

Chapter 12

Logistics

“Logistics has its roots in the national economy. In this area it is dominated by civilian influences and by civilian authority...[so] the major criterion of logistics is production **efficiency**. On the other hand, the end product of logistics lies in the operations of combat forces. There logistics is dominated by military influence and by military authority...[so] the major criterion is its **effectiveness** in creating and sustaining combat forces in action against an enemy. Because logistics is under two dominant influences, it is obvious that circumstances may arise under which the civilian criterion and the military criterion are in harmony — or at times, they are opposed. This is the root of many of the existing differences of opinion as to national defense organization: the criteria of judgment used by civilian executives are frequently different from criteria used by military commanders.”

Rear Admiral Henry E. Eccles, *Logistics in the National Defense*

Section I Introduction

12–1. Chapter content

a. The Nature of Logistics. Webster’s defines logistics succinctly as: *The procurement, maintenance, distribution, and replacement of personnel and materiel.* The logistic lessons of World War II and subsequent full-spectrum operations have taught us that the luxury of time is not always available and that planning and preparing pays off in logistics as it does in all other operations. The post-Cold War environment is no exception, and requires an adaptive and smaller force projection Army rather than relying on a Cold War-style, large and forward-based force. This environmental change has significant logistics implications, to include requiring a smaller “logistics footprint” OCONUS and relying on anticipatory, swift, and dependable “reachback” capabilities along lengthy strategic lines of communications. The primary mission of the Army logistics system is to support the joint force commander (JFC) with *what* is needed, *when*, *where*, and in the *condition* and *quantity* required, and in the most *economical way* possible in the eyes of the U.S. taxpayer.

b. The Paradox of Logistics. As the opening quotation reflects, logistics must be both efficient and effective, at times creating a paradox for the DOD. For example, to be efficient, the Army must purchase, store, distribute, and retire materiel at a reasonable cost. At the same time, to be effective, the numbers and types of logistics capabilities required in operations depend not on reasonable cost, but on factors of mission, enemy, terrain and weather, troops and support available, time available and civil considerations (hence, the Army acronym, METT–TC, is pronounced “met-tee-see”). These two values, efficiency and effectiveness, often compete in formulating decision criteria that affect all logistics policy and activity.

c. Chapter Contents. This chapter provides an executive overview of the nature and structure of the Army’s national logistics system. It describes:

- Key definitions and concepts (from factory to foxhole).
- National Logistics (The Army G4 and AMC)
- National Logistics (Other Organizations)
- Standard systems.
- Funding.
- Security assistance.

12–2. Key definitions and concepts (from factory to foxhole)

a. Principles of Logistics. Based on over 200 years of experience, the following principles have general applicability to logistics (developed by James A. Huston, *The Sinews of War*):

- First with the most. The primary purpose of logistics is to deliver adequate potential or actual firepower or shock to critical places at critical times for achievement of tactical, operational, and strategic objectives.
- Equivalence. Strategy, tactics, and logistics are different aspects of the same thing and if separated they become meaningless concepts. Together, they form the basis for the conduct of major operations and campaigns.
- Materiel precedence. Materiel mobilization must precede personnel mobilization because the lead times are much longer.
- Economy. Logistics resources are almost always limited and it is necessary to concentrate them in the best way to achieve the primary mission.
- Dispersion. Within reasonable bounds storage and other logistics activities should be dispersed, and multiple lines of communication should be used when possible.
- Flexibility. Since often it is not possible to count on prior strategic plans, it is necessary to be prepared to support

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- any of a number of different plans or decisions across the entire spectrum of military operations.
- Feasibility. Not only are military plans limited by the feasibility of logistics support, but also logistics plans themselves are subject to the capabilities of the national economy.
- Civilian responsibility. Procurement activity must be coordinated with the needs of the civilian economy, and the chief reliance for the production of military goods remains with private industry.
- Continuity. The perfection of logistics organization and development of production models of essential systems should be a continuous process in peacetime for war.
- Timing. Timing must be relative to the objective, whether in high-level procurement or tactical supply.
- Unity of Command. Logistics is a function of command.
- Forward Impetus. A system of continuous replenishment from sanctuary to elements engaged in operations is vital.
- Information. Accurate and up-to-date information is key to logistics planning and distribution.
- Relativity. All logistics is relative to time, space, and circumstances and can never be absolute.

b. The Army can be viewed from two major levels of logistics support-national and theater.

(1) *National.* “National logistics is the process of planning for and providing goods and services for the support of the nation’s military forces and its operations, a nation’s civilian economy, and its international obligations and requirements.” National-level logistics concerns include assurance of availability of strategic materials and fuels, supporting a military industrial base, developing and procuring new materiel systems, maintaining and improving critical logistics infrastructure, and rebuilding and improving old materiel systems. National logistics is governed by civilians, in both the Executive Branch, through the President and Secretary of Defense, and the Congress, through oversight activities and budget appropriations. The “strategic-national” logistics tasks to “provide sustainment,” identified in the Universal Joint Task List (CJCSM 3500.04C), are:

- Set Sustainment Priorities
- Acquire Materiel
- Acquire, manage, and distribute funds
- Procure and distribute personnel
- Provide for Base Support and Services
- Provide for Personnel Support
- Reconstitute National Forces and Means

(a) DOD relies on the Service departments, its Defense Logistics Agency (DLA), and non-DOD government agencies (such as the General Services Administration (GSA)) to manage these concerns. National-level functions have been generally performed in the CONUS and are intended to support and sustain theater activities in the homeland or abroad. The Secretary of Defense issues logistics guidance to the Services as part of the DPG. Within this broad guidance, the Services and defense agencies develop programs for logistics.

(b) The Army’s national logistics functions stem from its primary mission required by law. The Army shall “be organized, trained, and equipped primarily for prompt and sustained combat incident to operations on land.” (10 USC, Sec. 3062). Army organization for national logistics has evolved in response to the changing global environment. Some key national logistics functions are to:

- Develop requirements and capabilities for national logistics.
- Identify strategic risk to the President, Secretary of Defense, and Congress when logistics requirements exceed national and/or international capabilities.
- Serve as the bridge between the Nation’s economy and its military needs.
- Develop logistics policy, systems, and processes to create and sustain support to forces across the full spectrum of military operations.
- Establish reserves of equipment and supplies required for crises and mobilization.
- Formulate logistics doctrine (both Army- and with our joint and allied partners). - Acquire, distribute, maintain, and dispose of Army materiel systems.
- Develop equipped, trained and ready Army logistics forces.
- Assure bases of operations and training are established, developed, secured, and maintained both in the homeland and overseas.
- Assure strategic lines of communication are created and have sustained support.
- Provide logistics support to other Services and allies and perform Federal-level executive agent tasks as directed.

(c) HQDA establishes broad logistics policy direction and exercises staff supervision primarily through the Assistant Secretary of the Army for Acquisition, Logistics, and Technology, or ASA (ALT). The Army Deputy Chief of Staff, G-4 (“Army G4” for short) and AMC are the Army’s national Assistant Secretary of the Army (Acquisition, Logistics, and Technology) level logistics staff and operator.

(d) Other organizations that contribute to national-level logistics include:

- U.S. Army Corps of Engineers (USACE).
- CONUS Army major commands in (MACOMS), including TRADOC, MEDCOM, FORSCOM, and SDDC.
- Theater-oriented ASCC (such as U.S. Armies Europe, Pacific, and South, and Third U.S. Army).
- The Army and Air Force Exchange Service (AAFES).
- Defense Logistics Agency (DLA).
- Defense Contract Management Agency (DCMA).
- Defense Commissary Agency (DeCA).
- National Image and Mapping Agency (NIMA)

(2) *Theater*. Theater logistics is the “process of planning for and providing goods and services to support military forces” that operate in specified areas of the world directed by the Secretary of Defense and the President in concert with the geographic COCOM commander. Logistics support is focused on the movement and sustainment of forces operating in joint and combined environments. Theater-level logistics concerns are oriented on sustaining full-spectrum operations both homeland-based (CONUS) and forward-based (OCONUS). The “strategic-theater” logistics tasks to “sustain theater forces,” identified in the Universal Joint Task List (CJCSM 3500.04C), are:

- Coordinate the fixing and maintaining of equipment
- Coordinate support for forces in theater
- Establish and coordinate distribution of supplies/services for theater campaign and the communications zone.
- Develop and maintain sustainment bases
- Acquire, manage, and distribute funds
- Minimize safety risks Theater-level functions may be subdivided into three types:

(a) *General support*. (GS). GS-level activities are normally concerned with area logistics support to forces within the COCOM commander’s geographic area of responsibility and in concert with a specific theater or joint operations area when designated. GS is provided by echelon-above-corps (EAC) and corps-level Army field units (i.e. table of organization and equipment of “TOE” units), Army garrison-type activities (table of distribution and allowances or “TDA” organizations), contractor, and/or host nation support (HNS) activities.

(b) *Direct support*. (DS). DS field units support specific user units and activities on a habitual and dedicated basis.

(c) *User*. User logistics activity includes performing unit and operator maintenance on unit equipment and accomplishing internal unit supply and distribution functions.

c. The national and theater logistics concepts are evolving (see table 12–1). It is important to note that distinction between national and theater logistics processes is being blurred by movement toward more centralized management, flattening to a two-level maintenance (TLM) system, and a vision of logistics support that transcends traditional lines of communication (i.e. strategic lines of communication may extend all the way to the objective area). Other initiatives such as the single stock fund SSF (see para 12–4b(1)(b)), national maintenance program, and efforts to modernize logistics AISs are designed to create more seamless logistics levels and to ensure that units are fielded, equipped, and sustained in a more integrated manner. Logistics tasks and roles which were previously national or theater in nature are merging to create a more networked organization from depot to foxhole. Perhaps the Army logistics system of the future will not distinguish between these levels. Figure 12–1 shows how lines of operation and communication might exist both strategically and within theater.

The difference between national- and theater levels of logistics tasks are becoming blurred as the Army continues to streamline logistical processes "between factory and foxhole."

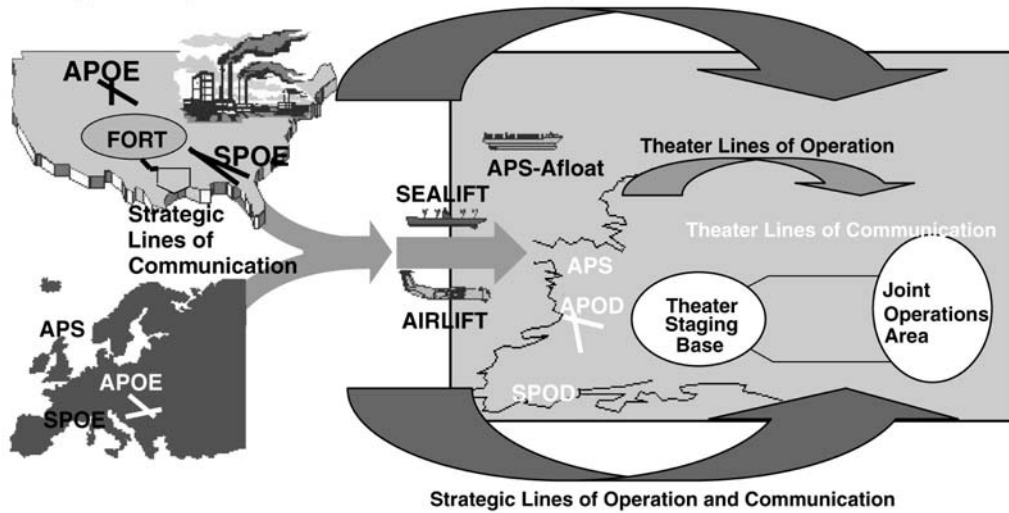


Figure 12-1. Strategic lines of operation and communication

Table 12-1
Foci of national and theater logistics

National logistics Foci (DOD, services, Non-DOD)	Theater logistics Foci (CBT, CDR, JFC, and/or ASCC)
Mobilization and deployment Requirements	Deployment sequence/prioritization Reception, staging, onward movement and integration of Army forces
Acquisition and industrial base Stockpiling Global propositioning Strategic mobility Strategic reconstitution Redeployment Demobilization Strategic lines of communications Installation/Bases	Combat service support of the campaign Support to other services Basing/sustainment engineering Distribution management Reconstitution of Army forces Host nation agreements/implementation Lines of communication to the tactical units

d. For the purposes of this chapter, Army logistics includes the following activities (mobilization, acquisition, military human resource management, civilian personnel management, health service support, installation management are discussed extensively as unique "logistics" activities in Chapters 6, 11, 13, 14, 17, and 19, respectively):

(1) Supply involves acquiring, managing, receiving, storing, issuing, and maintaining visibility and control of all classes of supply required to equip and sustain forces across the full spectrum of military operations. It is a wide-ranging function that extends from determination of requirements and buying materiel at the national level down to the issue of items to the user in the joint operations area. Classes of supply include:

- I - Subsistence (food and water).
- II - General items (everything from expendable office supplies, clothing and individual equipment, and tools to tents).
- III - Petroleum, Oils, & Lubricants.
- IV - Construction Materiel (fortification, barrier, and construction materiel).
- V - Ammunition.
- VI - Sundries (personal items that could be purchased in a commercial store).
- VII - Major end items of equipment (such as an M1A2 Abrams tank).

- VIII - Medical items (both consumables and equipment).
- IX - Repair Parts.
- X - Non-military or civil-governmental unique items.

(2) Transportation is moving and transferring unit personnel, equipment, and supplies in support of National objectives and the JFC's concept of operations. Transportation incorporates military, commercial, and host- or allied-nation capabilities. Transportation activities include: linking motor, rail, air and water transportation modes; operating terminals and ports, creating and maintaining transportation infrastructure; and, the movement planning and control of personnel, equipment and supplies.

(3) Distribution is the integration of personnel, supply, and transportation to ensure the users receive the right resources when needed and at the right place. It includes all actions performed to deliver required resources (units, materiel, personnel, and services) to, from, and within a theater. Some call this "inventory in motion."

(4) Maintenance keeps materiel in operational condition, returns it to service, and/or modernizes its capability. It includes performing preventive maintenance checks and services (PMCS). High technology allows materiel to be produced or upgraded with embedded diagnostics and prognostics. Maintenance also involves recovering and evacuating disabled equipment; diagnosing equipment faults; substituting parts, components, and assemblies; exchanging serviceable materiel for unserviceable materiel; and repairing equipment.

(5) Services and Troop support involves feeding, clothing, and providing personal services to forces. It consists of clothing exchange, laundry, shower, textile repair, mortuary affairs, preparation for aerial delivery and airborne activities, and food services.

(6) Security Assistance (SA). SA is a group of programs authorized by the Foreign Assistance Act (FAA) of 1961, the Arms Export Control Act, as amended, and other related statutes. These programs include: Foreign Military Financing (FMF) and the International Military Education and Training (IMET) Program, which are grants; and the FMS Program, which is cash or financed purchases. Through these programs, the United States provides defense articles, military training, and other related services to allied and friendly foreign countries in furtherance of national security.

