reducing duplicate functions. DOD will continue to sort out and realine its standardization programs and systems of integrated management where praticable and feasible without impairing the primary mission performance of the military departments. There is need for a common language, a single integrated system for information gathering and transmission to combine the related areas of supply management, maintenance management, and command and control. There is a need, particularly in view of the expanding use of computers for compatibility among these systems for the exercise of unified control and direction over the total logistical support and control provided to the military forces. The desirability or feasibility of further integration of the supply functions depends largely on the degree to which additional common supplies or services can be identified and isolated and the extent to which one military service or the DLA can render responsive support to the other services.

o. In full perspective, many of the recent improve-

ments in supply management organization, methods, and procedures have long been foreseen and desired by military supply managers. Manual and mechanical methods were too slow and cumbersome to adequately handle the huge masses of detail involved. New computers and high-speed telecommunications have provided the capacity that was lacking, and DOD has been quick to exploit their advantages. In turn, electronic data processing and communications systems must feed upon standardized data, lending urgency to the need for standardization not only in supply management but throughout the Defense Establishment.

29-2. Major historical developments in modern supply management

a. Since 1961, DOD has been concentrating on efforts to improve logistics readiness while minimizing the dollar value of stocks. The military services have made exceptional progress in this respect. The investment in supply stocks has declined significantly in relation to the investment in major weapons and military equipment. The reduction in supply system inventories even continued during the period of major buildup in Vietnam. This improvement in inventory posture has been the result of a succession of innovations in organization and procedures.

b. Seven historical events which have had significant influence on supply management are:

(1) The advent of the Federal Catalog System.

(2) NATO Codification System.

(3) Integrated item management.

(4) Standardization of procedures.

(5) Improved communications.

(6) Automation of records.

(7) The Defense Integrated Data System.

c. These seven events are discussed in detail in chapter 1.

29-3. Historical summary of supply management in Southeast Asia

a. In January 1965, US troop strength in South Vietnam was 23,000 and the logistics base consisted of one deepwater port, three jet airfields, and virtually no capability outside of Saigon to deploy and support forces. By April 1969, US forces had grown to 543,400 as shown below: June 1965 59,000 June 1966 267,500 June 1967 448,800 June 1968 534,000 April 1969 543,400 September 1969 509,600 December 1969 472,800 December 1970 349,700 *b.* The most difficult problems revere experienced during the first year of the buildup when 200,000 men were deployed concurrently with the construction of the logistical base. Three years later as of June 1968, almost 13 million short tons of materiel had been moved into the Pacific area, including 400,000 end items. Twenty-nine deepwater berths, 50 forward airfields, 4 major depots, petroleum storage for 4.5 million barrels, and 21 million square feet of improved open storage space had been constructed.

c. The major problems of the buildup were experienced by the Army, which deployed over two-thirds of the men and materiel, and had the problem of operating in a highly mobile environment without the benefit of fixed bases. The Army also operated all ports and supplied food, petroleum, and selected common items to the other military services and to the Army of the Republic of Vietnam. The Navy had these responsibilities only in the I Corps area of South Vietnam.

d. The supply of Vietnam and Southeast Asia is summarized as:

(1) Supply support. US forces were never restricted in combat operations for want of essential supplies, and enjoyed the highest quality of personal supplies such as food, clothing, and medical items ever experienced during wartime. Freshly baked bread, fresh fruits and vegetables, milk, and ice cream were regularly available to the troops in Vietnam. The availability of repair parts for aircraft, trucks, tanks, vehicles, and other equipment was as high or higher than that experienced anywhere else in the world. These results were achieved by the most intensive logistics management effort in the history of the United States, which included, when required, visibility of critical supplies and equipment up to the level of the Chairman of the Joint Chiefs of Staff (JCS) and the Secretary of the Defense.

(2) Cost consciousness. Vietnam commanders of all the military services were highly cost conscious and stressed economy in the war effort. A report on management improvement actions was prepared by all the military services. For the 9-month period ending 31 March 1968, the cost reductions achieved totaled $241 million, with all the services participating. These actions resulted from reducing stock levels, personnel, contract costs, etc.

(3) Special supply management techniques. The Army found it necessary to devise many special techniques of supply management to cope with its pro blems. *e.* The Army mission was immensely complex. It had some 2,500 mobile unit and 950 different operating aircraft locations. It began the buildup without a body of usage experience covering operations of this type. During the first 18 months of the buildup, as units deployed they were provided with a "push package" designed by Continental United States (CONUS) ICPs on the basis of estimates as to what the unit might need

during its first few months of deployment. These "packages" were generously built with former knowledge that some items would be unneeded and that some quantities would prove excess to requirements.

f. After the first few months of the buildup, out-of-service rates on equipment requiring parts became excessive, and in December 1965 the Red Ball Express service was inaugurated, with results such as those cited above. This service was immediately successful and continued under tight controls. It is undoubtedly responsible for insuring the high operational rates for equipment now enjoyed by the Army throughout the world. Also, because of the criticality of Army aircraft and missile systems, the so-called stovepipe system of vertical management between CONUS ICPs and the Army in Vietnam was established. These techniques resembled very closely the type of support which was pioneered by the Air Force in recent years between key operating bases and ICPs.

g. Beginning early in calender year 1967, at the request of the US Commander in Vietnam, teams of trained depot and inventory specialists were sent to Vietnam on temporary duty by AMC to begin the task of placing all supplies under its full control. The first step was to pull back from some 1,900 operating units the unneeded materiel contained in the "push packages." This was largely accomplished by the fall of 1967, but, in turn, it created temporary congestion at the three principal Army depots, and particularly at the Saigon depot. Conditions at the inadequate Saigon depot were corrected when a new depot was established 25 miles north of Saigon at Long Binh. Excess items were subsequently identified and redistributed.

h. In the fall of 1967, a fully automated central inventory control center became operational at Long Binh and assumed full control of all Army depot stocks.

i. From this experience, the Army has learned many valuable lessons for the future. Among these are the need for a quick relation inventory control center to be deployed at the outset of a major buildup when logistical facilities do not exist. The importance of more trained and experienced depot management personnel has likewise been revealed. Knowledge has been gained which will enable the Army to tailor "push packages" more precisely in the event of a future contingency of the Vietnam type.

j. Regardless of needed refinements, the special procedures and innovations described earlier-including prudent use of airlift for critical parts, and continuous high-level visibility of selected items, such as ammunition and helicopters are essential to a highly responsive supply system under combat conditions.

29-4. Conclusion

a. In this reference book, emphasis has been placed on concisely portraying the management systems used in military supply management. It would be inappropriate to conclude without emphasizing the final objective of all logistics activities-the support of combat forces to the extent that planned objectives are achieved. Mention was made throughout the reference book of the difficulties in providing logistics support for highly complex land, sea, and aerospace forces, where emphasis is placed on combat readiness, flexibility, and mobility. By maintaining both nuclear and nonnuclear capabilities, by providing increased airlift capability, by pre-positioning supplies and equipment, by providing an adequate industrial base, and by insuring adequate reserve stocks of modern weapons and equipment, the United States will be prepared for any eventual military situation that may occur.

b. Under the concepts that will govern future military operations running the gamut from massive nuclear actions to counterinsurgency operations in developing countries, the inseparability of tactics and logistics, long a principle of military operations, will require added emphasis. Distinctions between combat forces and support groups and between CONUS and oversea theaters of operation will become progressively more difficult to make. The major share of management attention, therefore, must be devoted to insuring that combat forces are adequately supported. There is no justification for the efforts or existence of military supply managers and planners unless this objective is achieved. Efficient management is a neverending task.

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