

THE DEPARTMENT OF DEFENSE ORGANIZATION FOR PHYSICAL DISTRIBUTION

1. Introduction. The logistics system encompasses the sum of all of the logistics activities within the Department of Defense. This includes the wholesale logistics system, the retail overseas logistics system, and the retail CONUS logistics system. This chapter addresses the wholesale distribution system which reaches from the Secretary of Defense with his policymaking responsibilities, to the distribution center commander with his responsibility for the physical item itself.

2. Objectives. After completing this lesson, you will be able to:

a. Identify the subfunctions and elements of physical distribution and explain their interrelationships.

b. Describe the objectives of an effective distribution system.

c. Identify the performance requirements needed in a distribution system.

d. Recall the responsibility of each organizational element in DoD physical distribution to include the Secretary of Defense, Defense Logistics Agency, Defense Distribution Center, and distribution center Commander.

e. List the functions performed by the distribution center in the military distribution system.

3. References.

a. DoDD 5100.1, Functions of the DoD and Its Major Components.

b. DoDD 5124.1, Assistant Secretary of Defense Acquisition and Logistics Charter.

c. DoDD 5105.22, Defense Logistics Agency Charter.

d. DLAM 5105.1, Department of Defense Supply Management Reference Book.

4. Physical Distribution.

a. Physical distribution is the movement, care, and handling of goods from the point of production to the point of consumption or use. Physical distribution provides the logistics support necessary to match manufacturing (i.e., procurement) to marketing (i.e., support of combat forces) goals. It provides the means of having the right product and correct quantity at the right place and time. Physical distribution involves the proper mix of subfunctions to include storage facilities, transportation network, inventory policy, and a communications and control network. Similarly, a military distribution system is defined as that complex of facilities, installations, methods, and procedures designed to receive, store, maintain, distribute, and control the flow of military materiel between the point of receipt into the military supply system and the point of issue to using activities and units.

b. The concept of physical distribution which has gained acceptance in industry, as well as in government, concerns not just the fact that there are several subfunctions included in the major function of physical distribution, but that these subfunctions are interrelated. In order to be cost-effective, the manager must maintain a keen awareness of the need to understand these interrelationships. For example, one must not blindly accept a change in transportation methods which lowers transportation costs without weighing the effect of this change on other physical distribution subfunction costs. To illustrate, a lower transportation cost might be achieved by making fewer and larger shipments in bulk or using a slower transportation mode. These actions could, however, result in increased inventory and inventory costs as well as added storage facilities requirements. This

would more than offset the savings in transportation costs.

c. From the definition of physical distribution, one can readily see that the concept of physical distribution is concerned with the flow of materiel from the producer to the consumer. The total logistics distribution network involves such functions as material handling, transportation, storage, in storage maintenance, and management control of these functions. The facilities within which these functions take place can be fixed or mobile when considering the entire realm of physical distribution. It is essential for the manager to recognize that the function of transportation is only a part of the total distribution system. In recognizing the fact that transportation is only one of several subfunctions which, in total combination, makes up the complete distribution system. Management decisions can then be made concerning the allocation of resources to these areas. In addition, the manager must understand how these subfunctions operate.

d. The concept of the total distribution function envisions both modernization of facilities and mechanization/automation of operations. This includes both the use of modern communication techniques for the processing of paperwork as well as the use of computerized retrieval systems within the warehouses. Organizationally, this concept requires a consolidation of these related functions into one directorate or department making one manager responsible for the total effort of physical distribution. Functionally, this concept makes use of performance criteria to ensure that the various subfunctions complement rather than compete with each other.

5. Physical Distribution Subfunctions. There are four subfunctions within a physical distribution system. These are **facilities, transportation network, communications and control network**, and an **inventory policy**. Individually and collectively, these subfunctions play a significant role in physical distribution.

a. The **facilities** form an important component of the distribution system within DoD since channels of distribution are not normally direct from producer to consumer, but rather through middlemen who are called wholesalers and retailers. These middlemen normally store materiel at fixed facilities called warehouses or distribution centers, awaiting demands by customers. Consolidation and containerization points are also included in the facilities. It is here, as the title depicts, where the materiel is consolidated and containerized by shipment unit configuration. Transportation terminals are another type of fixed facility in the network. Most materiel and supplies do not move on the same transportation vehicle or mode in moving from the point of production (manufacturer) to the consumer. Most of them pass through transportation terminals where they are unloaded from one vehicle and placed on another; or the container in which they are loaded is transferred from one mode to another; or the vehicle on which the materiel is moving may be unhooked from one power unit and hitched to another.

b. **Transportation** and traffic management includes the facilities, equipment, and manpower required in the management of movement of personnel, materiel, and household goods. The United States Transportation Command is the single transportation manager for the DoD in peacetime and during mobilization or war. It includes the Military Traffic Management Command (MTMC), Air Mobility Command (AMC), and Military Sealift Command (MSC). These elements operate the defense transportation system with support from the commercial transportation industry.

c. Another important component of a distribution system which operates in conjunction with the facilities and the transportation network is the **communications and control network**. Personnel and activities involved in a distribution network must be able to communicate clearly and quickly with one

another. The customer must be able to communicate with the inventory manager in order to place demands in the form of requisitions and to follow up on them. The inventory manager at the inventory control point (ICP) must maintain communications with the distribution centers to direct shipments to customers and to receive shipment status. Distribution centers must communicate with military transportation agencies or with commercial transportation companies to obtain transportation services to move supplies and materiel. Control must be exercised in the form of coordination between all of the components of the distribution system in order to ensure the smooth and efficient functioning of the system. To assist the managers in controlling the various functions, several military standard logistics systems and procedures have been developed such as the Military Standard Requisitioning and Issue Procedures (MILSTRIP) and the Military Standard Transportation and Movement Procedures (MILSTAMP). All of these standard systems are known collectively as the Defense Logistics Standard Systems (DLSS).

d. Another subfunction of the distribution system is a viable **inventory policy**. A determination must be made as to what items will be stocked, where they will be stocked, how often the items will be purchased, and in what quantity they will be stocked at storage locations. The ICPs of the military services and the defense supply centers of DLA play a central role in the inventory policy subfunction of a distribution system. Inventory techniques such as just-in-time and economic order quantity allow managers to carry out its inventory policy.

e. The existence of fixed facilities in a distribution system, particularly storage sites or distribution centers, may appear to be an unnecessary or uneconomical method of satisfying military logistical requirements. It would appear that the most economical method of distribution would be direct from the producer to the consumer; this would eliminate costs for additional handling and maintenance of fixed-storage facilities as well as reducing

inventory costs. This method is feasible in the distribution of items on which there is a predictable rate of demand, and the item is consumed in large quantities by one customer or a group of customers in the same geographic area. Since it is highly improbable that the DoD will be able to accurately predict the rate of demand for many categories of materiel in support of its military forces, it becomes apparent that these fixed facilities are an essential element in physical distribution. Aside from strategic and tactical considerations which may dictate the requirement for fixed-storage facilities, there are good **economic reasons** for having fixed-storage facilities as a component for military distribution systems. To illustrate, the large majority of the items that move through the military distribution system are secondary items. Consumption by the users is usually fairly erratic and unpredictable with individual **demands** made in small quantities. Also, modern industrial production lines are not geared to **economically** satisfy small quantity demands (**unit cost**) of this type directly from the producer to the consumer. Startup and shutdown costs are high since production facilities are geared to large quantity production. Finally, **acquisition costs** would also be higher if procurements matched individual small quantity demands.