(7) Facilities engineering (sometimes called "sustainment engineering") is concerned with buildings, real property, environmental management, etc. This activity affects the ability of Army logistics elements to support joint operations. Joint forces are often dependent on underdeveloped logistics infrastructure. National logistics foci for engineers include creating or developing bases, ports, roads, bridges, waterways, and so on to support mobilization and deployment. Theater logistics operations, such as force reception, staging, and onward movement and integration, require storage facilities, road and rail networks, and seaports and airfields built and/or sustained by engineers. Though not a doctrinal Army logistics function, engineering support is considered a logistics activity in joint doctrine. Engineers play a critical role in the delivery of logistics by enhancing these capacities. Their responsibilities include support to other Services, agencies, and allied military forces in joint and multinational theaters of operations. Planning factors include the size of the support bases required, existing HN infrastructure, and the force protection situation.

(8) Logistics technical system development and application. The logistics technical system consists of the tools, techniques, processes, devices, artifacts, methods, configurations, procedures and knowledge used by organizational members to acquire inputs, transform inputs into outputs and provide outputs or services to clients or customers. The logistics system is holistic and interdependent, also comprised of military organizations and contractors, working within established policy, toward creating, moving, and providing sustained support to U.S. Army forces, other Services, and allies. The Army has developed and applied many "standard" systems that connect the parts of the logistics system. These will be covered in more detail in this chapter.

Section II

National Logistics Organization: ASA (ALT); the Army G-4; and, Army Materiel Command

12-3. Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA (ALT)).

The ASA (ALT) is a civilian political appointee and as such is responsible to provide Executive Branch/DOD civilian oversight of Army logistics. The office of the ASA (ALT) consists of the following sub-elements: The Deputy Assistant Secretary of the Army for Research & Technology; Deputy Assistant Secretary of the Army for Policy and Procurement; Deputy Assistant Secretary of the Army for Defense Exports and Cooperation; Deputy for Systems Management; Deputy Assistant Secretary for Plans, Programs and Resources; Deputy Assistant Secretary of the Army for ILS; Director Acquisition Support Center; and, the Executive Secretary for ASB. ASA (ALT) also provides staff supervision over the U.S. Army Contracting Agency. ASA (ALT) serves, when delegated, as the AAE, the Senior Procurement Executive, the Science Advisor to the Secretary, and as the senior R&D official for the DA. The ASA (ALT) also has the principal responsibility for all DA matters related to logistics. Among these logistics responsibilities are:

- a. Advising the SECARMY on all matters relating to acquisition and logistics management.

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b. Overseeing the logistics management function including readiness, supply, services, maintenance, transportation, and related automated logistics systems management.

c. Reviewing the SA portions of the Army International Affairs Plan to ensure that they are logistically sound and supportable and compatible with the Army's Research, Development, Acquisition, and Industrial Base Programs.

d. Overseeing the Army Industrial Base and Industrial Preparedness Programs.

12-4. Deputy for Integrated Logistics Support (ILS), ASA (ALT)/Army G-4.

The Army G-4 is "dual-hatted" in that he also serves the SECARMY as the ASA (ALT) responsible official for sustainment and his Deputy for ILS. The Deputy for ILS serves as the independent logistician for the Army G-4 in his role as the Responsible Official for Sustainment to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA [ALT]), on acquisition programs. The ILS Office is responsible for providing the Army G-4 with an independent ILS assessment of equipment and weapons systems requirement documents, equipment and systems in development and of fielded systems, to ensure supportability and sustainability is adequately addressed and maintained throughout the system's lifecycle. Members of the ILS office staff serve on integrated product teams as independent logisticians to influence product definition, design and supportability beginning with pre-systems acquisition planning.

a. *Army G-4 organization.* An organizational chart for the Army G-4 is at Figure 12-2.

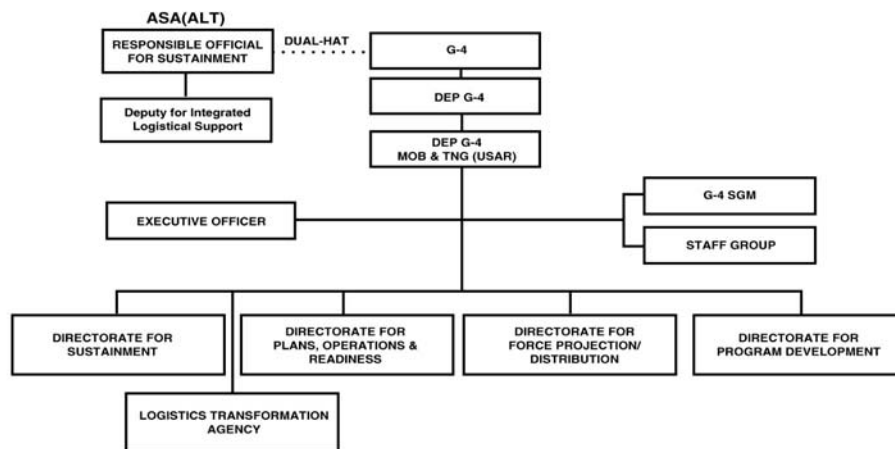


Figure 12-2. Army G-4 organization

b. *Army G-4 functions.* On the ARSTAF side, he is Deputy Chief of Staff, G-4 (or "Army G-4") and is responsible to the Chief of Staff, Army for policy, planning, programming, budgeting, management, staff supervision, evaluation, oversight and information system support for logistics activities of the DA. The Army G-4 has staff responsibility for overall coordination of the major logistics disciplines: Supply, Maintenance, Readiness, Materiel, ILS, Troop Support, Energy, Transportation and Mobility, and is responsible for coordinating the logistics mission requirements and activities of the U.S. Army Reserve and the Army National Guard with those of Active Component forces. The Army G-4 is responsible for the development and staff supervision of Army logistics organization, operations, and systems worldwide, including logistics readiness, planning, policies, doctrine, resource determination and allocation, objectives, force structure, and standards. The Army G-4 serves as the principal ARSTAF representative and focal point for SA matters. The Army G-4 participates in and contributes to all phases of the research, development, and acquisition process (concept through deployment) and is responsible for support of materiel systems from production output through disposal. The Army G-4 exercises general staff supervision over the Army Surgeon General as pertains to Army class VIII management for medical materiel. The Army G-4 is responsible also for stewardship and advocacy of logistics resources in support of the operational capability of the Army, assessing and improving the efficient use of logistics resources, and the planning and implementing of business management concepts and practices for logistics programs. Finally, the Army G-4's charter for Army Transformation, as part of the *Army Vision*, is to assure that the Army is capable of rapidly deploying in support of current and future forces, effectively sustaining the full spectrum of

military operations, and synchronize Army and joint efforts. The plans to meet this challenge have foci on enhancing strategic responsiveness, reducing the combat support (CS) and combat service support (CSS) “footprint” in the JOA, and transforming Army administration of logistics by reducing costs for logistics support without reducing combat readiness and effectiveness.

(1) *Directorate of Sustainment.*

(a) *Supply.*

1. The level of supply requirements, usually expressed in days of supply, is the quantity of materiel authorized in anticipation of future demands. This Directorate prescribes levels of supply authorized to be on hand or on requisition. Levels are based on usage factors and experience data.

2. Army Pre-positioned Stocks (APS) are fenced as “go-to-war only” assets, managed by HQDA and not necessarily linked to a specific theater OPLAN. They are pre-positioned ashore in OCONUS theaters, or afloat aboard cargo ships.

3. Stocks held by DS and GS units, when consisting of demand-supported items, mission-essential items, and initial-provisioning items, comprise an authorized stockage list (ASL). Inventory at the DS and GS levels is used to support consuming organizations. A using unit’s PLL consists of demand-supported and mission-essential repair parts to support unit maintenance and initial-provisioning items. Army G-4 policy considerations for the establishment of theater stockage:

- Optimum stockage for each class of supply.
- Best trade-off between economies and readiness.
- Simplicity in application and accuracy in determination of requirements.
- Conformation with automated systems.
- The method of distribution (air or surface).
- Weapon system essentiality.

4. The Army is committed to optimizing the manner in which secondary items (repair parts, spare parts, and consumables) are managed, and to modernizing and streamlining supply management processes. In that regard, the establishment of a SSF has improved the management of these stocks through increased visibility, improved forecasting, and reduction of excess. The SSF management goal is to place both Army-managed and non-Army managed secondary items into a single supply manager under AMC. This management initiative improves the Army credit process by establishing serviceable and unserviceable credit values by linking secondary item repair to national need. The overall objective is to make the materiel returns and redistribution system as effective and efficient as the distribution system. Supporting repair parts doctrine, policy, and procedural revisions to the supply system are being developed collaboratively by the LTA, AMC, CASCOC and TRADOC in an effort to reduce inventory and operating costs.

5. Also included under the Army supply are troop support division-managed programs. These include: the Army food program (subsistence, troop issue, strategic subsistence supply, and garrison and field food service), Army military clothing sales store/clothing initial-issue points; clothing and individual equipment items program; central issue facilities; field laundry, showers, latrines, and tent repair programs; and, the mortuary affairs (formerly graves registration) program.

(b) *Maintenance.* To meet the Army’s transformation objectives the Directorate is supervising the development of a new maintenance policy and structure for reducing the forward deployed logistics “footprint.” This emerging “replace forward, repair rear” policy, will replace the army’s current “fix forward” policy for future Army units. This policy is required to sustain future combat units at high levels of mission readiness while having a smaller logistics capability in forward areas. Additionally, the continuing merger of what we know today as “organizational-level” and DS-level maintenance is evident in the design of Force XXI (FXXI) and Stryker SBCTs, and with the emergence of a single national maintenance manager for all component repair at installation/theater and depot level. The Army is examining the elimination of a traditional four-level maintenance system, in favor of a more simplified two level maintenance system. The proposed maintenance system will be *field-* and *sustainment-*levels of maintenance. *Field maintenance*, a combination of the current “unit maintenance” and Direct Support (DS) maintenance, will consist of repair-and-return-to-user on-system tasks, those tasks that do not require disassembly of a component (primarily line replaceable unit or line replaceable module replacement), and will be performed as far forward as possible. *Sustainment maintenance* tasks return components, subassemblies, and/or end item systems to a serviceable condition and back into the supply system. Sustainment maintenance, the combination of General Support and Depot maintenance, will be performed by military, government civilians, and/or contractors, and will take place at designated locations in future Army deployed units or potentially as far back as CONUS.

1. Materiel maintenance is all required actions taken to keep materiel in a serviceable condition, restore it to serviceability, or upgrade its functional utility through modification. As a general policy for the near-term future, maintenance is performed at the location of the equipment operation or failure to the maximum extent consistent with the tactical situation and the cost-effective use of maintenance resources. Again, with Army transformation initiatives, systems in the future will be replaced forward and repaired in the rear.

2. The current framework within which maintenance (less aviation) is performed contains four echelons: unit, DS,

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GS, and depot. Aviation maintenance, however, is performed at three levels. Aviation unit maintenance (AVUM) is a combination of organizational and limited DS maintenance. Aviation intermediate maintenance (AVIM) is a combination of the remaining DS and limited GS maintenance capabilities. The third is depot-level and this includes some maintenance previously performed at GS level. Maintenance levels are described below.

- Unit. Unit-level maintenance is performed by the user and is characterized by quick turnaround based on repair by replacement, services, and minor repair (adjust, clean, lubricate, and tighten). The cornerstone of unit maintenance is performing PMCS.
- DS. This echelon is organized with DS units assigned at division, corps, and EAC level. DS is characterized by high mobility, a forward orientation, and repair by replacement. Divisional maintenance units support maneuver elements while non-divisional units will provide area support and reinforcing support to the division. DS units are organized on a modular team basis to support specific systems and their auxiliary equipment (for example, tank battalion and engineer battalion maintenance support teams). Battle Damage Assessment and Repair (BDAR) teams will be assigned to the non-divisional maintenance units.
- GS. GS maintenance is characterized by semi-fixed facilities assigned at theater level. GS also represents a deployable sustaining maintenance capability. Its fundamental purpose is to support the theater supply system through repair of components. Maintenance at this level will be either job or production line operations as appropriate, and will be performed by modular units composed of commodity-oriented platoons. Finally, a GS maintenance unit may work as a theater special repair activity.
- Depot. Depot Maintenance supports Army readiness through the overhaul and re-capitalization of major items and overhaul of all class IX supply items.

3. The Directorate controls maintenance policy by use of the maintenance allocation chart that remains the primary tool for assigning tasks according to the echelon of maintenance authorized to repair. Equipment design supports a first, discard; second, repair forward; and third, evacuate maintenance priority. Greater use of built-in-test or built-in-test equipment, modularity, common tools and hardware, and discard of components and selected small end items facilitate improved forward maintenance to the user of the future. Army maintenance principles include:

- Maintenance is a command responsibility,
- Unserviceable materiel that cannot be repaired because of the authorized level of repair assigned is to be promptly evacuated to the appropriate echelon and a replacement item issued; and,
- Unserviceable materiel being evacuated should have the same movement priority opportunity as serviceable materiel.

4. Maintenance management within the Army is organized by commodity groups; for example, missiles or aircraft. Within commodity groups, management effort is predicated upon cost and item essentiality. High cost and high demand result in a greater degree of management, although management by exception is done when deviations from normal occur. Currently, the Army's key maintenance management thrusts are:

- Assure that logistics policies and doctrine support joint and Army doctrine.
- Implement an improved concept for test, measurement, and diagnostic equipment (TMDE) calibration and repair.
- Review and improve maintenance float policies and procedures.
- Improve retail/strategic maintenance support of repairable secondary items.
- Improve national-level maintenance management.
- Modernize the Army's worldwide maintenance facilities.

5. The Directorate has developed a new maintenance initiative called National Maintenance Program (NMP) in order to standardize the manner in which maintenance is performed throughout the Army. The process begins with the local, regional/theater, and national maintenance providers and broadens to tailor repairs to national need, returning repaired items to the supply system. Through centralized management, national work-loading, and decentralized execution, the NMP initiative will optimize the Army's maintenance capability by tailoring repair programs to national need.

(c) *Petroleum Logistics Management.* The Directorate has policy and staff supervision over petroleum and packaged petroleum logistics matters. Primary functions include developing and implementing policies for bulk petroleum supply, distribution and accountability; single fuel on the battlefield concept; and, assisting in the development of pre-positioned war reserve policies, guidance, stock levels and computation factors for bulk petroleum products worldwide. Army G-4 also participates in planning and development of force structure for petroleum units; establishes policy for DA quality surveillance programs for fuels and lubricants; provides liaison with other government agencies and military departments with respect to bulk petroleum matters; and coordinates with the Air Force and the Navy in the joint development of equipment requirements. Army G-4 serves as the functional proponent for the Inland Petroleum Distribution System (IPDS) operational project

(d) *Troop support.* The Directorate has staff responsibility for Soldier support policy resides with the Troop Support Division. The primary troop support programs are food, clothing and individual equipment, and field services support.

To achieve management of these programs, the Troop Support Division is comprised of three separate teams, the Subsistence Team, the Clothing and Individual Equipment Team, and the Field Service Support Team.

1. The Chief, Troop Support Division serves as the Army member of the DOD Food Policy Council, the DOD Joint Formulation Board of Food and Nutrition Research, and the Joint Service Operational Ration Forum. The Troop Support Division also provides the Army representative on the DOD Steering Committee for Subsistence Prime Vendor (direct vendor delivery of subsistence), and provides Army G-4 representation on the Tri-annual Airdrop Malfunction Review and Safety Analysis Group, and the Joint Committee for Tactical Shelters. The Chief serves as the executive secretary for the Army Uniform Board and the Subsistence Review Committee, and the co-chair for the Army Nutrition Planning Committee.

2. The Subsistence Team provides policy for the Army Installation Food Service Program and the Field Feeding Program. The Subsistence Team provides policy and supervision for the Army Installation Food Service and Field Feeding Programs including:

- Development of plans, programs and standards, and reviewing doctrine for management of the installation food service programs.
- Development of plans and formulation of policy to support Army field feeding concepts, force structure, testing, and introduction of new equipment and rations.
- Developing nutrition policies and programs of dining facilities consistent with TSG's nutrition policies.
- Monitoring DeCA support to Army personnel and families.

3. The Subsistence Team also serves as the DA functional proponent for:

- Designing and equipping of installation dining facilities and troop subsistence activities.
- The Army Food Management Information System (AFMIS).
- Recognition for excellence in the Army Food Program to include the Philip A. Connelly Award for Excellence in Food Service and the Army Culinary Arts Program.

4. The CIE Team is responsible for developing plans and formulating policies for management of Class II CIE (with the exception of chemical protective clothing) and AAFES managed AMCSS, clothing initial issue points, and central issue facilities. The Army G-4 chairs the Army Uniform Board, which recommends CIE changes clothing bag, dress, and optional purchase items to the CSA. The CIE Team serves as DA functional proponent for concept approval and type classification of clothing bag, dress, and optional purchase items included in Common Table of Allowance (CTA) 50-900. The CIE team also coordinates CIE and AMCSS issues with DOD, other Services, other federal and civilian agencies, Army MACOMs, the RC, and also serves as the HQDA functional interface for DOD standardization and modernization of CIE.

5. The Field Service Support Team (FSST) is responsible for developing plans, formulating policies and procedures to improve the quality of life for the Soldier in the field. They serve as the Army G-4 independent logistician in the acquisition process (cradle to grave) for the Mortuary Affairs Program, aerial delivery and airdrop systems and equipment, Class II (rigid and soft wall shelters) and Class VII to include tactical mobile electric power systems, physical security equipment, topographic equipment and map material, camouflage netting, field laundries and clothing repair equipment, and containerized self-service laundry, showers, shelters and latrines. Additionally, the FSST supports the War Reserves Division in functional implementation of the collective support system, bridging systems and aircraft landing mats operational projects. Limited functional oversight is provided for Army Special Forces operational equipment (diving equipment and rubber tactical boats).

6. Tactical water management. The Army is designated the DOD executive agent for land-based water resources (for generating drinking water and water for other military purposes). The Army established a water office under this Directorate to carry out several primary duties. In coordination with the other military department secretaries, the office: develops and implements policy concerning joint plans, procedures, and requirements for water resources in support of land-based forces; and, advises the ASA (ALT) of water resource requirements and significant developments in connection with water resource research, equipment acquisition, and doctrine. The office establishes procedures for coordination of policy documents and plans affecting water resources for joint employment and support, R&D, and equipment acquisition. The office develops, in coordination with appropriate DOD components, joint doctrine for the employment of water resources. Office initiatives include development of an improved, expanded, and automated water resources intelligence database for the rapid retrieval of information on an area or point basis to assist commanders in making water support logistics decisions. This data is provided to the Defense Image and Mapping Agency for incorporation into its terrain analysis program. The office established a Joint Water Resources Management Action Group (or JWRMAG) as a mechanism to coordinate and resolve joint water support issues.

(2) *Directorate for Plans, Operations, and Readiness.* The Directorate is the Army G4 logistics planner, operator, and integrator. The Directorate also serves as the principal advisor for concepts, doctrine, policy, logistics force structure, and materiel readiness. In addition, the Directorate represents the Army G-4 for joint actions.

(a) Logistics planning, operations and force integration processes. The Director for Plans, Operations, and Readiness under the Army G-4 serves as the Army General Officer point of contact to the Director of Logistics (J4) of the JS;

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chairs the Logistics Studies Steering Committee; serves as the Army G4 representative on the FAA GOSC; and, serves as a principal Army G4 member of the TAA GOSC. Specific responsibilities include:

1. Serves as HQDA proponent for the development, evaluation, coordination, and implementation of plans establishing major combat operations/smaller scale operations wartime lines of communication with the appropriate COCOM Commanders /ACCs.

2. Evaluates analyzes, and recommends improvement on all regional OPLANs, CONPLANs, functional plans and other COCOM commander plans. Evaluation includes the assessment of logistics supportability, enhancement of logistics planning efforts and adequacy of the logistics force structure.

3. Establishes the Logistic Operations Center that functions as the primary logistics monitor during the execution of current operations, contingencies and exercises.

4. Provides logistics staff supervision over long and mid-range planning to include interpretation and dissemination of logistics aspects of the SPG, and TAP.

(b) This Directorate also identifies requirements and inadequacies in both current and future logistics force structure and systems, which impact support and sustainment of HLS, OCONUS military operations, strategic reserves and the National capacity for force generation. Also serves as the advocate for a balanced mix of logistics units to supported forces in the requirements and resourcing phases of TAA. The logistics planning process focuses on the transitions across the full spectrum of military operations. The operations process focuses on the execution of current plans, contingencies and exercises. The force integration process focuses on identifying requirements in logistics force structure and systems.

(c) A major consideration of the Directorate is to oversee the Army logistics portions of time-phased force deployment lists (TPFDLs) — the major tool used by the unified commanders to request forces to support their OPLANs. In determining the adequacy of the logistics support for the TPFDL, the major factors considered are:

- Strategic lift.
- Sustainability.
- Pre-positioned war reserve stocks.
- Force shortfalls.
- Warning time.

(d) The Directorate also provides staff oversight of allied and coalition support requirements. The United States continues to rely on allies for logistics support of the full spectrum of military operations. Wartime HNS (WHNS) is one means to supplement the organic support capabilities of theater U.S. forces. WHNS capabilities are used in such areas as transportation, maintenance, construction, civilian labor, communications, facilities, utilities, air/seaport operations, rear area security, and the movement of U.S. forces and materiel between the ports of debarkation and combat areas. Other means include use of mutual support agreements under Acquisition Cross Servicing Agreements and International Standardization Agreements that are forged with multinational coalition partners.

(e) The Directorate also provides policy and staff supervision over the Logistics Civil Augmentation Program (LOGCAP) — also considered as an alternative to complement organic force and WHNS capabilities. LOGCAP may be used if shortfalls are identified from other support sources, or if the other sources are not considered in the best interests (e.g., operational, fiscal, political) of the U.S. Government. The Army G-4 is the LOGCAP proponent for program policy, guidance and sources. AMC is the Army's manager for LOGCAP planning, support to exercises and the full spectrum of military operations.

(f) Logistics Readiness. The Directorate has staff responsibility to assess and improve the logistics readiness and sustainability of the Army in the field. The basic ingredients of military readiness are adequate, well-trained personnel in particular skills, possessing proper equipment in a combat-ready condition. Logistics readiness deals in large part with the equipment and is measured by EOH compared to that authorized (i.e. a measure of shortages) and equipment status (i.e. in terms of serviceability). The Directorate's specific responsibilities for readiness include:

1. Exercising staff supervision of, and provides policy and guidance for major end item distribution and redistribution of equipment based on Army priorities.

2. Determining Army-wide logistics conditions and trends as they affect overall Army readiness. Army G4 develops solutions and directs action to correct readiness deficiencies.

3. Serving as proponent for logistics objectives and performance metrics for the Chief of Staff, Army (CSA) Strategic Readiness System.

4. Determining supportability of USF strategy, concepts and implementation and the impact USF will have on logistics operations and supportability from both the unit and Army perspectives. Develops, coordinates, and synchronizes the plans, policy, and procedures for logistics functions in support of USF.

(3) Directorate for Force Projection/Distribution.

(a) The Directorate provides policy and staff supervision for Army transportation, distribution and pre-positioning functions, strategic movement and mobility, ship modernization, transportation and distribution programs, development of transportation policy for DA-sponsored cargo and passenger movements, management of Army responsibilities for

the DOD Customs and Border Clearance Program and exercising responsibility for policy, concepts, and worldwide activity of APS.

(b) The Director is also the Army representative and member of the JTB. The JTB is responsible to the JCS for the effective employment of common-user transportation resources assigned or available to DOD. The director is also the ARSTAF member of: the Mobility Studies Steering Group and the High Speed Sealift Executive Steering Committee; Army liaison representative to the National Defense Transportation Association; and, a member of the Army Power Projection Program (AP3) GOSC. The Associate Director serves as Career Program Manager (Functional Chief Representative) for the Army Civilian Transportation Career Program. The Directorate supports the force projection and distribution responsibilities, assigned by the SECARMY to Army G-4 in General Order Number 3, by maintaining the status of current operations and contingencies plans and resource programs that support Army-wide operations in the following areas: strategic mobility, war readiness, reserves, materiel/equipment pre-positioning, transportation, and distribution. In addition, it oversees the execution of Army programs, budgetary inputs and activities in the MACOMs focusing on transportation, distribution, strategic mobility and pre-positioning of supplies and equipment. The Directorate represents the Army in assigned areas with the JS, OSD, Commander, USTRANSCOM, other Services, Army MACOMs and other agencies and activities. Three divisions in the directorate manage transportation programs: the Strategic Mobility Division, the Transportation and Distribution Division, and the Pre-positioning Division.

1. The Strategic Mobility Division exercises supervision over strategic mobility initiatives, develops strategic transportation concepts, coordinates Army mobility and transportation input to Army/Joint studies and plans/programs for a balanced "fort to foxhole" capability to ensure rapid power projection of Army forces. Strategic mobility is defined as the capability to deploy and sustain military forces worldwide in support of national strategy. The DOD concept for strategic mobility includes airlift, sealift, and OCONUS pre-positioning of materiel. In conjunction with DOD, Joint and Service transformation efforts, the Army plans to transform into a more strategically responsive and deployable force with a focus on pursuit of strategic mobility enablers. Transformation initiatives will ensure sufficient lift capability and IT architecture, to support the Army's deployment goals. The Army Strategic Mobility Program (ASMP) prior to FY 2003 was the Army's plan to implement the recommendations of the Mobility Requirements Study (MRS) and ensure the total fort to foxhole deployment system for our current legacy forces. The strategic environment has radically changed since the Cold War genesis of ASMP. Joint and Army operational requirements have evolved as a result of changes in the National Military Strategy the QDR, and the enhanced strategic responsiveness capabilities called for under Army Transformation. These changes combined to present a compelling need for a successor program to ASMP. The Army Power Projection Program (AP3) is that program. AP3 seeks the capabilities required to achieve a paradigm shift, where "deploy equals employ," to fully support the Combatant and Joint Force Commanders in a dynamic new strategic environment. The Chief, Strategic Mobility Division, serves as the DCS G-4 functional proponent for Army Watercraft, and the Army Watercraft Restructuring Program (AWRP). This program involves the forward positioning and stationing of Army Watercraft and support packages in the COCOM commander's area of responsibility. Forward positioning allows for rapid use of Army vessels for intra-theater cargo/troop movement training and operations. The AWRP also includes modernization of the current fleet through divestments, enhanced modifications, communications, electronics and navigation upgrades; plus investment in R&D and procurement to enhance future capabilities. The Division also serves as functional proponent for Logistics Over The Shore (LOTS), deployment process improvement and strategic sealift and airlift policies. The Chief, Strategic Mobility Division, serves as the Army member of the Joint Logistics Board (JLB) and the JTB secretariat and co-chairs the Power Projection Council of Colonels with his G-3 war plans counterpart. The Strategic Mobility Division executes the Army's responsibilities as the lead service agent for the development of the Transportation Coordinator's Automated Information for Movements System II (TC-AIMS II).

2. The Transportation and Distribution Division develops, manages, evaluates, and promulgates HQDA policies, programs, procedures, and guidance on transportation, transportation services, and distribution of materiel processes that enables effective and efficient transportation and distribution support to the JFC. It also serves as the Army proponent for the Defense Travel Regulations (DTR). The Division is organized into four functional areas: Transportation Business Processes, Cargo Policy, Materiel Distribution, and Soldier Support. The Division provides program oversight, information, and guidance for MACOMs and installation transportation offices worldwide, and provides policy and technical advice to the Army leadership. The business process functions include: managing the Army's Second Destination Transportation (SDT) and transportation operations programs, from requirements development through funds execution; developing processes governing reengineering initiatives intended to streamline the acquisition and payment of transportation services; serving as Army transportation account code coordinator; and providing transportation functional direction for the development and implementation of automated billing and payment processes. SDT funds the over-ocean and inland costs associated with the movement of equipment (principally class VII, major end items) thru the Defense Transportation System (DTS), which includes the USTRANSCOM Transportation Working Capital Fund, as well as via commercial carriers. Cargo Policy functions include: developing transportation and traffic management policy governing the shipment of Army freight and cargo worldwide; plus, the provisioning of management oversight for critical day-to-day operations associated with Army air cargo channel requirements, Defense Traffic Management Regulation, small package programs, air line of communications (ALOC), and shipment of hazardous materials. The Distribution functions include the development, evaluation, coordination, and

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promulgation of distribution policies and procedures; and a focus on improving the operational effectiveness and efficiency of the distribution component of the supply chain. The Soldier support functions encompass: transportation quality of life issues, the assistance and advocacy for travel of Soldiers, and the shipment of household goods.

3. The Pre-positioning Division is responsible for APS logistics, policy, budget formulation, and implementation of the program consisting of equipment and supplies stored around the world on land and afloat. AMC and TSG's U.S. Army Medical Materiel Agency administer the program. Storage sites are organized in brigade-sized and smaller unit sets, operational project stocks for special purposes, war reserves sustainment equipment, and war reserve stocks for allies. These APS stocks are pre-positioned in fourteen countries and in CONUS, and on 12 ships berthed in the Pacific and Indian Oceans. The Division serves as the Army G-4 focal point of all APS issues and reviews concepts and policies in the logistics portions of contingency and mobilization war plans to insure adequacy of APS materiel stock policies.