6. Military Distribution System Elements.

There are several elements a military distribution system must contain to make it a totally viable system. These are:

a. Materials Handling Equipment (MHE). This includes equipment manually operated, power operated, or automated that is required to handle the materiel throughout the distribution system from the wholesale level down to the ultimate consumer. Compatibility cannot be overemphasized. If wholesale distribution centers are consolidating shipments in various containers, pallets, and vans, distribution managers must ensure the recipients of those items are capable of handling them as well.

b. Protective Packaging. The purpose of protective packaging is to provide effective and economical protection of supplies from purchase to use. The special aspects of the military distribution system must be taken into consideration with regard to protective packaging. These include long term storage, packaging levels, packaging uniformity requirements, etc.

c. Maintenance Facilities. Total rebuild or overhaul can be accomplished considerably cheaper than the acquisition cost of a replacement. Item managers plan for major items and assemblies to be brought back into the distribution system as part of this overall maintenance plan.

d. Reutilization and Marketing Facilities. DoD customers save considerable moneys by acquiring many secondary items through these channels in place of new acquisition. Reutilization and marketing is essentially a redistribution operation, redistributing materiel to government or commercial concerns.

7. Interrelationships of the Distribution System Subfunctions.

a. Distribution managers are able to vary the resources that are put into any subfunction of the distribution system in order to optimize the total system. For example, managers may choose to increase the resources devoted to transportation while at the same time reducing the resources allocated to inventory. These changes will result in a net dollar savings due to the reduction of dollars invested in inventory. In an effort to optimize the system, managers may choose to reallocate resources within a particular subfunction of the system. To illustrate, within the inventory policy subfunction, managers may allocate more funds for maintenance, thus reducing the requirement to procure new equipment. However, managers are cautioned that in an attempt to optimize any of its subfunctions they do not suboptimize the system.

b. As can be seen from the discussion above, there exist many trade-offs within and between such logistical functions as transportation, maintenance, and supply. The logistics planner may, for example, substitute more responsive transportation for supply and maintenance. Thus, the requirement for inventory in the pipeline as well as the requirement for extensive maintenance facilities can be reduced provided additional funds are expended to increase the transportation capability.

8. Objectives of an Effective Distribution System. Present and future military distribution systems must be designed to accomplish a number of broad objectives in order to be effective in terms of performance and cost effectiveness. Regardless of the size or location of the distribution system, certain objectives must be met in order for the system to be effective. These are:

a. Appropriate response to user requirements. The distribution system must be capable of providing the right materiel at the time that it is required by the user.

b. Flexibility to adapt to rapidly changing conditions. The environment in which any distribution system must function is characterized by change. A military distribution system is influenced by political, economical, and technological changes that occur worldwide. Thus, the designer of a military distribution system must ensure that requirements brought about by changes in the distribution environment can be incorporated without undue disruption to the system.

c. Economies of all resources. Existing and future distribution systems must be able to withstand detailed analysis of the cost-effectiveness of the system. Each segment of a distribution system represents an economic cost which must be identified. These costs must be compared to alternative methods of getting the materiel to the user. New cost accounting methods under the Defense Working Capital

Fund will continue to put great emphasis on physical distribution efficiencies.

d. Resistance to disruption. An effective commercial or military distribution system must have the resilience to continue operations when one or more segments are disrupted. Thus, alternative facilities, use of multiple modes of transportation, and redundancy in communications and control systems are all characteristics of efficient commercial and military distribution systems.

e. Maximum use of automated data processing equipment (ADPE) to control the distribution of materiel. The volume of individual transactions in both commercial and military distribution systems has dictated the use of ADPE throughout the distribution system. Additional applications for the use of ADPE are required particularly in the functional area of transportation.

f. Optimum use of storage. This refers to maintaining the appropriate inventory levels. Unnecessary inventories divert resources from training programs or new equipment acquisition. Also, inventory shortages impact training or mission accomplishment. Effective use of storage focuses on the ability to support the customer with appropriate inventories that are neither too great or too little. Optimum use of storage is an economy of logistics.

9. Performance Requirements of Military Distribution Systems.

a. The military logistician is constantly confronted with changing strategic considerations as well as technological advances which render previous plans and systems obsolete. In planning for a distribution system to meet logistical requirements, the military planner must know two basic pieces of information. He must know the performance requirements that will be placed upon the system as well as the "**real-life**" constraints that must be considered in the design of a military distribution system.

b. In order to be effective, the military distribution system must meet certain minimum performance requirements. It must be able to receive materiel from a wide variety of sources since the nature of the acquisition process establishes a multitude of supply sources due to the particular emphasis on competitive bidding. It must be capable of storing materiel in a sufficient number of locations within CONUS as well as overseas and be able to provide materiel to the customer configured to meet his needs. The distribution system must be able to effectively support the forces deployed rapidly to developing areas of the world in response to the customer's priority determination. Configuration of shipment profiles with respect to availability of MHE on the part of the recipient must be considered. Workable interfaces with non-military agencies that provide supply support to the DoD must be established. A reliable flow of materiel to overseas theaters must be provided in order to reduce in-theater stocks. This is best accomplished by a reduction in order-ship times using effective transportation and processing techniques. The system must be capable of retrograding and redistributing materiel as a planned element of physical distribution. Effective communications and control capable of rapid response must be provided for both peacetime and emergency requirements. This applies to asset visibility within the system as well as intransit visibility of these assets as they flow through the distribution pipeline.

c. In addition to the performance requirements involved, the military distribution system has several constraints placed on it with which logistics managers must be familiar. It includes the suitability and availability of the transportation resources throughout the system and the effects of peacetime economic actions upon this system. Also, the availability and suitability of communications, ADPE, high-speed automated MHE, and transfer transportation equipment, such as heavy lift helicopters, air cushion and amphibious vehicles for intratheater distribution, must be considered. Additionally, the compatibility of standard

packaging modules, unitization configurations, and preservation practices all serve as constraints on physical distribution. Last, the impact of domestic labor policies and practices as a constraint must be considered by managers.