(4) *Directorate for Program Development.* The Director of Program Development is responsible for the overall planning, programming, management, and execution of all matters pertaining to resource management of Army programs under the purview of the Deputy Chief of Staff, G-4. Serves as the focal point for guidance, preparation, review, and submission of annual Sustaining PEG POM. Coordinates and provides support for the Planning, Program, Budget Committee, Senior Resource Group, Army Resource Board, and resource meetings of the Deputy Chief of Staff, G-4.

(5) *Logistics Transformation Agency (LTA).* LTA is a FOA. The mission of the LTA is to serve as the Army lead agent for the continuous process of logistics transformation, across all echelons of the Army. LTA provides the direction, means, and impetus for change in the logistics enterprise. This responsibility includes the identification, development, and recommendations for near-, mid-, and long-range strategic concepts, programs, plans, technology, and systems. It also includes facilitating the acceleration of change by integrating and synchronizing capabilities and technologies, and by making assessments that focus senior Army leadership decision-making. The following functions are associated with LTA missions: strategic planning, policy and process modernization, knowledge management, technology exploration, power projection, logistics systems and communications, and materiel logistics. The proliferation of IT systems and the problems of interface between these systems have complicated logistics systems development. Current efforts in LTA are aimed at the reduction of the number of logistics systems and a concurrent simplification of new and existing systems and procedures. AMC has been assigned responsibility to integrate Army logistics management information systems. Currently, the process is twofold: the Global Combat Support System-Army (GCSS-A) (see para 12-10e(1)) provides an integrated, evolutionary enterprise information system for Army combat service support (CSS) functions, and the Logistics Modernization Program (LMP) modernizes national logistics processing. Streamlining logistics information systems through logistics web-based information and decision support systems are important enablers to produce a more responsive and focused logistics effort for Army logistics transformation.

12-5. Mission and Organization of AMC "Essential in peace, indispensable in war"

a. AMC Mission. The mission of AMC is to provide superior technology, acquisition support, and logistics to ensure dominant land force capability for our Soldiers, the United States, and our Allies. In short, AMC is the Army's national-level operator. Headquartered at Fort Belvoir, Virginia, the command operates through major subordinate commands that direct the activities of maintenance depots, laboratories, arsenals, and ammunition plants around the world. AMC performs assigned materiel and related functions for research, acquisition; logistics support, and technical assistance for materiel systems; and other materiel-acquisition and distribution management functions. The AMC national management mission can be restated this way: first, the acquisition of materiel; second, the responsibility for supporting the readiness of that materiel while in the user's hands; and third, provide materiel disposal direction. Through its integrated material management centers (IMMCs), AMC performs supply and maintenance management tasks through an array of commodity commands, depots, arsenals, data banks, plants and factories; and special activities under direct DA control. AMC also provides numerous acquisition and logistics services to the other components of DOD and many other government agencies. AMC is global. AMC has approximately 50,000 civilian and military employees working in approximately 150 locations in over 40 States and 38 foreign countries. The major components of the AMC mission are:

- (1) Design and field an integrated Single Army Logistics Enterprise that ensures seamless end-to-end business processes and automated systems that best support Army needs.
- (2) Provide guidance, development, and acquisition support to PEOs and Program/Project/Product Managers (PM) throughout the weapon system life cycle.
- (3) Coordinate commercial and maintain in-house industrial capabilities necessary to support the full spectrum of military operations.
- (4) Manage APS and operational projects stocks, less Class VIII, worldwide.
- (5) Provide equipment and services to other nations through the Security Assistance (SA) program.
- (6) Acquire equipment and spare parts to support weapons systems.
- (7) Provide development and acquisition support to Program Managers (PMs).

- (8) Define, develop, and acquire superior technologies.
- (9) Manage Army LOGCAP.
- (10) Maintain the mobilization capabilities necessary to support the Army.
- (11) Provide national maintenance management (NMM) operations. Headquarters, U.S. Army Materiel Command is designated as the National Maintenance Manager (NMM). The NMM focuses on centralized management; decentralized execution of Army maintenance programs, and consolidates all national maintenance organizations under a single management structure. The NMM is a program for the repair of AWCF–SMA Class II, IV and IX reparable components and their return to the AWCF–SMA account. It is transitional based on Total Army need and SSF is the first source of supply to satisfy national requirements for the AWCF–SMA. The National Maintenance Program (NMP) encompasses the Army strategy of a centrally coordinated and controlled repair-based logistics system that is managed by the national maintenance manager (NMM). The overall objective is to increase fleet readiness at the weapon system level and reduce operation and sustainment costs by accomplishing repairs to a higher standard. The National (also known as Sustainment under the new maintenance structure) category of maintenance consists of organic depots, the industrial base, and qualified non-depot activities to include Component Repair Companies. The overall focus is sustainment readiness and items repaired to a single standard that are returned to the supply system.
- (12) Perform depot-level maintenance. AMC performs depot-level maintenance on Army weapon systems and equipment in government-owned facilities. This includes managing contracts to have similar work performed by private sector providers at their own facilities or on-site at government facilities. Perform depot-level maintenance on Army weapon systems and equipment in government-owned facilities. Manage contracts to have similar work performed by private sector providers at either their own facilities or on-site at government facilities. Determine the core depot maintenance required to be performed in-house in support of the essential weapon systems used in wartime, and assign work load to the Army-owned maintenance depots in sufficient quantity to retain that capability. For AMC-managed weapon systems and equipment, determine the best value solution for non-core work load, and place that workload with the appropriate public or private sector supplier. For PEO-managed systems, advise the PEO on best-value decisions for placement of depot maintenance work. Manage the “brick and mortar” depot facilities and the plant equipment necessary to perform depot maintenance.
- (13) Execute the SSF and manage the AWCF (a revolving fund designed to ensure logistics processes are available to meet customer needs). AMC is the Army’s SSF manager with sole obligation power for the AWCF, Supply Management Army (AWCF–SMA). AMC is consolidating management of current wholesale, theater, corps/installation, and division ASLs inventories into a seamless logistics and financial system and creating an integrated supply and maintenance operation in the ACWF–SMA business area. Non-Army managed items (NAMIs) such as fuel, subsistence, clothing, engineer supplies, and medical items not included in the SSF will by-pass the SSF and will be transmitted directly to DLA. Army interest in these items is overseen by a NAMI commodity business unit of the Tank-Automotive and Armaments Command.
- (14) Serve as the DOD executive agent for conventional ammunition and nuclear, biological, and chemical defense.
- (15) Provide technical direction and guidance in services such as laundry, dry-cleaning, clothing initial issue points, central issue facilities, field laundry and showers, demilitarization, and disposal direction.

b. Organization. The present AMC organization includes seven major subordinate commands and two separate reporting activities (SRA). The major subordinate commands include the Research Development and Engineering Command, concerned with R&D missions; the Army Field Support Command (AFSC), developing APS and ammunition manufacturing and maintenance missions; the U.S. Army Security Assistance Command (USASAC), concerned with assistance programs to include foreign military sales (FMS); and the four remaining major subordinate commands which are commodity oriented and perform life-cycle management over the initial and follow-on procurement, and materiel readiness functions for items and weapon systems in support of the Army in the field. Figure 12–3 shows the major elements of AMC.

(1) TACOM, the U.S. Army’s Tank-automotive and Armaments Command, is headquartered in Warren, Michigan. Its mission is to support and sustain mobility, lethality, and survivability for warfighters, joint commanders, allies, and other customers. By partnering with Program Executive Offices and multiple research, development and engineering centers, TACOM is able to support a diverse set of product lines throughout their life cycles. In all, TACOM supports over 3,500 fielded systems and over 29,000 components that make those systems work. TACOM and its partner PEOs and RDECs constitute the Soldier and Ground Systems Enterprise for the U.S. military. TACOM is supported by personnel located throughout the globe working for its Acquisition Center, Integrated Logistics Support Center, Ground Systems Industrial Enterprise, and its active partnerships with the Research, Development and Engineering Command and five different Program Executive Offices. TACOM continues to institutionalize a culture of innovation and continuous improvement throughout their command. TACOM uses programs such as Quality Management System, Voice of the Customer, Lean/Six Sigma and other Enterprise Excellence Federation tools to help provide the best possible support to the joint warfighter. With other ongoing programs like the Leadership Competencies for the Future training program, TACOM is devoted to changing its culture and institutionalizing its ability to easily deal with change. Together with its partners, TACOM is now leading the way in land warfare and soldier technologies and helping to ensure America’s military remains relevant and ready in the 21st century.

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(2) The Aviation and Missile Command (AMCOM) was established in 1997 as a readiness command to develop, acquire, field and sustain Army aviation and missile weapons systems. The Command is headquartered at Redstone Arsenal, Alabama. AMCOM provides life-cycle management of Army aviation and missile systems, from research and development to procurement and production, from spare parts availability to flight safety, and from maintenance and overhaul to eventual retirement. AMCOM ensures the Army's aviation and missile systems are technologically superior, affordable, and always ready. AMCOM provides support to the Army Program Executive Officer, Aviation; the Army Program Executive Officer, Tactical Missiles; and the Army Program Executive Officer, Air and Missile Defense. Redstone Arsenal is home to some of the nation's most advanced missile and rocket research, development and test facilities, with a replacement value of more than \$2.5 billion. AMCOM manages seven of the Army's 16 SORTS systems, and most of the Army's Foreign Military Sales (FMS) cases. AMCOM's predecessor organizations have achieved a number of firsts in the history of rockets and guided missiles and in the history of aviation, including the development and launch of the missile that placed the first American scientific satellite in earth's orbit and advances which resulted in the air mobile Army we know today.

(3) The Communications-Electronics Command (CECOM) is an Army Materiel Command major subordinate command, with headquarters at Fort Monmouth, New Jersey. CECOM's mission is to acquire, field, sustain and integrate superior Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) systems for the Joint warfighter. CECOM focuses on three major objectives to ensure this mission is achieved: sustaining C4ISR and related systems; providing C4ISR enterprise integration; and providing acquisition support of C4ISR and related systems. CECOM achieves this mission through three major centers and two subordinate commands. The Software Engineering Center manages most of the Army's deployed software, which involves over 100 million lines of code across more than 300 Tactical, Logistics, and Business Systems. The Logistics Readiness Center is responsible for 59,000 items managed by the Army. Tobyhanna Army Depot provides depot level maintenance and support for electronics systems and equipment, to include C4ISR, avionics and tactical missile guidance and control systems for the Army, other Services, agencies and our allies, and is performing all of the Air Force's ground communications depot level repair work. The Information Systems Engineering Command supports PEO EIS in upgrading the Information Technology (IT) infrastructure at every Army post, camp and station, upgrades command centers, and is modernizing the Pentagon's IT infrastructure.

(4) The US Army Chemical Materials Agency (CMA) was established on 1 December 2003, as an Agency under AMC. Once part of the former US Army Soldier and Biological Chemical Command and the former Program Manager for Chemical Demilitarization, it combines the Army's storage and demilitarization functions under a single organization. The Agency is headquartered at the Edgewood Area of Aberdeen Proving Ground, MD. The CMA has the mission for the safe and secure storage of the chemical stockpile, and the safe and quick destruction of all chemical warfare and related material, while ensuring maximum protection for the public, the personnel involved in the destruction effort, and the environment.

(5) The U.S. Army Field Support Command (AFSC), headquartered in Rock Island, Illinois, maintains the readiness and accountability of the Army's globally prepositioned equipment and materiel, including prepositioned sets, operational project stocks, and sustainment stocks. AFSC is responsible for transferring equipment and materiel to Warfighters whenever and wherever required in support of the Army's global power projection mission. During training and combat operations, AFSC leverages the capabilities of the Army's prepositioned stocks located ashore and afloat to enhance rapid deployment and sustainment. AFSC also manages the Logistics Civil Augmentation Program, which uses contractor assets to augment support to units in the field. When operations are complete, AFSC is responsible for reconstituting stocks and preparing them for future contingencies. AFSC maintains a global network of facilities in the United States and in overseas nations where stocks are stored and maintained and logistical services are provided. During deployments and exercises, AFSC provides direct support to combat units deployed to the front lines, and operates sites such as Logistics Support Elements near forward areas. AFSC is a global organization with installations and activities in 35 States, 15 foreign nations. AFSC provides a single AMC face to the combatant commander during contingencies, exercising centralized command and control over AMC's deployed forward-based logistics support elements (LSEs). AFSC also manages the Army's pre-positioned stockpiles of war reserve materiel. It maintains the readiness and accountability of the Army's war reserve combat, combat support, and combat service support equipment and materiel globally pre-positioned; this includes pre-positioned sets, operational stocks, and sustainment stocks. AFSC hands-off APS, equipment and materiel when and where required in support of the Army's global power projection mission. It further reconstitutes Army prepositioned stock sets upon completion of operations.

(a) There are five AFSC subordinate organizations; AMC Forward LSE-STRYKER, AMC-CONUS, AMC Forward-Europe, AMC Forward-Far East, and AMC Forward-Southwest Asia; plus AMC Combat Equipment Group-Europe (AMC CEG-E) and AMC Combat Equipment Group-Afloat (AMC CEG-A).

(b) LSEs are subordinate to the FSC organization. These elements integrate AMC activities down to the user-level, and provide technical assistance to forward- and homeland-based forces everyday. Five multifunctional, highly mobile, and tailorable TDA organizations of logistics technicians, military, civilian and contractors, can be deployed anywhere in the world in support of U.S. forces in a contingency operation. The LSE can be tailored to meet the requirements of the theater commander. A deployed LSE provides resources to fill gaps in functions where deployed military units may need technical or logistics assistance (e.g., maintenance support, supply support, etc.) The primary mission is to

enhance readiness through unified and integrated application of logistics power projection of OCONUS and CONUS-based capabilities. The footprint the LSE places in a theater is based on METT-TC and the desires of the combatant commander. With the usage of LOGCAP (see next paragraph), which is managed by the LSE, the LSE can perform logistics support mission assigned. The LSE can function in a variety of scenarios ranging from a hostile environment, such as Desert Shield/Desert Storm or Operation Joint Endeavor (Bosnia-Herzegovina), Operation Enduring Freedom and Operation Iraqi Freedom to OOTW, such as disaster/ humanitarian relief, for example, the cleanup in Florida following Hurricane Andrew, the Mississippi River floods, fire fighting in the Pacific Northwest, or supporting United Nations relief efforts in Rwanda or Somalia. LSEs also help the JFC plan nested AMC support across the full spectrum of operations. In the event of surge requirements, AMC has a rapidly deployable pool of highly skilled technicians available to augment LSEs with additional capability. In addition to its military and DA civilians on LSEs, AMC can deploy contractor personnel to augment the Army's force structure. AMC is the PM for LOGCAP, under the policy auspices of HQDA, Army G-4. LOGCAP is a commercial acquisition program designed to plan contractor logistics service to operations by leveraging a commercial contractor's global corporate assets. Since 1992, LOGCAP has responded to several crises by providing superb and timely combat support and combat service support, including operations in Somalia and Haiti, base camp construction and operations in the Balkans, support in East Timor, and support to the global war on terror. LOGCAP complements and augments the Army's force structure and is accounted for in Army force structure as component ("COMPO") 9. LOGCAP is not designed to replace force structure, but to provide the JFC, through his ASCC, with a valuable logistics alternative.

(6) The Joint Munitions Command (JMC) is headquartered at Rock Island Arsenal, Illinois, is the Army's premier provider of munitions and ammunition. It is the Single Manager for Conventional Ammunition and the DOD agent for buying, making, maintaining, storing, transporting, and renovating conventional ammunition for all U.S. military services and for other customers. The command also serves as the national maintenance point (NMP) (see para 12-7a) and the national inventory control point (NCIP) for the ammunition commodity. JMC manages the industrial base, both organic and non-organic as it relates to ammunition, as well as the U.S. Army Defense Ammunition Center. It also manages two manufacturing arsenals. The U.S. Army Joint Munitions Command (JMC) headquartered in Rock Island, Illinois, manages the production, storage, issue and demilitarization of conventional ammunition for all U.S. military services. JMC serves as the Department of Defense's field operating agency for the Single Manager for Conventional Ammunition mission, and therefore, provides support to all branches of the U.S. military and to selected non-DoD customers. To meet the needs of the transformed fighting forces of the 21st century, JMC is developing and modernizing systems that provide theater and field commanders with accurate, up-to-the-minute information on the status of munitions; make the most effective use possible of the existing ammunition stockpile; and maximize the capabilities and cost effectiveness of munitions production facilities. Through an initiative known as Centralized Ammunition Management, JMC is expanding its ability to supply combat units with the right munitions, at the right time and in the right place. JMC operates a nationwide network of installations and facilities where conventional ammunition is produced and stored. To assure the reliability, quality, and safety of the ammunition stockpile, specialists from JMC often work alongside units in the field and accompany them on deployments.

(7) The U.S. Army Research, Development and Engineering Command (RDECOM) became a U.S. Army Materiel Command major subordinate command on March 1, 2004 after consolidating the Army's core research, development and engineering capabilities under one organization and is headquartered at Aberdeen Proving Ground, Maryland. RDECOM combines AMC's laboratories and research, development, and engineering centers into one major command. Established as a provisional command in October 2002, RDECOM has moved independent organizations into an integrated command of interdependent organizations. The goal of RDECOM is to accelerate the pace of transition from concept to fielding, improve integration across AMC, and to enhance technical agility. RDECOM promotes and facilitates coordination and agility to stay ahead of ever-changing technological advances. RDECOM vastly expands working relationships with Army elements, industry, academia, military services, government agencies and international partners, by focusing on improving management, coordination and integration of research, development and engineering. The command has established Memoranda of Understanding with the U.S. Army Training and Doctrine Command and the U.S. Army Test and Evaluation Command to increase coordination between these commands and the Army's science and technology community. RDECOM's technology expertise, analytical capabilities and unparalleled collaboration with academia and industry provide cutting edge technology to the Warfighters in all service.

(8) The U.S. Army Security Assistance Command, headquartered at Fort Belvoir, Virginia, traces its origins to the Army's technical service era, and was designated a major subordinate command (MSC) of the U.S. Army Materiel Command in 1975. The mission of USASAC is to implement approved U.S. Army security assistance programs, including Foreign Military Sales (FMS) of defense articles and services to eligible foreign governments. USASAC is responsible for life cycle management of FMS cases, from development to execution, financial management, accounting, and settlement. The Command manages approximately 4,000 FMS cases. USASAC manages the Army's co-production program and development of the Army position on commercial license applications for export of munitions, services, and technology. In addition, USASAC is responsible for Army security assistance information management and financial policy, and provides logistics guidance to the Army security assistance community. The Command is increasingly responding to support of U.S. government emergency assistance, humanitarian relief, and Operations Other Than War, including United Nations peacekeeping operations. Security assistance is a national program administered

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by the State Department. In conjunction with the White House, Congress, and the Treasury Department, military security assistance programs are executed by the Department of Defense (DOD). Security assistance promotes regional stability, deters aggression, maintains alliances, and disseminates democratic values between the United States and its allies. In carrying out the Army security assistance mission, USASAC — “The Army’s Face to the World” — calls on all AMC MSCs, as well as other Department of Defense agencies and U.S. industry for support. Each sale of equipment to overseas customers comprises the same “total package” of quality materiel, spare parts, training, publications, technical documentation, maintenance support, and other services that AMC provides to U.S. Army units.

c. Deputy for Army Logistics Enterprise Integration (DALEI) mission. The Army leadership has assigned the Commanding General, Army Materiel Command (CG, AMC) the specific responsibility to ensure establishment of an integrated logistics enterprise that provides end-to-end sustainment support. Thus, the CG, AMC is the Army Logistics Enterprise Integrator. This function is a principal component of Logistics Transformation and is specified in the Army Campaign Plan (ACP).

(1) The CG, AMC has established and resourced the Office of the AMC Deputy G-3 for Enterprise Integration (AMC DG3 EI). The incumbent, who functions as the Deputy for Army Logistics Enterprise Integration (DALEI), is vested with the responsibility to ensure end-to-end functional integration, integrated business processes and Joint interoperability of the Army logistics business enterprise. He or she will integrate Army logistics modernization efforts through a collaborative matrix environment with functional requirements managers across the Army in support of Army Transformation.

(2) The AMC DG3 EI (DALEI) serves as the key integration element responsible to the Commanding General, AMC to exercise requirements oversight, schedule and resource integration over Army-wide logistics modernization efforts. This includes (1) logistics business process reengineering efforts built upon the principles of the Future Logistics Enterprise, (2) an integrated process to collaborate with the Army Enterprise Integration Oversight Office, (3) responsibility for articulating and developing a cohesive, integrated strategy to retire current legacy systems and stand-up modernized capabilities.

(3) The Logistics Enterprise Vision for the Future Force is an integrated digital environment stretching from the factory to the foxhole that enables generating, building and sustaining warfighting capability through a fully integrated logistics enterprise based on collaborative planning, knowledge management and best business practices. Within the SALE, logistics, financial, acquisition, and product data will be integrated in an integrated modernized environment, which operates in a near seamless fashion across the major Army commands, across the Services, across the Department of Defense (DoD) and across industry, drawing on the best business practices and technology.

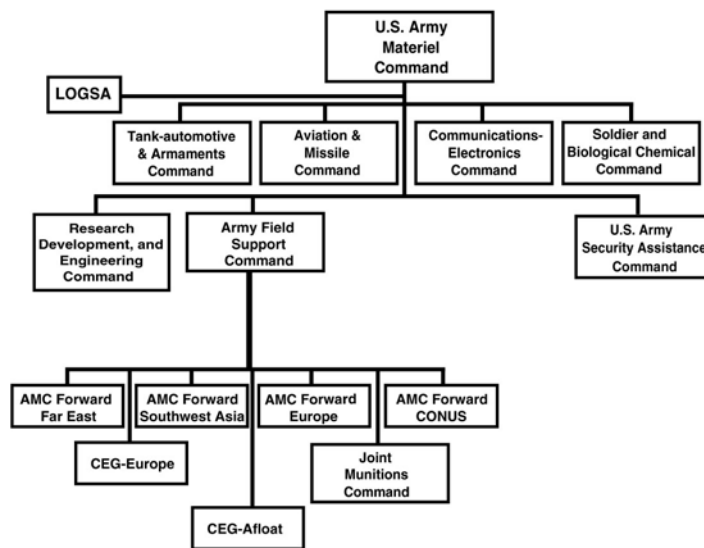


Figure 12-3. Major elements of AMC

12–6. AMC Changing

a. Vision. AMC is made up of dedicated and innovative people who are committed to continuously improving support to soldiers, leading the development of new technologies and sustainment processes to transform the Army, and reshaping the workforce of the 21st Century.

b. Changes are Necessary. As AMC continues to maintain its global support responsibilities of today while simultaneously transforming itself to support the Army's Future Force and Joint Team, new research, development, and engineering organizations and processes will be needed to ensure that the best technology is provided to our combatant commanders quicker than in the past. An industrial base of depots, arsenals, and ammunition activities that was built during World War II must be modernized to meet future requirements. A balanced approach regarding privatization will be needed to ensure that the most efficient and effective industrial base is developed. The risks and rewards of privatization must also be balanced. Partnering between industry, academia, and the government will also be needed to improve our research and industrial organizations. AMC continues to serve warfighters and our allies around the world. New field support organizations are being developed to ensure that soldiers receive more responsive, integrated logistics support from the industrial base. This will require modernization of our logistics bases around the world to ensure that they are positioned to future operations. Finally, AMC recognizes that the pace of change will continue and that it must design and develop a learning organization that embraces change.

c. Life-Cycle Management Command Initiative. AMC began this initiative to get products to the Soldier faster, make good products even better, minimize life cycle cost, and enhance the synergy and effectiveness of the Army Acquisition, Logistics and Technology (ALT) communities. It is intended to integrate significant elements of ALT leadership responsibilities and authority to enable a closer relationship between the AMC Major Subordinate Commands (MSCs) and the Program Executive Officers (PEOs). PEOs will work as an integral part of the AMC MSCs, while continuing to report directly to the Army Acquisition Executive (AAE); likewise, logisticians in AMC will have enhanced input into acquisition processes to influence future sustainment and readiness. The life cycle management initiative will provide an integrated, holistic approach to product development and system support. The Concept of Operations is to create Life Cycle Management Commands (LCMC) by aligning AMC systems oriented MSCs (AMCOM, CECOM, TACOM and JMC) with the PEOs with whom they already work. RDECOM RDECs will be strategically and operationally linked. See Figure 12–4.

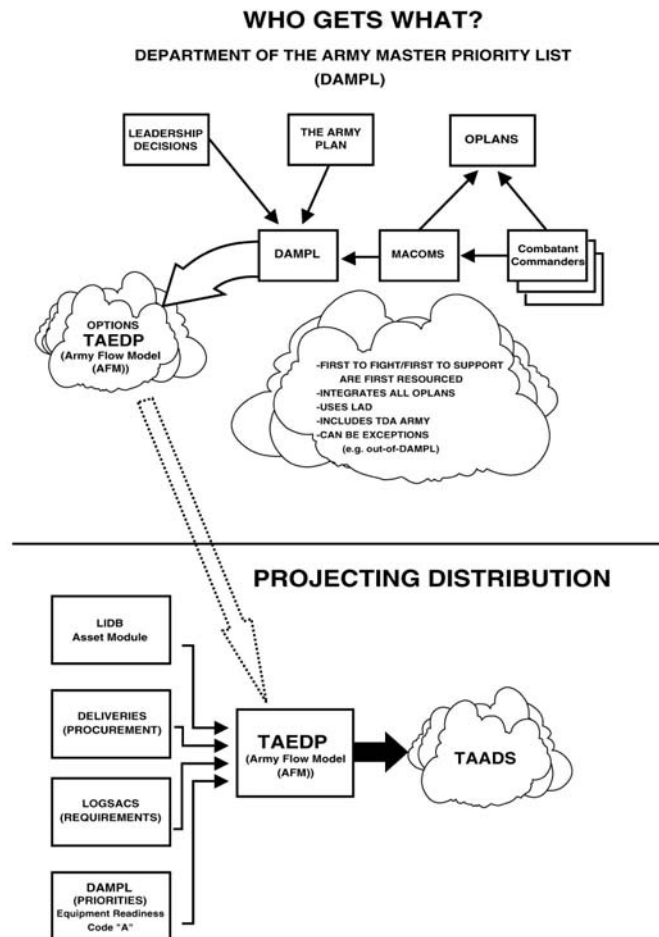


Figure 12–4. Merging of inputs to create projected distribution

12–7. Functions of AMC

AMC functions include materiel management, maintenance management, ILS, development of equipment, strategic maintenance, operation of strategic maintenance depots and arsenals, development and fielding of logistics systems and supporting automated systems, and logistics systems enterprise integration across the Army. AMC through AFSC also provides management of the worldwide Logistics Assistance Program. During contingencies, AMC provides platforms for deploying maintenance, supply and technical support teams to the field Army. AMC is increasingly serving as the Army’s vehicle for contracted logistics support to the warfighter and warfighter plans.

a. National maintenance management (NMM) operations. Headquarters, U.S. Army Materiel Command is designated as the National Maintenance Manager (NMM). The NMM focuses on centralized management; decentralized execution of Army maintenance programs, and consolidates all national maintenance organizations under a single management structure. The NMM is a program for the repair of AWCF–SMA Class II, IV and IX reparable components and their return to the AWCF–SMA account. It is transitional based on Total Army need and SSF is the first source of supply to satisfy national requirements for the AWCF–SMA. The National Maintenance Program (NMP) encompasses the Army strategy of a centrally coordinated and controlled repair based logistics system that is managed by the national maintenance manager (NMM). The overall objective is to increase fleet readiness at the weapon system

level and reduce operation and sustainment costs by accomplishing repairs to a higher standard. The National (also known as Sustainment under the new maintenance structure) category of maintenance consists of organic depots, the industrial base, and qualified non-depot activities to include Component Repair Companies. The overall focus is sustainment readiness and items repaired to a single standard are returned to the supply system.

b. Integrated Materiel Management Centers (IMMCs). The materiel management functions of the commodity command (Life Cycle Management Commands) are accomplished by an IMMC. Each commodity command has materiel managers accomplishing the following functions:

- (1) Computer requirements;
- (2) Provide cataloging input to DLA;
- (3) Direct procurement actions within their respective commodity and area of responsibility;
- (4) Direct overhaul, rebuild, and repair;
- (5) Perform configuration management;
- (6) Develop maintenance publications;
- (7) Determine provisioning of repair parts for equipment initially issued to troop units; and
- (8) Direct materiel disposal and reutilization.

c. Army Materiel Command (AMC). AMC is assigned the responsibility to integrate Army Logistics Information Systems across the Army Logistics Enterprise and with the other Services and DoD. To this end, the AMC Deputy G-3 for Enterprise Integration is also designated by the Acting Secretary of the Army and the Army Chief of Staff as the Deputy for Army Logistics Enterprise Integration (DALEI). The Logistics Vision for the Future Force is an integrated digital environment stretching from the factory to the foxhole that enables generating, building and sustaining warfighting capability through a fully integrated logistics enterprise based on collaborative planning, knowledge management and best business practices. Logistics, financial, acquisition and product data will be integrated in a new environment which operates in a near seamless fashion across the major Army commands, across the Services, across the Department of Defense (DoD) and across industry, drawing on the best business practices and technology.