10. The Office of the Secretary of Defense (OSD) (see Exhibit 1).

a. DoD includes the SECDEF, the Deputy Secretary of Defense, the Defense Staff Officers, the Joint Chiefs of Staff (JCS) and the Joint Staff, the military departments, and the military services within those departments. Also included are the unified and specified commands, and other DoD agencies that OSD establishes to meet specific requirements.

b. To assist OSD in the field of logistics, there is a Deputy Undersecretary of Defense (Logistics) (DUSD(L)). This individual is the principal staff assistant to the SECDEF for physical distribution management. The DUSD(L):

(1) Establishes policies and guidance governing DoD planning and program development.

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

(3) Reviews, evaluates, and makes procedural recommendations to the military departments, DLA, and other DoD agencies for carrying out approved policies concerning logistics support functions.

(4) Evaluates the administration and management of policies and programs.

(5) Recommends or directs appropriate management actions which will provide DoD with an effective, efficient, and economical administration and operation, and contributes to improved military preparedness.

(6) Exercises staff supervision over the Director, DLA.

c. Within the office of the DUSD(L) is a Deputy Assistant Secretary of Defense (Supply, Maintenance, and Services) who is directly responsible for physical distribution management. Also, there is a Director of Transportation and Warehousing Policy. This office, by means of DoD instructions and directives, develops DoD policies, programs, systems, and procedures in the area of:

(1) Transportation.

(2) Traffic management.

(3) Movement control.

(4) Warehousing and materials handling.

(5) Civil aviation (in support of the military services only).

(6) Air traffic control facilities.

(7) Packaging and preservation.

(8) Use of storage, warehousing, and terminal facilities.

11. Office, Secretary of the Army (SA).

a. The SA is a civilian head of the Department of the Army (DA). He is responsible for, and has the authority to conduct, all affairs of the department to include logistics planning and direction. He has delegated responsibility for developing Army physical distribution policy to the Deputy Chief of Staff for Logistics (DCSLOG). He is not directly concerned with operations. The SA is appointed by the President with the advice and consent of the Senate and has a civilian staff augmented by military staff members. One member of his staff is the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(A,L&T)).

b. The ASA(A,L&T) is the principal adviser and assistant to the SA for DA installations and logistics matters. Within the functional areas of logistics, supply, maintenance, and transportation management, he is responsible for:

- (1) Integrated logistics support (ILS).
- (2) Logistics management systems.
- (3) Troop support services.
- (4) Physical security of installations and materiel.
- (5) Energy conservation.
- (6) Logistics readiness.
- (7) Military traffic management, land transportation, and common user ocean terminal matters.
- (8) Chemical and nuclear surety.
- (9) Army Industrial Safety Program.
- (10) Telecommunications.
- (11) Logistical support and interface for North Atlantic Treaty Organization (NATO) standardization and interoperability.
- (12) Plans, programs, and budgets for logistics.

c. The office directly responsible for the physical distribution function is the Deputy for Supply, Maintenance, and Transportation. This office, following the guidance given by the DUSD(L) in DoD instructions and directives, interprets them in the form of DA circulars, DA regulations, etc., to fit the mission of the Army.

12. Office, Chief of Staff, U.S. Army (CSA) (see Exhibit 1).

a. The CSA is the principal military adviser to the SA. He is responsible to the SA for the efficiency of the Army and its readiness for military operations. He is appointed by the President with the advice and consent of the Senate, and becomes the senior military person of the Army. He is a member of the Joint Chiefs of Staff (JCS). He has a military staff to assist him. One member of the military staff is the Deputy Chief of Staff for Logistics (DCSLOG).

b. The DCSLOG has Army General Staff responsibility for plans, policies, programs, doctrine, and standards of the Army logistics organization and system, to include interservice and interdepartmental logistical support. This office participates in all phases of the logistics function. There are six major components within this office:

- (1) Aviation Logistics Office.
- (2) Transportation, Energy, and Troop Support Directorate.
- (3) Supply and Maintenance Directorate.
- (4) Resources and Management Directorate.
- (5) Plans and Operations Directorate.
- (6) Security Assistance Directorate.

c. The Office of the DCSLOG separates supply and transportation. Supply aspects of the physical distribution system are under the staff cognizance of the Supply Division in the Directorate of Supply and Maintenance. The Director of Transportation, Energy, and Troop Support is the staff adviser on transportation matters and is the Army point of contact with other DoD and Federal transportation agencies.

13. Army Materiel Command (AMC) (see Exhibit 1).

a. AMC consists of a worldwide network of military installations and activities such as ICPs, depots, laboratories, arsenals, maintenance shops, proving grounds, test ranges, and logistics assistance offices throughout the United States. Today AMC is responsible for the integrated management of materiel and the related logistical services required by the Army. This includes the life-cycle materiel functions to include research and development (R&D), test and evaluation, procurement and production, storage and distribution, inventory management, maintenance, and disposal.

b. The AMC missions are to:

(1) Perform assigned materiel functions of DA to include storage and distribution of ammunition and maintenance management.

(2) Provide managerial and related service support to U.S. and foreign customers to include contingency operations and international logistical agreements.

(3) Provide worldwide technical and professional guidance and assistance to customers to include deprocessing of equipment, training recipients of new materiel, and resolving problems in maintenance and ammunition.

(4) Command those subordinate commands, installations, and activities as may be assigned by Headquarters, DA.

c. The AMC Deputy Chief of Staff for Logistics (DCSLOG) is responsible for R&D and the Test and Evaluation Command. He directs the research, development, testing, evaluation, systems integration, and manufacturing technology for new systems as well as for major product improvements. The DCSLOG is also responsible for materiel readiness, the Security Assistance Command, the Industrial Operations Command, logistics management activities and logistics assistance offices. He directs the materiel requirements determination, the Integrated Logistics Support (ILS), and the follow on procurement. The DCSLOG gauges

the success of the logistics concepts and doctrine in supporting the equipment in the hands of the troops.

d. The national inventory management and supply control of assigned items has remained within the Directorate of Materiel Management, in the Inventory Control Point (ICP), within the major subordinate commands (MSCs). It is here the fiscal responsibility rests, where requirements are determined, and where procurement, storage of materiel, maintenance, and disposal decisions are made.

e. The following depicts the commodity-oriented commands and the type items assigned for management and/or development.