(1) The Army/AMC strategy to achieve the modernized logistics capability based on the Single Army Logistics Enterprise (SALE) and supporting end-to-end architecture. This architecture is the critical driving force in the Logistics Enterprise Modernization effort. It takes the Army from fragmented stove piped custom coded development efforts to an Enterprise wide COTS ERP solution. The enterprise capability is the only viable strategy to achieve compliance with DOD Business Enterprise Architecture (BEA), Force – Centric Logistics Enterprise (FLE) (Logistics Domain), Netcentricity, Clinger Cohen Compliance, and Joint Focused Logistics Doctrine. AMC has received the initial FLE architectural compliance review approval and is continuing to work with OSD to maintain compliance as the BEA and Joint Doctrine evolve.

(2) AMC will accomplish this vision by implementing the Single Army Logistics Enterprise (SALE) using commercial off the shelf enterprise software. The three primary components of SALE are:

(a) Global Combat Support System-Army (GCSS-A) that provides an integrated, evolutionary enterprise information system for tactical Army combat service support (CSS) functions.

(b) Logistics Modernization Program (LMP) that modernizes national logistics processing.

(c) Product Life Cycle Plus (PLM+) that integrates business processes across the Army, manages master data, and provides the single gateway to other services and agencies.

(3) Implementation of the SALE will simplify and standardize operations, resulting in improved decision-making, and conserving scarce resources via shared data at multiple levels.

(4) The SALE will extend from small unit level (Prescribed Load List functionality) through the Army's National level. Further, it must work in unison with the DOD Future Logistics Enterprise environment, including the Defense Logistics Agency (DLA); industry; the Joint Warfighting Community; and coalition partners. The SALE will enable support to our Current and Future Forces and equipment and will be capable of working concurrently in all environments. When fully implemented, the SALE will provide commanders and logisticians common integrated business processes with a view of the entire Army logistics value chain from the National level through our sustainment base installations to tactical field levels.

(5) The Army and AMC have established the following specific objectives for the SALE:

(a) Implement a centralized, integrated and responsive management process to oversee functional requirements, schedules, architecture, configuration control, performance goals, allocate resources and, when necessary, associated costs.

(b) Implement a core Army logistics Enterprise Resource Planning (ERP) solution using commercial off the shelf software in a phased process starting with the AMC.

(c) Implement subsequent logistics ERP solution implementation at the installation and tactical levels of the Army.

(d) Assess migration of legacy capabilities not encompassed by core ERP solutions wherever and whenever possible, with a goal of continual integration with core ERP. This will require an integrated process to analyze Army needs, best practices and standardize processes across the enterprise.

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(e) Enable continuous improvements to logistics automation business processes/systems via ERP improvements offered by the software provider.

(f) Implement an integrated logistics solution featuring one set of integrated end-to-end business processes within a single Army Enterprise.

(g) Align the SALE architecture with the OSD Business Enterprise Architecture and Future Logistics Enterprise requirements.

(h) Include robust decision support tools (strategic issues, prioritization, and risk mitigation).

(i) Integrate technical data with product data flowing across all domains in a Product Lifecycle Management environment.

(j) Establish a single set of shared Master Data and one set of external interfaces that use software solutions to internally integrate Enterprise Resource Planning instances.

d. Requirements computation. In computing requirements, materiel is separated into major and secondary items. A major item is a final combination of parts and/or materiel ready for its intended use and of such importance that it is subject to continuing, centralized (HQDA), individual item authorization and management throughout all command and support echelons.

(1) Army Acquisition Objective (AAO), Class II, VII, and Class VIII. The AAO is the quantity of an item of equipment or ammunition required to equip and sustain Army forces, together with allies, in wartime from D-Day through the period prescribed in the latest DPG. The development of the AAO is joint effort between the Army G-3/5/7, who sets Army prioritization for modernization, and the Army G-8 (Force Development). AAO computations for Class II (non-major items), Class VII (major items), and Class VIII (medical) are no longer made by G-3 Force Builder. Both the POM and OTOE AAO computations are now made within, produced by, and displayed within the Army Flow Model. The AAO can be the total Army requirement for an item if that item is replacing an item that is facing obsolescence or is a new item to the force. In most cases the AAO is for an item that modernizes only part of the force (usually the first deploying units). Late deploying units will retain the older items that have not reached the end of the service life. The condition of these items to meet force requirements may result in changes to the AAO at a later date. The resulting procurement program is developed on a commodity approach and reflects the various line items of equipment that are to be purchased to support recognized Army requirements. The basic source calculations identifying overall procurement objectives are derived from the AAO concept.

(a) Initial Issue Quantity (IIQ) and Decrement Stocks. The IIQ is derived from the LOGSACS and is computed based on the MFORCE of the SAMAS, as developed through TAA and MACOM command plans. It contains all of the Army requirements for each item as modified by basis-of-issue plans. The IIQ is a tabulation of all of the TOE and TDA requirements for that item in the Army's force structure. Decrement Stocks reflect the difference between peacetime authorizations and wartime requirements. The IIQ also includes the APS.

(b) Additive Operational Project Stocks. Supplies and equipment above normal TOE, TDA and CTA authorizations tailored to support one or more Army operational plans and/or contingencies. Quantities are approved by HQDA and become a specific component of the total requirement.

(c) War Reserve Sustainment Stocks. Stocks acquired in peacetime and held to meet the Army's increased wartime sustainment requirements, until re-supply at wartime rates or emergency rates are established. This requirement is arrived at by use of a computer model that deploys forces on a time phased deployment schedule, utilizing a specified scenario length and applying predetermined length and applying predetermined inter-theater and intra-theater attrition factors. It should be noted that sustainment stocks are reduced by an amount equal to IIQ left behind by units that deploy OCONUS and draw APS.

(d) War reserve stocks for allies (WRSA). WRSA is a DOD directed program to assist designated allies in case of war. Computed quantities are included in this component of the gross requirement.

(e) Maintenance floats. The maintenance system requires that additional equipment be available for issue while repair and maintenance of unit equipment is being performed. These are called "floats." Two types of floats are included in this component of the AAO, the Operational Readiness Float (ORF) for unit and intermediate levels and the Repair Cycle Float (RCF) for depot maintenance.

(f) Class V (Ammunition) requirements are developed by AMC's Single Item Manager for Conventional Ammunition.

(2) Army procurement objective (APO). The AAO is what the Army wants to procure; the APO is what the Army can procure. The AAO is constrained through several different mechanisms, the two major ones being fiscal constraint and projected obsolescence. When these factors are applied to the AAO, a reduced number of items are arrived at. This becomes the APO. Fiscal restraints on procurements, in most cases, are caused by the limited availability of procurement dollars to meet all the Army's requirements. Thus, many systems are procured at a reduced quantity over a greater period of time than initially envisioned. By the time the availability of funding allows for an item procured to the AAO level, its replacement may be available for procurement instead. For example, the Army now has three types of medium tactical trucks in its fleet, 800 series, 900 series and Family of Medium Tactical Vehicles (FMTV). None of these items were procured up to the AAO level, but all have been procured to a reduced APO level. At the current

funding profile, the FMTV program will take 38 years to reach its AAO, prior to reaching AAO the FMTV will be replaced by the Future Tactical Truck System.

(3) Procurement plan development. When the AAO computations are completed, the requirements are analyzed to assist in the development of the procurement plan phased throughout the budget cycle. Development of the procurement plan requires careful attention to ensure that at least the eight factors listed here are incorporated while attempting to achieve the AAO in a balanced and progressive manner that will enhance Army readiness at the end of each funded delivery period (FDP). The FDP data is reviewed and adjusted by the acquisition PEO/PM and the ARSTAF in terms of overall Army requirements and changed to accommodate new guidance and/or priorities and to assure the materiel program is fully integrated into, and supported by, other appropriations. Articulation of Army requirements and recommended procurement programs and budget are the responsibility of the ASA(ALT) in coordination with the Army G-3/5/7 and Army G-4.

- Fiscal guidance.
- DA, DOD, OMB, congressional decisions.
- User Priority needs (compiled by Army G-3 and TRADOC).
- Current asset positions and projected loss data including FMS.
- Product improvement programs.
- Secondary item requirements (those procured within procurement appropriations-engines, transmissions, etc.).
- Production base status and capabilities.
- Interface of modernization programs (new products) with current procurement programs.

(4) AAO purpose. The AAO is, in the final analysis, the Army's requirement for an item of materiel to modernize all or part of the existing force and is used to justify budgets and programs submitted to DOD, OMB and Congress in order to obtain funding. The component parts of the AAO computation system are clearly definable and aid in the explanation of the total requirement. Tentative conclusions can be drawn about Army readiness by comparing current asset data to the AAO. AAO data are used repeatedly by the leadership of the Army in justifying the Army's need for procurement funds.

e. Cataloging Direction.

(1) Within disciplines established by the Federal Catalog System (a DLA administered system), this process develops a Federal Item Identification to describe an item-of-supply and acquires a NSN to establish and fix the unique identity of the item.

(2) The NSN is a 13-digit number used in all materiel management functions. The first four digits are the federal supply classification (FSC) class code. The FSC relates like items of supply and, conversely, separates unlike items of supply. For example, in the FSC 5305, the notation '53' indicates that the item falls within the group "Hardware and Abrasives," and the '05' indicates that the item falls within the class of screws. The last nine digits of the NSN are called the national item identification number (NIIN). Each NIIN is permanently assigned to only one item-of-supply and remains with the item as long as it is used in the government supply system. The first two digits of the NIIN also identify the country of origin; 00 and 01 indicate the United States.

(3) LOGSA maintains a consolidated Army Master Data File (or AMDF, pronounced "am-def" in the Army vernacular) of all NSN that the Army uses or manages. This file contains coded item management data, nomenclature, packaging, freight classification information, interchangeable/ substitutable data, component references, and historical records on stock numbers. This information is disseminated throughout the Army with changes made monthly.

f. Procurement direction. Computers absorb much of the administrative burden of initiating a purchase request. As a by-product of the supply control study, the computer provides a procurement work directive containing available technical specification data needed for the pre-award phase of a procurement contract. Depending upon a variety of factors including dollar value of the procurement, this request may be reviewed by the item manager, their supervisors, or it may be forwarded automatically for procurement without review. Secondary items have an economic order quantity (EOQ) computed using a modified EOQ algorithm. Typically, secondary items are procured in quantities ranging from three months' to three years' supply, depending on the cost to buy versus the cost to store the item. When procurement is solicited, the prospective contractors are told where the item is to be delivered. This decision is made based on transportation costs, storage requirements, and the geographical location of the ultimate user.

g. Distribution management of major items. Distribution management is primarily a three-fold process: accounting for existing assets through the Continuing Balance System, Expanded (CBS-X), projecting the distribution of equipment against planned force structure utilizing the AFM, TAEDP, and executing the equipment distribution program through the use of the Requisition Validation Report (REQVAL) and the Equipment Release Priority System (ERPS).

h. Accounting for assets. CBS-X (Currently being replaced by the LIDB Asset Module) is a transaction accounting system operated and maintained by LOGSA that provides worldwide asset visibility for the Army's reportable items. It covers approximately 14,500 NSNs (primarily major end items, but also includes other selected items such as medical and secondary on which worldwide visibility is required). CBS-X is updated monthly to reflect on-hand assets in units, storage, and in transit. The system is reconciled with property books and stock record accounts at least annually. CBS-X data is used by MACOMs, AMC, and HQDA to assess and manage the overall preparedness of the force, as

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the source of on-hand asset data in the AFM and, when merged with unit equipment authorization data, the determinant in honoring requisitions. For ammunition, retail/strategic visibility is accomplished by the Worldwide Ammunition Reporting System (WARS). The WARS data is used as a baseline for requirements computation, procurement, distribution, maintenance direction, and disposal. Unique item tracking provides visibility of small arms, controlled cryptographic items and radioactive testing and tracking systems.

i. Projecting equipment distribution. TAEDP is a program which projects distribution requirements and priorities using on-hand assets and projected deliveries to produce an equipment distribution program for the current, budget, and program years. The data source for requirements is LOGSACS. It incorporates near-term authorizations from TAADS with planned force structure as depicted in SAMAS. Requirements are prioritized by the Army G-3 through the DAMPL in conjunction with equipment readiness codes (ERCs) as stated in TOEs (Figure 12-5). Assets from CBS-X are used as the baseline from which projected distribution of deliveries begins. Deliveries consist of new procurements, depot maintenance returns, and redistribution of displaced systems or assets generated through force structure changes. Figure 12-5 depicts the merging of the inputs in order to create the projected distribution plan. The distribution is generally accomplished in ERC and DAMPL sequence, which will allow decisions to distribute for to achieve optimal readiness. TAEDP is run in an ORACLE environment. As such distribution rules and priorities can be changed to reflect current or envisioned priorities, such as Army National Guard Redesign Study (ADRS), Medical Reengineering Initiative (see para 19-21), SBCT, light infantry divisions, etc., when determined by Army G-3. TAEDP projects distribution to all valid unit and non-unit claimants which include MTOE, TDA, TDA-Augmentation, Army war reserves, operational project stock, ORF, Army Reserves, etc. The TAEDP is normally synchronized with the Army planning, programming, budgeting and execution system process, but can be run at any time for special analyses.

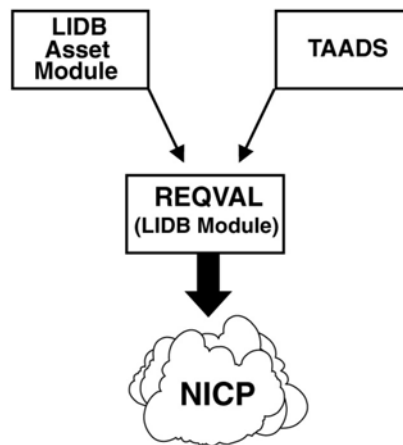


Figure 12-5. Executing distribution requisition validations (REQVAL)

j. Executing the distribution plan. The REQVAL and ERPS reports are used to validate requisitions and release equipment. The REQVAL matches current equipment authorizations as stated in TAADS against assets reported in CBS-X in order to validate requisitions (Figure 12-6).

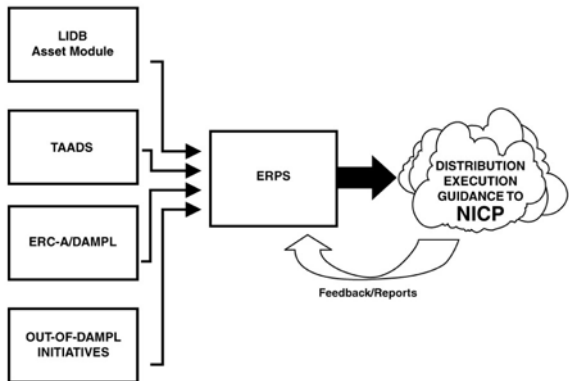
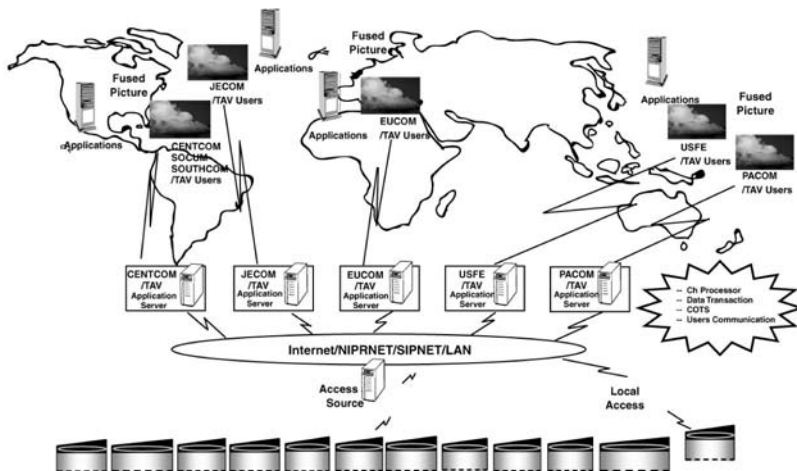


Figure 12-6. Equipment release priority system

(1) ERPS takes the process one step further and overlays out-of-DAMPL or special initiative priorities as reflected in the planning system. ERPS prioritizes for the NICP item manager to determine which units or non-unit claimants will receive equipment and in what order. The Major Item REQVAL system compares ERPS and item manager equipment backorder files, validates requirements, and provides the proper equipment distribution sequence in an automated product (Figure 12-7).

(2) The management of equipment distribution is a complicated process primarily used for allocating equipment, analyzing force capability, programming, budgeting, and as the link to correctly “growing” Army documentation. The Committee for Ammunition Logistic Support (CALS) determines ammunition distribution for items in short supply. CALS is co-chaired by Army G-4 and Army G-3. Distribution is generally accomplished in DAMPL sequence. CALS meets twice each year and allocates supplies to the MACOMs for the upcoming six-month period. The MACOMs in turn sub-allocate down to the retail level.



Supply, Personnel, Maintenance, Acquisition, Transportation, and Medical Source Data

Figure 12-7. Supply, personnel, maintenance, acquisition, transportation,

Section III

National logistics organization: other

12–8. Other Logistics-related organizations

a. U.S. Army Corps of Engineers (USACE). Designated an Army MACOM on 16 June 1979, the USACE plays a major role in the Army logistics system to include the Army's responsibility in supporting joint operations. USACE performs MILCON, installation support, real estate, R&D, and civil works missions in peacetime. It provides an organizational structure for rapid conversion of its resources to support general war and other national emergency conditions. The six components of the USACE mission are:

(1) Manage and execute engineering, construction, and real estate programs for the U.S. Army and Air Force and perform R&D in support of these programs.

(2) Manage and execute installation support programs for Army installations.

(3) Manage and execute civil works programs, including the design, planning, engineering, construction, and R&D functions in support of this program.

(4) Perform R&D through non-system-specific advanced development in systems, specialized equipment, procedures, and techniques relevant to engineer support of combat operations.

(5) Develop and maintain a capability to mobilize readily in response to national security emergencies, domestic emergencies, and emergency water planning programs.

(6) Develop technology, and design and construct facilities and structures in support of Army space initiatives.

b. Army MACOMs—CONUS.

(1) TRADOC manages all individual schooling; formulates concepts, doctrine, organization, and materiel objectives and requirements for Army forces in CONUS and OCONUS; and develops and promulgates doctrine for CSS that includes the user, DS, and GS logistics.

(2) U.S. Army CASCOM, a subordinate command of TRADOC, has the mission to develop, test, integrate, and disseminate CSS doctrine and systems for CONUS Army installations and for forces deployed OCONUS. There are five major functions performed by CASCOM.

(a) It develops and evaluates CSS concepts, doctrine, organizations, systems, and materiel concepts and requirements, and planning factors for the Army and in concert with joint logistics doctrine. It ensures the personnel service support, supply, maintenance, transportation, services, and facilities systems designed for the Army in the field and the CONUS-based theater logistics systems are compatible with the sustaining base system.

(b) It acts as TRADOC proponent for CSS training and monitors and evaluates CSS training at TRADOC schools. It ensures CSS course content is consistent with approved doctrine. It assesses the training evaluation process at associated schools.

(c) It conducts CSS exercises and manages the development of CSS training materials for AA and Reserve Component (RC) units.

(d) It serves as a principal adviser to DA, TRADOC, and AMC on all CSS matters. It provides direction, guidance, and tasks to assigned combat development activities, associated schools, other Army MACOMs, and HQDA staff agencies for their contribution to CSS development and training.

(3) FORSCOM is responsible for the administrative control of all Army forces in CONUS.

(4) The U.S. Army Medical Command (MEDCOM) provides a single manager for all health care delivery and supporting services in all 50 State and commands the Army hospital system (see Chapter 19).

(5) SDDC is the DOD single surface traffic manager and provides traffic management, transportation engineering, and common-user surface terminal services to all DOD customers and contractors. As a jointly staffed land component command of USTRANSCOM, SDDC's primary mission is executing the nation's military strategic mobility. In this capacity, it ensures the safe, secure, and economical worldwide movement of DOD units, personnel, and materiel. It is also responsible for the movement of personal property for Service members, DOD civilians, and other government agency members, manages the contract for commercial bus, federal rental cars, and the Army's commercial travel program; and assists the GSA in management of the city-pairs airfare program.

(a) To accomplish its role, SDDC is developing and fielding a number of information systems dedicated to the improvement of global transportation. These include the Transportation Coordinator - Automated Command and Control Information System (TC-ACCIS), which provides automation of Army user-unit deployments and peacetime transportation functions at U.S. and OCONUS mobilization stations. Global Freight Management (GFM) System provides automated electronic data interchange (EDI) / electronic commerce (EC) for the managing, rating, and routing of DOD freight movements within CONUS. It increases the efficiency and accuracy of general cargo government bill of lading (GBL) preparation. The Worldwide Ports System (WPS) supports SDDC's terminal management and cargo documentation mission during peace and war. The Strategic Deployment System (STRADS) is SDDC's command and control system for peacetime planning and wartime execution support. The Transportation Operational Personal

Property Standard System (TOPS) automates and standardizes the personal property movement, storage, and management functions at DOD transportation offices worldwide.

(b) SDDC Transportation Engineering Agency provides the scientific engineering and transportation expertise to analyze and improve the transportability of military equipment, the deployability of Army units, and the effectiveness of the DOD transportation programs for national defense.

c. *Army Service Component Commander (ASCC)*. Logistics in a theater of operations is tailored to support the JFC's requirements for each situation. Consideration is given to the variety of missions, which tend to make each logistics requirement different in terms of amounts and types of supplies, maintenance, transportation, and services needed. Consequently, organizations are tailored to each theater to cover a full spectrum of possibilities ranging from a large theater of operations comprised of one or more corps to support levels required by a division or separate brigade.

(1) The ASCC is responsible for providing administrative control (that includes logistics support) to all Army units and contractors in the theater. This responsibility is executed through one or more subordinate theater support commands (TSC) or a functional command such as personnel, transportation, medical, or engineer commands. The Army commander manages theater logistics support by establishing broad policies, allocating critical supplies, and assigning missions in concert with the JFC's guidance. Additionally, the Army theater commander manages and controls supply, maintenance, and other logistics services through the TSC and provides for centralized movements control for U.S. Army forces through the Theater Movement Control Agency.

(2) The Army TSC is a subordinate command and normally falls under the ASCC. Across the full spectrum of military operations, the TSC provides direct and general supply and maintenance support to all theater units in the COMMZ and sometimes forward to include EAC units, joint elements, allied forces, and units passing through.

(3) The Army corps support command (COSCOM) provides maintenance, supply, transportation, health services, and field services support to an Army corps. Within the corps zone, non-divisional units receive supply and maintenance support from the COSCOM. Additionally, the COSCOM provides backup and GS to divisional units. Its functional centers, the materiel management center (MMC) and movement control center (MCC) perform the major tasks of managing the supply, maintenance, and transportation functions.

(4) The division support command (DISCOM) orchestrates divisional logistics operations. It directs maintenance, supply, transportation, health services, and field service support to an Army division.

d. *Army and Air Force Exchange Service (AAFES)*.

(1) AAFES is the provider of supply Class VI (personal demand items) for the Army and Air Force. It is a joint command of the Departments of the Army and Air Force. The AAFES commander is a general officer responsible to the AAFES BOD. In turn, the BOD is responsible to the Secretaries of the Army and Air Force through their respective chiefs of staff. The chairmanship of the BOD alternates between the two Services approximately every three years. The AAFES positioned of commander and vice commander alternate between the Army and the Air Force. Primarily a civilian-run organization under military leadership, AAFES employs about 52,400 people, and operates approximately 1,500 facilities worldwide. AAFES worldwide headquarters is located in Dallas, Texas and two subordinate headquarters manage operations within the Europe and Pacific Regions.

(2) The mission of AAFES is to provide merchandise and services of necessity and convenience to authorized patrons at uniformly low prices, and to generate funds to supplement APFs for the support of MWR programs. AAFES does this in peace and wartime. To accomplish its mission, AAFES:

(a) Operates retail, food, personal service, vending centers, theaters, automotive facilities, Army military clothing sales stores, on military installations,

(b) Provides basic exchange support to military personnel engaged in contingency operations or field exercises by establishing military-run tactical field exchanges (TFEs) where regular AAFES operations are not possible. Class VI support in the field can be limited to basic health and hygiene needs or expanded to include food, beverages, and other comfort items based upon the requested needs of the theater commander,

(c) Generates earnings that support MWR programs. AAFES pays dividends to the Army, which in turn allocates funds to specific MWR programs on installations. The Army MWR BOD, which is formed under the Army Community and Family Support Center (CFSC) (see para 14-8b), controls the allocation of AAFES-generated MWR funds within the Army.

e. *GSA*. The GSA provides general supplies and services that are common to more than one department of the Government. The GSA has multi-mission responsibility to manage the varied business activities of the Federal Government. GSA provides an extensive amount of supply support to the DOD for such commonly used items as leased commercial-style vehicles, office furniture and supplies, machine and hand tools, photo supplies, etc.

12-9. Defense Logistics-related organizations

a. *Defense Logistics Agency (DLA)*. Headquartered at Fort Belvoir, VA, DLA performs its worldwide logistics with both civilian and military personnel, in facilities ranging from supply centers, to property reutilization offices. DLA is the DOD's primary source for consumable items, whether for combat readiness, emergency preparedness or day-to-day operations. DLA functions include the following:

- Management of more than 4 million consumable items.

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- Execution of a worldwide distribution system.
- Worldwide property reutilization and marketing services as well as information on available excess DOD property.
- Worldwide HAZMAT disposal services and information on management of hazardous materials.
- Management of the Federal Catalog System, including sources, item descriptions and prices.
- Technical logistics services, such as specialized product testing.
- Management of federal strategic materials reserves.

b. Defense Contract Management Agency (DCMA). DCMA was established in March 2000 (formerly DLA's Defense Contract Management Command) and provides contract administration services in support of all the DOD components, the National Aeronautics and Space Administration, and other designated federal and state agencies, and 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, and surveillance of contractor progress to ensure timely delivery of materiel. DCMA also provides contract management for Army LOGCAP.

c. Defense Commissary Agency (DeCA).

(1) The DeCA was established in May 1990 and assumed full operational control of Army and other Services' commissary operations in October 1991. DeCA is an agency of the DOD operating under the direction and control of the Under Secretary of Defense (Personnel and Readiness) (USD (P&R)). DeCA is organized with a director and headquarters staff, three CONUS regions, a European region, and a DOD Liaison Office. The DOD Liaison Office is administratively assigned to the Director, DeCA. DeCA's primary mission is to:

(a) Provide an efficient and effective worldwide system of commissaries for the resale of groceries and household supplies at the lowest practical price to members of the military Services, their families, and other authorized patrons, while maintaining high standards for quality facilities, products, and service consistent with standards similar to those in commercial food stores.

(b) Operate commissaries as APF activities as an integral element of the military pay and benefits package. Provide an income-effect benefit through savings on food and household items necessary to subsist and maintain the household of the military member.

(2) The Commissary Operating Board has representatives from the different military services and serves as a forum for the discussion and resolution of issues concerning the commissary services provided by DeCA, addresses operational and policy concerns, and implements broad policy as directed by Defense Management Council (DMC).

d. National Image and Mapping Agency (NIMA). NIMA provides geospatial information to the national security community. Maps, nautical charts, and aeronautical charts are essential for logisticians to plan logistics support.

Section IV Standard systems

12-10. Defense standard systems

There are a number of defense standard systems necessitated by the ever-increasing language of codes and formats readable by the computer, the supporting communications equipment, and the human operator. GSA, DLA, the commodity commands of AMC or any of the other military departments may supply items requisitioned by a single Army unit, thus the need for standard codes and formats. DLA has been assigned the responsibility for administering the 10 DOD standard systems generally referred to as the Defense Logistics Management Standards Office (DLMSO).

a. Defense Logistics Management System (DLMS) and Military Standard Requisitioning and Issue Procedures (MILSTRIP). The Defense Logistics Management System (DLMS) supports the Department of the Army's data transition using current interchange business practices and eliminating MILSTRIP requisitioning.

(1) MILSTRIP procedures prescribe the uniform code and data elements to be used in requisitioning and issuing supplies. Within the DOD, a single line item requisition is used. Each requisition is for one specific item. The form and format are fixed, but some of the data elements may be manipulated and other data elements added may produce a variety of documents essential to supply operations. Common documents thus produced are requisitions, cancellations, supply status, shipment status, follow-up answers, materiel release orders, confirmations, and denials. Much of the information contained in these documents is the same. For example, each document contains the NSN, quantity, requisitioner, priority, funding data, etc. These procedures permit the requisitioner to say what he or she wants, and provides the supply system with the necessary documents for processing the request.