| <u>Command</u> | <u>Type Items Assigned for Management</u> |
|---|---|
| (1) U.S. Army Tank Auto-motive and Armaments Cmd (TACOM), Warren, MI | Tactical wheeled, tracked, and general-purpose vehicles; construction and services equipment; barrier, bridging, petroleum handling, and other general support equipment. |
| (2) U.S. Army Aviation and Missile Cmd (AMCOM), Redstone Arsenal, AL | Free rockets, guided missiles, ballistic missiles, target missiles, related special-purpose and multi-system test equipment, air defense missile fire coordination equipment, and other associated equipment; helicopters, fixed-wing aircraft, & associated secondary items. |
| (3) U.S. Army Armament and Chemical Acquisition and Logistics Activity (ACALA), Rock Island, IL | Weapons, combat vehicles, and fire control equipment; nuclear/non-nuclear ammunition rocket and missile warhead sections; chemical, munitions, NBC defense materiel, demolition munitions, pyrotechnics and propellant actuated devices. |

| <u>Command</u> | <u>Type Items Assigned for Management</u> |
|---|--|
| (4) U.S. Army Communications-Electronics Cmd (CECOM), Fort Monmouth, NJ | Communications equipment; communications electronics intelligence and electronic warfare equipment; avionics, combat surveillance target acquisition, night vision, Identification Friend or Foe (IFF) systems and Automated Data Processing Equipment (ADPE); photographic and microfilming materiel; radar, meteorological, and electronic radiological detection materiel; assigned electric generation equipment and electronic parts; and materiel common to electronic materiel throughout the Army. |
| (5) U.S. Army Soldier and Biological Chemical Cmd (SBCCOM), Natick, MA | Aeronautical and air delivery equipment, surface transportation equipment (other than vehicles); mapping and survey equipment; field food services and laundry and bath equipment. |

f. The following depicts the depots and designated missions.

(1) Maintenance depots perform depot level repair or overhaul of secondary and principal items.

DEPOT NAME

Anniston Army Depot,
Anniston, AL (ANAD)*

Corpus Christi Army Depot,
Corpus Christi, TX (CCAD)*

DEPOT NAME

Letterkenny Army Depot,
Chambersburg, PA (LEAD)*

Red River Army Depot,
Texarkana, TX (RRAD)*

Tobyhanna Army Depot,
Tobyhanna, PA (TOAD)*

*Colocated with DLA Distribution Center

(2) Ammunition depots colocated with DLA distribution Centers.

DEPOT NAME

Anniston Army Depot,
Anniston, AL (ANAD)

Letterkenny Army Depot,
Chambersburg, PA (LEAD)

Red River Army Depot,
Texarkana, TX (RRAD)

(3) Ammunition depots with special weapons missions.

DEPOT NAME

Blue Grass Army Depot,
Richmond, KY (BGAD)

Sierra Army Depot,
Herlong, CA (SIAD)

(4) Depot activities with reserve storage missions. Essentially, depot activities are operable depots that have had their missions, personnel strengths, and overhead costs reduced to that of reserve storage status capable of greatly enlarged activity if needed. They are remote storage sites under command of a distant command depot.

(5) Overseas supply activity. The Industrial Operations Command operates the Support Activity Far East.

14. Office, Secretary of the Navy (SECNAV)
(see Exhibit 1).

a. The SECNAV is responsible for policies and control of the Department of the Navy. This includes organization, administration, operation, and efficiency.

b. The SECNAV is appointed by the President with the advice and consent of the Senate. The Navy Staff organization, like the Army's, is a military staff. The Chief of Naval Operations (CNO), on a level with the CSA, is the senior naval officer and is a member of the JCS. The Deputy Chief of Naval Operations (DCNO) for logistics is his staff officer, responsible for the logistics function to include physical distribution and transportation policy. This responsibility does not include the Marine Corps.

c. The Department of Navy has five subordinate commands which are responsible for meeting the material needs of the naval operating forces for equipment, weapons or weapons systems, materials, supplies, facilities, maintenance, and support services. They are the:

(1) Naval Air Systems Command (NAVAIR).

(2) Space and Electronic Warfare Systems Command (SPAWAR).

(3) Naval Facilities Engineering Command (NAVFAC).

(4) Naval Sea Systems Command (NAVSEA).

(5) Naval Supply Systems Command (NAVSUP).

Of these five subordinate commands, three are designated as "hardware commands." They are: NAVAIR, SPAWAR, and NAVSEA. These hardware commands manage the principal or major items of the systems involved--a system's

responsibility. The secondary item support responsibility is vested in the Supply Systems Command. The Facilities Engineering Command is responsible for all civil engineering activities such as Seabees (Construction Battalion) operations to include physical plant constructions and maintenance.

d. The Naval Supply Systems Command is the supply manager of the Navy. In 1995, the Navy consolidated from two ICP's (Aviation Supply Office and Ships Parts Control Center) to the Naval Inventory Control Point (NICP) located in Mechanicsburg, PA. This organization manages all secondary items, including repair parts and ammunition. Major items are managed by the three hardware systems commands. Within the headquarters of the Naval Supply Systems Command, the Deputy Commander for Fleet Logistics Operations is responsible for physical distribution. Facilities include numerous Fleet and Industrial Supply Centers located at Norfolk, VA, Jacksonville, FL, San Diego, CA, Puget Sound, WA, Pearl Harbor, HI, and Yokosuka, Japan.

15. Commandant of the Marine Corps (see Exhibit 1).

a. The Commandant of the Marine Corps (CMC) is responsible to the SECNAV for the performance of the Marine Corps. As the senior officer of the Marine Corps, he is appointed by the President, with the advice and consent of the Senate, and serves as a coequal member of the Joint Chiefs of Staff. The Commandant has a military staff to assist him in the performance of his mission.

b. The current Marine Corps organization divides responsibility for logistics between the Deputy Chief of Staff for Installation and Logistics (DC/S I&L) and the Commander, Marine Corps Materiel Command (COMMARCORMATCOM). As such, DC/S I&L, located at Headquarters, U.S. Marine Corps in Washington, DC, is designated as the principal staff agency for logistics policy and

management. It is divided into the following divisions:

- (1) Contracts Division (LB).
- (2) Facilities and Services Division (LF).
- (3) Logistics Plans, Policies, and Strategic Mobility (LP).
- (4) Precision Logistics Office.
- (5) Installation Reform Office (LR).
- (6) Logistics Studies and Analysis Section (LX).

As of 1 Oct 99, COMMARCORMATCOM, located at Albany, GA, became the single process owner for Materiel Life Cycle Management in the Marine Corps. The Materiel Command is comprised of the following subordinate commands:

- (1) Marine Corps Systems Command (MARCORSYSCOM), headquartered at Quantico, CA.
 - (a) Marine Corps Tactical Software Support Activity (MCTSSA) at Camp Pendleton, CA.
 - (b) Program Manager, Light Armored Vehicles (PM/LAV) at TACOM in Warren, MI.
 - (c) Marine Corps Programs Office at Naval Air Warfare Training Systems Division (NAWTSD) in Orlando, FL.
 - (d) Program Manager, Lightweight 155 (PM/LW155), located at Picatinny Arsenal, NJ.
- (2) Marine Corps Logistics Bases (MARCORLOGBASES) headquartered at Albany, GA, with a West Coast base located at Barstow, CA.
 - (a) Blount Island Command (BIC) at Jacksonville, FL.

16. Secretary of the Air Force (SAF) (see Exhibit 1).

a. The SAF is a civilian head of the Department of the Air Force (DAF). He is responsible for and has the authority to conduct all affairs of the department. He is appointed by the President with advice and consent of the Senate. He has a civilian staff augmented by military staff members. He does not become directly concerned with operations. One member of this staff responsible for logistics and the physical distribution system is the Assistant Secretary of the Air Force, Acquisition (SAF/AQ). This office, following the guidance given by the ASD(P&L) in DoD instructions and DoD regulations, then interprets them in the form of AF regulations and AF pamphlets.

b. The Chief of Staff, U.S. Air Force (CSAF) is the military head of the Air Force. He is a member of the JCS. To permit the Chief of Staff to devote most of his time to the expanded duties in the Joint Chiefs, he is now empowered by law to delegate virtually all of his functions as military head of his service to his Vice Chief of staff. The principal staff within Headquarters, USAF, is the coordinating staff. It has six major components, five deputy chiefs of staff and the Air Force comptroller. The logistician is the Deputy Chief of Staff, Installations and Logistics (AF/IL).

c. The AF/IL has been delegated the staff responsibility for physical distribution policy within the Air Force. The Director of Supply exercises primary staff responsibility for physical distribution within that office. The AF/IL in the Air Force is relatively in the same position as the DCS for Logistics in the Army. Another office, Director of Transportation, is the staff adviser on transportation. He is also the Air Force point of contact with DoD agencies on transportation matters.

d. The mission of the Air Force Materiel Command (AFMC) is to provide logistics support and services (except medical) for USAF organizations, systems, and other activities as

directed by the Chief of Staff. To carry out its mission AFMC, through the three Air Logistics Centers (ALCs), performs six major steps. All of these steps are command functions. The six steps are based upon HQ Air Force programs and are supplemented by programs of AFMC. These steps are:

- (1) Determining needs.
- (2) Procuring the items needed.
- (3) Maintaining storage.
- (4) Maintaining items.
- (5) Controlling configuration.
- (6) Modifying items.

e. The three ALCs are where the actual logistics operations occur. Each ALC is assigned worldwide support responsibility for specified systems and commodities. Each ALC complex consists of an airfield, depot repair and overhaul shops, laboratories, warehouses, packaging facilities, shipping terminals for all types of transportation, and large automated data processing machines for inventory managing and processing the millions of transactions. A standard organization structure is prescribed down through branch level. All ALCs use identical procedures in the performance of common functions. Deviations from the standard patterns are authorized as needed. For example, San Antonio ALC, the only ALC managing nuclear ordnance, has a Directorate of Special Weapons. The ALC commander, a two-star general, has a staff similar to the HQ AFMC staff, with four mission directorates and the usual support elements.

f. Each of the ALCs are assigned both system and commodity responsibilities on a worldwide Air Force support basis. The ALC is a single-point manager responsible for the full ICP fiscal inventory management required to support the operation of the system or use of the commodity. In addition, each ALC is

designated a Technology Repair Center (TRC) for a particular kind of homogeneous workload. This permits the development of the leading state of the art within a single responsive industrial facility. Each of the ALCs has an ICP function for the system/commodities for which they have mission responsibility. Therefore, there are three ALCs and three ICPs. The Director of Materiel Management has primary responsibility for the ICP function.

g. Locations of the three ALCs are:

(1) Oklahoma City ALC, Tinker AFB, OK.

(2) Ogden ALC, Hill AFB, UT.

(3) Warner Robins ALC, Robins AFB, GA.

(4) Sacramento ALC, McClellan AFB, CA (BRAC 95). Closed 13 Jul 01.

(5) San Antonio ALC, Kelly AFB, TX (BRAC 95). Closed 13 Jul 01.

h. The management approach used by AFMC to support Air Force systems is referred to as Integrated Weapon System Management (IWSM). This management process provides:

(1) A single manager for weapon systems from cradle-to-grave. A single manager is responsible for a weapon system at every point in its life cycle and provides the user one-stop shopping for weapon/ military systems and their support.

(2) A single face to the user. Operational commands work with a single manager to: define system requirements to meet their mission needs; conduct cost, performance, supportability, and schedule tradeoffs; and provide maintenance, modifications, upgrades, safety fixes, etc. This customer orientation by the single manager facilitates contractor and other government agency interaction.

(3) An organization of seamless processes. The IWSM process eliminates seams that existed prior to the establishment of the AFMC. Integrating commands under AFMC focuses efforts on program continuity under a single manager rather than transfer of function, and streamlines separate, parallel, and interdependent processes such as financial management, contracting, and technology insertion.

17. Defense Logistics Agency (DLA) (see Exhibit 1).

a. DLA is an agency of the Defense Department headed by a military director responsible to the SECDEF for **providing services and consumable supplies used by the military services**. DLA is essentially a manager of those item managers at the wholesale level who are responsible for the most commonly used items such as food, clothing, medical, textile, chemical, industrial, petroleum, construction, electronics, and general supplies. It is one of the major organizations through which the SECDEF operates DoD. The position of director is rotated among the military services and is usually of three-star rank.

b. The DLA missions are to:

(1) Provide effective logistics support to operating forces of the military services in war and peace, and to Federal civil agencies, as assigned.

(2) Provide the support at the lowest feasible cost to the taxpayer.

(3) Provide contract administration services in support of the military departments, other DoD components, the National Aeronautics and Space Administration (NASA), and other Government agencies upon request.

c. DLA provides logistics support in two areas.

(1) Supply Support. DLA procures, stores, and distributes an immense variety of

items used by the military. The Defense Reutilization and Marketing Offices (DRMO) also provide supplies through redistribution of materiel.

(2) Logistics Services. DLA functions include the responsibility for administration and supervision of the DoD Coordinated Procurement Program; the Federal Catalog Program; the Defense Materiel Utilization Program; the Defense Personal Property Utilization and Disposal Program; the DoD Industrial Security Program; the DoD Industrial Plant Equipment Program; the DoD-Wide Program for Redistribution/Reutilization of Excess Government-Owned and Rented Automatic Data Processing Equipment; operating functions of the Defense Contract Compliance Program; and the National Defense Stockpile Program.

d. DLA is essentially a civilian organization with the key positions jointly staffed by members of uniformed personnel of the Army, Navy, Air Force, and Marine Corps.

e. The Director of DLA has delegated his responsibility for physical distribution to the Executive Director, Distribution. Unlike the services, there are no intermediate headquarters or commands such as DCSLOG or AMC. The Executive Director for Supply Operations deals directly with the defense supply centers.

f. Organizationally, the four defense supply centers (DSCs) are on the same level as the Army MSCs, the naval systems commands, the Marine Corps logistics base, and the Air Force air logistics centers. These defense supply centers each have ICP functions in that they perform all wholesale supply management functions including requirements computations, supply control, provisioning, procurement, requisition processing, inventory accountability, financial accounting, billing, collecting, and reporting. Locations and missions of the four DSCs are:

(1) Defense Supply Center (DSCC), Columbus, OH, provides land and sea weapons systems support.

(2) Defense Supply Center (DSCR), Richmond, VA, provides aviation weapons systems support.

(3) Defense Energy Support Center (DESC), Alexandria, VA, provides fuel and energy support.

(4) Defense Support Center (DSCP), Philadelphia, PA, provides troop and general support.

g. DLA is the single manager for wholesale distribution center operations for the DoD and is responsible for **receiving, storing, maintaining, and issuing of supplies as directed by the owning DLA or service ICP**. The consolidation of Army, Air Force, Navy, Marine Corps, and DLA distribution centers under the command and control of DLA began April 1990 and concluded March 1992. DLA distribution centers are currently organized into a single region, referred to as the Defense Distribution Center (DDC) (see Exhibits 2&3). The DDC Commander reports to the Defense Logistics Support Command, HQ DLA.

Former service distribution centers are under the total management of DLA. Service distribution centers with multiple missions are jointly managed. Specifically, DLA is responsible for the distribution mission and the service has command and control of other missions (e.g., maintenance).

h. While the distribution centers and facilities discussed form the major portion of the distribution system, another DLA mission involves the distribution of perishable subsistence items requiring refrigerated facilities. More than 20 such facilities are used by Defense Supply Center Philadelphia in CONUS. Three facilities--at Alameda, CA; Bayonne, NJ; and Williamsburg, VA--are Government owned. The others are commercial

facilities operated under the DoD Commercial Warehouse Service Plan administered by DLA.

i. DLA is responsible for custody and management of the national stockpile of critical and strategic materials, and maintenance of the National Industrial Equipment Reserve.

18. Defense Contract Management Agency. Provides contract administration services in support of the military departments and other DoD components, NASA, other designated Federal and State agencies, and friendly foreign governments. These services include contract management, pre-award surveys, quality assurance, payment to contractors, support to small business and labor surplus areas, transportation and packaging assistance, surveillance of contractor progress to ensure timely delivery of materiel, assistance and liaison with small business and, finally, contract compliance with the numerous Federal acts, public laws, and Executive orders.

19. General Services Administration (GSA).

a. GSA is not a part of DoD, but it does play an increasingly important supporting role in the field of procurement and distribution of supplies.

b. GSA missions include:

(1) Providing and maintaining office building space.

(2) Procurement and distribution of supplies.

(3) Archival administration and records management.

(4) Transfer of excess property among agencies for further Federal use and the disposal of surplus property to Government needs.

(5) Transportation and traffic management assistance to Federal agencies, including operation of a Federal fleet of cars and trucks; public utilities management; supervision

and operation of Federal telecommunication systems to include voice, teletypewriter, and data transmission.

c. The Office of Federal Supply and Services (FSS), the procurement arm of the Federal Government, is that part of GSA that impacts upon DoD. The FSS buys, stores, and distributes approximately 49,000 common-use items for Federal agencies. Items include office supplies, furniture, machine and handtools, standard forms, baby food, snakebite kits, photographic supplies, toothpaste, and paint brushes. These items, depending upon the size of the using agency's needs are distributed through a nationwide network of supply facilities including self-service stores. Items not suited for long-term storage are procured through Federal supply schedules directly from commercial sources. FSS develops specifications and standards to ensure maximum value received.

d. GSA/FSS has 10 regional offices and a headquarters which is located in Crystal City, Washington, DC. The Office of Federal Supply and Services is an organization of centralized national commodity-oriented inventory control centers similar to the centralized national inventory control points (NICP) of the military services. In some cases, a region may be the national center for a specific commodity. Other examples of this commodity-oriented, centralized management system can be seen in the formation of the National Furniture Center and the National Automotive Center in Washington, DC plus the National Tool Center split between Washington, DC and Kansas City. These centers perform single-point management for those inventory items purchased for all regions or customers. Certain residual activities such as quality assurance, storage, disposal, and motor pool activities still remain in each region. In addition, there are approximately 100 distribution points worldwide, chiefly self-service stores located to give optimum service in areas of Federal concentration.

e. The GSA Federal supply system is compatible with DoD activities in the use of the MILSTRIP-FEDSTRIP and the Uniform Materiel Movement Issue Priority System (UMMIPS).

19. Summary. This chapter began with a discussion of the concept of physical distribution and those subfunctions that make up a distribution system. Moreover, a military distribution system and its related elements were addressed. Also, the interrelationships between the components of a distribution system were presented focusing on the necessity for the logistics planner to manage these subfunctions as a total system. Furthermore, it was noted that the logistics planner must place continuing emphasis on improving the military distribution system in order to better utilize limited resources. With this in mind, objectives for an effective distribution system and performance requirements for the design of military distribution systems were presented. In addition, it was identified that the logistics planner must be alert to new opportunities for system improvement as changes occur in the environment in which the distribution system operates. Overall, the greatest challenge for distribution system managers is to manage the various distribution subfunctions as a total system. In so doing, the manager prevents selective management of individual subfunctions and elements at the expense of the total distribution system.

EXHIBIT 1

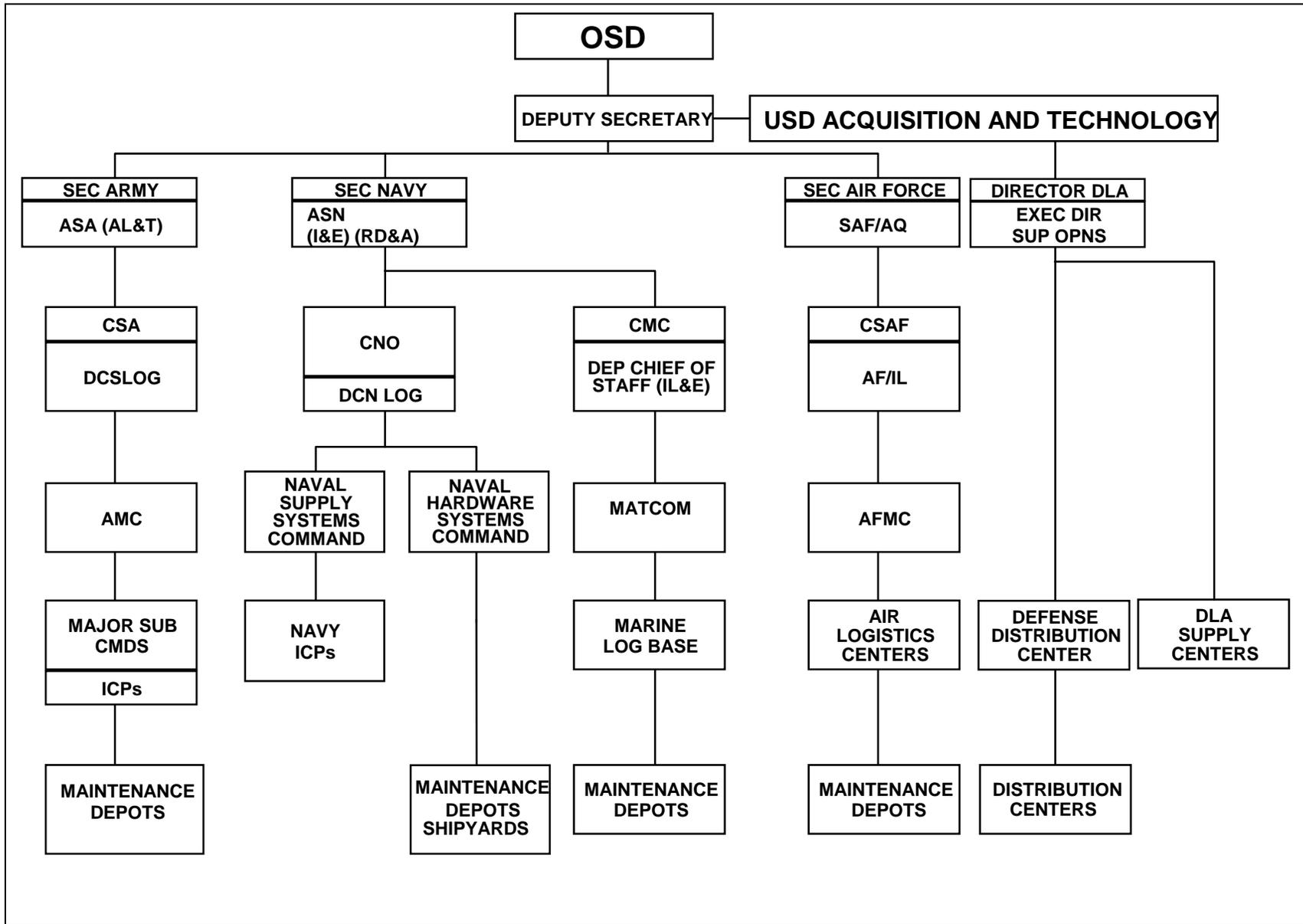


EXHIBIT 2

DEFENSE DISTRIBUTION CENTERS

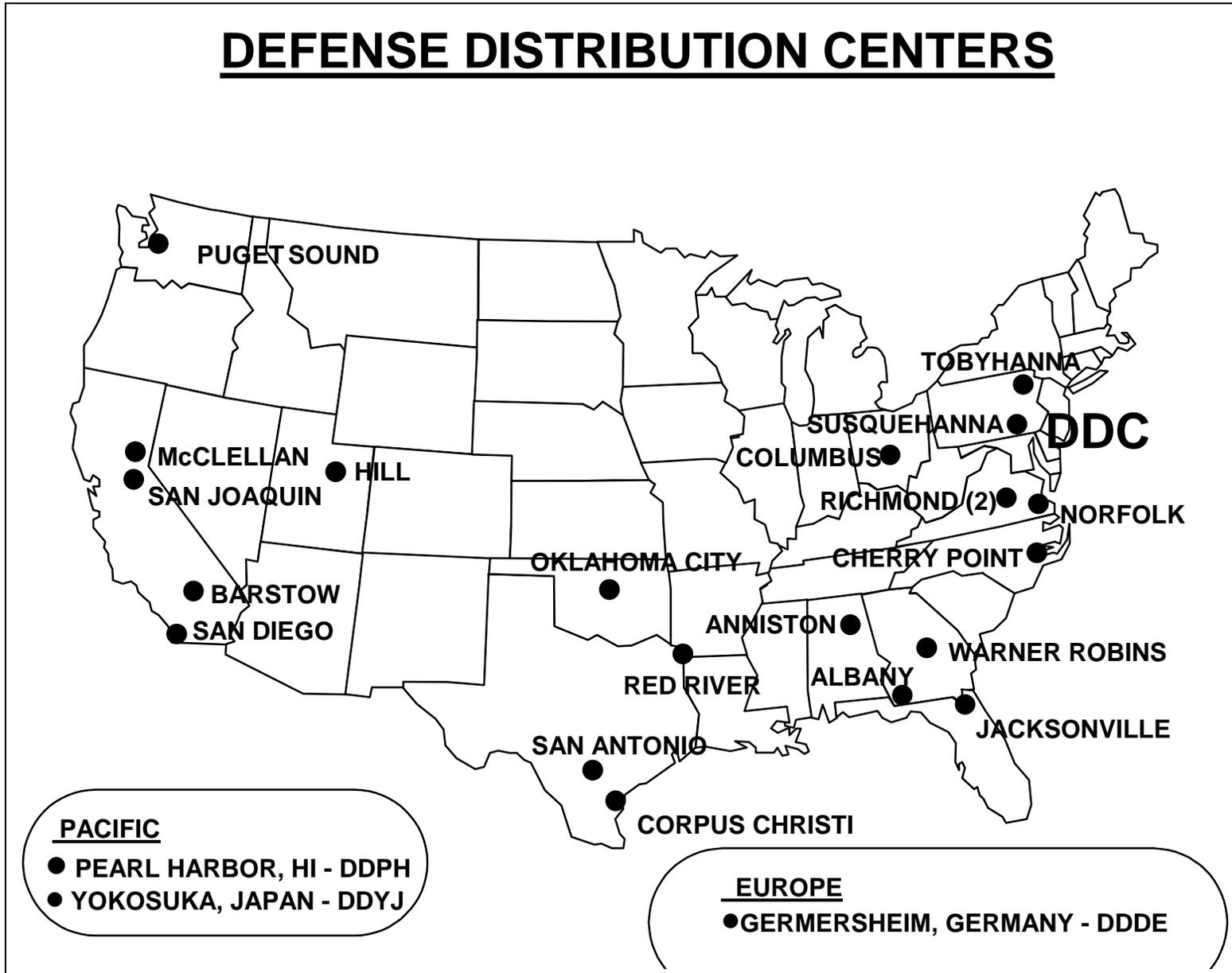
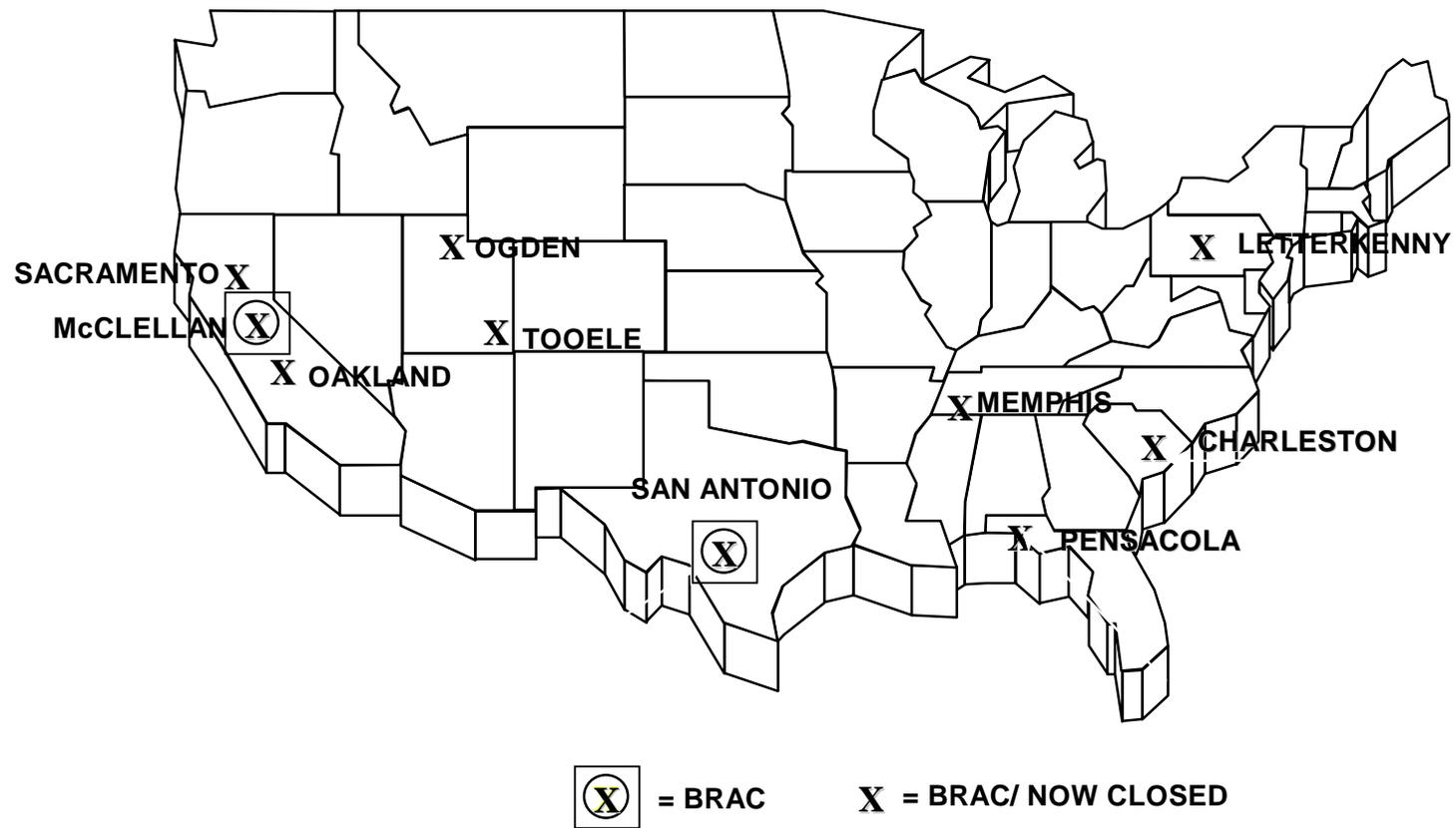


EXHIBIT 3

DEFENSE DISTRIBUTION CENTER CLOSURES



OUTLINE FOR NOTETAKING

DoD ORGANIZATION FOR PHYSICAL DISTRIBUTION

I. Physical Distribution

A. Definition

B. Subfunctions

II. Military Distribution System

A. Definition

B. Elements

III. Objectives of an Effective Distribution System

IV. Performance Requirements of Military Distribution Systems

V. DoD Organization

VI. Services

A. Army

B. Navy

C. Marine Corps

OUTLINE FOR NOTETAKING (Continued)

DoD ORGANIZATION FOR PHYSICAL DISTRIBUTION

D. Air Force

VII. DLA

A. Missions

B. Defense Supply Centers

C. Defense Distribution centers

VIII. GSA

A. Missions

B. FSS

IX. Summary

DoD ORGANIZATION FOR PHYSICAL DISTRIBUTION**STUDY QUESTIONS**

1. Define physical distribution and military distribution system. What is the key difference?
2. Identify the four subfunctions of physical distribution. What role is played by each?
3. Identify four elements of a military distribution system. What are key characteristics of these elements?
4. Identify the objectives of an effective distribution system.
5. Identify five performance requirements of a military distribution system. Why are they significant?
6. Who is the principal advisor and assistant to the SECDEF on matters of logistics? To the Director of DLA?
7. Identify the major functions of a distribution center.
8. Compare the responsibilities of an ICP/DSC with that of a distribution center. What is the main difference between their roles?
9. DLA provides logistics support and services to DoD in three major functional areas. What are they? What is a characteristic of the type of items handled by DLA? Through what types of activities are DLA items distributed?
10. Which major organizational component of GSA provides supply support to federal agencies, including DoD? Is it centrally or regionally oriented for inventory management and materiel distribution?

DoD ORGANIZATION FOR PHYSICAL DISTRIBUTION

MATCHING EXERCISE

NOTE: Answers to quiz may be used more than once.

- | | | |
|---|-------|---------------------------------------|
| 1. The movement and handling of goods from point of production to point of consumption or use. | _____ | A. Military Distribution System |
| 2. Includes facilities, transportation network, communication and control, and inventory policy. | _____ | B. Physical Distribution Subfunctions |
| 3. That complex of facilities, installations, methods and procedures designed to receive, store, maintain, distribute, and control the flow of military materiel between point of receipt into the military supply system and the point of issue to using activities and units. | _____ | C. Physical Distribution |
| 4. An activity which is designed to provide for the maintenance and distribution of munitions and special weapons. | _____ | D. Distribution Center |
| 5. An activity which is designed to provide for the supply, storage and distribution of secondary items in support of our armed forces for a specific geographic area. | _____ | E. Distribution Center Activity |
| 6. The location of Consolidation and Containerization Points (CCPs) for support of the Direct Support System (DSS). | _____ | F. Headquarters, DLA |
| 7. An activity which is designed to perform depot level maintenance and storage and distribution of major items. | _____ | G. Ammunition/Special Weapons Depot |
| 8. An activity with a reserve storage mission and/or a reduced maintenance capacity. | _____ | H. Maintenance Depot |
| 9. Responsible for receipt, storage, and issue of material as directed by the ICP. | _____ | |
| 10. Is the single manager of wholesale distribution centers throughout the DoD. | _____ | |

**ANSWERS TO
DoD ORGANIZATION FOR PHYSICAL DISTRIBUTION
MATCHING EXERCISE**

1. C
2. B
3. A
4. G
5. D
6. D
7. H
8. E
9. D
10. F

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