(2) The DLMS is a process managed by the Defense Logistics Management Standards Office (DLMSO) located at the Defense Logistics Agency that governs logistics functional business management standards and practices rather than an automated information system. The DLMS interprets, prescribes, and implements DoD policy in the functional areas of supply, transportation, acquisition (contract administration), maintenance, and finance. Joint committees administer the requirements of these functional areas. The DLMS provides a functional infrastructure for the establishment and maintenance of procedural guidelines required for its user community to carry out DoD logistics policy. The DLMS is authorized by DoDD 4140.1; DLMS is prescribed by DoD 4140.40-1-R.

b. Uniform Movement and Materiel Issue Priority System (UMMIPS). In the issue and movement of supplies it is necessary to determine the relative importance of competing requisitions. The force activity designator (FAD) is what authorizes the requestor to use certain priorities based on the urgency of need. Each unit in the Army is assigned a FAD based upon its relative position on the DAMPL and its present deployment, that is, positioned for combat, in combat, in support of troops in combat, etc. FAD I can only be assigned by the JS. The urgency of need refers to the unit's need for the particular item being requisitioned, that is, a repair part to get equipment off deadline, stock replenishment, etc. The application of these two factors produces a total of 15 priorities. UMMIPS establishes time standards based on priority. From requisition to receipt, the standards are (table 12-2). These time standards are further subdivided for each activity involved in the supply and movement of materiel, that is, NICP, depot, transportation agencies, etc. *Uniform Movement and Materiel Issue Priority System (UMMIPS).* In the issue and movement of supplies it is necessary to determine the relative importance of competing requisitions. The force activity designator (FAD) is what authorizes the requestor to use certain priorities based on the urgency of need. Each unit in the Army is assigned a FAD based upon its relative position on the DAMPL and its present deployment, that is, positioned for combat, in combat, in support of troops in combat, etc. FAD I can only be assigned by the JS. The urgency of need refers to the unit's need for the particular item being requisitioned, that is, a repair part to get equipment off deadline, stock replenishment, etc. The application of these two factors produces a total of 15 priorities. UMMIPS establishes time standards based on priority. From requisition to receipt, the standards are in Table 12-2. These time standards are further subdivided for each activity involved in the supply and movement of materiel, that is, NICP, depot, transportation agencies, etc.

Table 12-2
UMMIPS Time Standards

Requisitioning Priority	Unit Location	
	United States	Overseas
01-03	7 days	11-12 days
04-08	11 days	15-16 days
09-15	28 days	67-82 days

c. Military Standard Transportation and Movement Procedures (MILSTAMP). This system is designed to manage, control, and document materiel (including personal property, exchange, and commissary) moving in the DTS and clearly define the responsibilities of shipping, clearance, terminal, and receiving activities. MILSTAMP is structured to interface directly with MILSTRIP and to support the movement criteria prescribed by UMMIPS. It functions through a discipline of uniform documentation procedures, formats, data elements and codes, and data transmission time standards. It also supports the performance-assessment requirements of MILSTEP through in-transit data collection and the inventory visibility requirements of the Services and agencies. AMC is the Army focal point for MILSTAMP.

d. Military Supply and Transportation Evaluation Procedures (MILSTEP). The basic tools for evaluating the strategic system are the MILSTEP reports. This system of reporting uses the uniform data elements produced by MILSTRIP and MILSTAMP as a database to produce the various MILSTEP supply and transportation reports. To produce these reports, a reduced version of the computer history file for each commodity command is extracted onto tape and forwarded to LOGSA. The supply effectiveness reports display such things as: the percentages of requisitions on which stock was available, the number and age of back-ordered requisitions, and the number of stock numbers causing back orders. Using this same database, other reports are generated to evaluate depots, NICPs, and AMC's overall performance in key functional areas. AMC is the Army focal point for MILSTEP.

e. Transportation Operational Personal Property Standard System (TOPS). TPOS is a joint Service system which has the capabilities to automate, streamline, and coordinate virtually every aspect of handling personal property shipments to include counseling, outbound, inbound, non-temporary storage, and quality assurance, and ends duplication of effort and documentation. The system is a network of computer systems located at a personal property shipment office (PPSO). Each site has a telecommunications link to central switching (SWITCHER), a site at SDDC, Alexandria, Virginia that serves as a data sorting and distribution point.

12-11. Department of the Army standard systems

Just as it is necessary for DOD to establish military standard systems to be used by all of the military departments, the Army establishes standard systems for use by its various elements. The overall concept for Standard Army Logistics Systems (SALS) embodies standard systems in every functional area. Many new systems that will be included under the SALS concept are currently being developed and tested. There are two standard systems developed and used by AMC that are a part of SALS. They are the Commodity Command Standard System (CCSS), which is used to support the NICPs; and the SDS, used to support depot operations.

a. Direct Support System (DSS). AMC serves as executive agent for DSS. The ALOC is a refinement of DSS and is

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used to airlift selected repair parts to designated OCONUS units. DSS was developed with the following objectives:

- Reduce intermediate stock levels OCONUS and at CONUS installations.
- Reduce the value of stock in the pipeline.
- Maintain or improve supply responsiveness and expend fewer resources through use of improved computer, communications, and container technology.
- Change existing procedures as little as possible.
- Maintain readiness.

(1) DSS–ALOC provides for direct supply of materiel from the strategic distribution depot to the direct support unit (DSU). This bypasses OCONUS GS and break-bulk points and CONUS installation supply activities. The DSU requisition is passed to the strategic supplier through the intermediate level and the Defense Automatic Addressing System (DAAS).

(2) DAAS is a worldwide, computerized activity that acts as a message center. It automatically routes supply documents between requisitioners and the various supply activities. This routing is done on a near real-time basis and rarely is a supply document delayed more than a few minutes. The requisition is routed to the NIPC who orders the appropriate distribution depot to ship the item. The distribution depot moves the item to the consolidation/containerization point (CCP), located at the distribution depot, for consolidation with other supplies destined for the same DSU. Depending on volume, consolidation point personnel load a container for one unit or a number of units situated in the same geographic area. The container is loaded for ease of unloading and once closed at the CCP is not opened until it arrives at its destination. If all supplies in the container are for one DSU, the destination is that DSU. If supplies are for multiple DSUs, the destination is a drop point (a designated unit) within the geographical area and other units come to this point and pick up their supplies.

b. Continuing Balance System, Expanded (CBS–X). As already described earlier, CBS–X is the official Army database that provides accurate, timely, and auditable worldwide (down to property book level) visibility of major end items of equipment. CBS–X furnishes Army management with inventory numbers for equipment procurement and distribution decisions.

c. Army Total Asset Visibility (ATAV). ATAV is an information process that integrates data from automated systems and provides commanders and logisticians with information on location, quantity, condition, and movement of assets. It is the responsibility of AMC to ensure ATAV fits in as part of a larger Defense and Joint TAV (DTAV/JTAV) system (under constant and continuous development). The TAV system is a fully automated, near-real time, and has “open architecture” capability that is migrating to be Defense Information Infrastructure and Common Operating Environment compliant under the Logistics Integrated Database (LIDB). TAV has visibility of over 1.4 million Army NSNs (and 6 million DOD NSNs) and provides related logistics data to users throughout the Army and DOD. It has been successfully used during operations in Somalia, Rwanda, Haiti, operations Joint Endeavor and Joint Guard and Task Forces Eagle and Falcon to track assets. The Army has identified ATAV as the authoritative source for obtaining Army logistics data in support of joint programs, i.e., DTAV/JTAV (see figure 12–8).

(1) *Lateral redistribution/procurement offset.* ATAV is being used today to provide visibility of assets internal to the Army and across Service/DLA lines for use in utilizing assets for redistribution and procurement offset from the wholesale levels.

(2) *Automatic Identification Technologies (AIT).* AIT is a family of devices that facilitates the accurate capture, storage, retrieval, transfer and transmission of source data information to reduce processing times, improve accuracy, and enhance asset visibility. AIT is being integrated into Army logistics processes including the deployment of troops and equipment, logistics supply and re-supply, and maintenance. The purpose of AIT applications is to provide an accurate and efficient automated means to capture, store, and retrieve source data, with a minimum of human intervention. Since no single AIT device can satisfy the Army’s logistics source data automation, identification and tracking requirement, the Army embraces a family of AIT devices. These devices include linear and two-dimensional bar codes, radio frequency identification (RFID) technology, contact memory buttons, optical memory cards and smart cards. AIT initiatives include: Ammunition-AIT integration, implementation of RFID Army-wide, and maintenance-AIT integration.

(3) *Ammunition-AIT Integration.* LTA in partnership with the SDDC, AMC, CASCOM, U.S. Army, Europe, USARPAC, and industry, is leveraging commercial technology and is applying AIT to the ammunition business process. Ammunition-AIT integration provides TAV of Class V as it is transported in containers from the depots through SDDC ports and on to ammunition supply points (ASPs) in the theaters of operation. At the shipping depot, information obtained from automatic content-interrogations is transmitted electronically into AISs for updating status records and preparing shipping documentation. Radio frequency (RF) tags and two-dimensional bar codes attached to shipping containers are “written” or “populated” with essential electronic data. As the cargo moves through the logistics pipeline, RF tags provide managers content visibility and tracking information. A business process server (BPS) acting as an interpreter of the AIT for legacy AISs, has been integrated onto the same server platform for Ammunition at the retail level Standard Army Ammunition System Modernized (SAAS–MOD). The BPS is being fielded to all ASPs throughout the Army with the target completion in FY 03. The BPS at the wholesale level is at all

depots and is interfaced with the Standard Depot System (SDS). Both provide in-the-box visibility and a shipping template. This information provides the recipient with information to automatically produce a receipt document that will automatically update the automated accountability records. After completion of a successful pilot integration effort in July 1998, Ammunition-AIT integration now includes depots, ASPs, two ports in Europe, and two ports on the CONUS west coast. Future RFID infrastructure is being extended to more ASPs in the Pacific and one additional port.

(4) *RFID Implementation*. RFID is being implemented Army-wide to provide content or "inside-the-container" visibility and transportation node tracking of assets as they move through the logistics pipeline. RFID has been installed at the fifteen FORSCOM "power projection platforms" (specified bases), at the National and Joint Readiness training centers, seven CONUS-based logistics locations, six commercial subsistence prime vendor plants, along commercial and military ALOC and sea lines of communication (SLOC), Tier I and II ammunition depots and DLA distribution depots.

(5) *Stryker Brigade Combat Team (SBCT)*. RFID technology has been installed at Fort Lewis, WA, in support of the SBCT deployment and sustainment operations. An Early Entry Deployment Support Kit (EEDSK) and associated AIT training is being provided for the SBCT. The EEDSK provides a temporary, mobile capability to read and write RF tags and upload the information to the Army ITV server via satellite communications. EEDSKs are designed for locations not permanently or adequately configured for AIT operations, and are currently being deployed in support of Operation Enduring Freedom.

(6) *Maintenance AIT*. Efforts are underway to integrate AIT into the maintenance process to provide source data automation, enhancement of the maintenance process, and tracking through the SDS, Standard Army Maintenance System and Unit Level Logistics System of maintenance actions from wholesale through the General and Direct Support levels of maintenance. Maintenance AIT integration provides information on what is broken, parts required to repair, repair history, location of items and expected arrival time. AIT, in the form of miniature contact memory buttons and bar codes, is being used to identify, store and transfer data to provide an end to end tracking system for critical aviation components for Army aviation. Components are tracked through original manufacturer, operational usage, and maintenance and overhaul, automating the current paper-based system (i.e., The Army Maintenance Management System - Aviation (TAMMS-A)) designed to manage the forms and records used to control, manage, and maintain the aircraft. At Corpus Christi Army Depot, AIT in the form of bar codes and RFID technology is being implemented to track and locate repair parts in the repair/overhaul process and also for their Ground Support Equipment.

(7) *Deployment and Sustainment Support Tool (DS2T)*. DS2T, formerly known as the Computer Automated Transportation Tool, is a stand-alone capability to generate standard DOD supply, transportation and shipping documentation. It was designed for use in organizations that are required to ship materiel within the DOD transportation system, but have no AIS to support production of the required documentation and AIT media. DS2T is PC based and provides the capability to read and write linear and 2 dimensional bar codes, RF tags, and Optical Memory Cards for the Automated Manifest System; produce a Military Shipping Label, Issue Release/Receipt Document, Transportation Control Movement Document, and a packing list. There are three modules within DS2T: Sustainment, Unit Movement, and Direct Vendor Delivery.

d. Tailored systems. The Army currently employs a set of logistics systems that are each tailored to specific areas.

(1) The Standard Army Ammunition System (SAAS) supports tactical ammunition management and storage operations to produce accurate and timely Class V information during peacetime, contingency, and wartime operations on a highly mobile battlefield.

(2) The Standard Army Maintenance System (SAMS) is used to manage maintenance operations at the installation and in all tactical units.

(3) Standard Army Retail Supply System - Objective (SARSS-O) supports retail supply management operations. It consists of four integrated systems (SARSS-1, SARSS-2AD, SARSS-2AC/B, SARSS-Gateway). SARSS-1 is used for customer service and warehouse operations in GS or DS supply activities. SARSS-2AD is used for supply management at division and separate brigade and regiment. SARSS-2AC/B is used at materiel management centers at the corps and theater level. Gateway provides the capability through improved communications and advanced automation techniques to place orders on the source of supply the same day they are produced by the customer and to provide asset visibility of all assets that are available within a specified geographical area. SARSS-Gateway is a relational database that interfaces with existing Army STAMIS to provide a near real-time supply system to unit level supply and maintenance activities.

(4) ULLS consists of three applications (ULLS-G, ULLS-A, ULLS-S4). ULLS-G is located at company level for TAMMS and PLL. ULLS-S4 is found at company, battalion and brigade S-4 levels. The ULLS-A is found at aircraft flight companies and Aviation unit- and intermediate- maintenance units. ULLS automates the logistics to include aviation, for unit supply, maintenance and materiel readiness management operations; prepares unit supply documents, maintenance management records, and readiness reports. It operates in all components of the Army (Active Army, Army National Guard, and U.S. Army Reserve).

(5) Standard Property Book System-Redesign (SPBS-R) is used for property accountability at battalion and higher levels in both tactical and installation environments. It automates overall property accountability and asset visibility

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functions. It creates master hand receipts, which allow the ULLS to generate automated sub-hand receipts to the user level. Property accountability is maintained within SPBS-R, while asset data is passed to the next higher level for asset visibility and management (through CBS-X).

(6) Department of the Army Movement Management System-Redesign (DAMMS-R) is divided into seven modules/subsystems (shipment management module (SMM), to include controlled movements, movement control team (MCT) operations subsystem, mode operations subsystem, highway regulation subsystem, convoy planning subsystem, operational movement programming subsystem, and transportation addressing subsystem (TAS). DAMMS-R is used to plan, schedule, and track the shipment of equipment and assets (containers) used for shipping equipment via air, ground, and sea. Shipment location is tracked and reported until a shipment reaches its destination. This system is scheduled for replacement by TC AIMS II, which is a joint Service system being developed by Army.

(7) AFMIS automates management of food service and subsistence supply operations at the troop issue subsistence activity (TISA), installation food advisor (IFA), and the dining facility operations (DFO). The TISA module of AFMIS tracks issues, receipts, sales, reorders, and storage. The IFA module produces reports on dining facility operation and menus. The DFO module assists the dining facility manager in menu planning, production scheduling, inventories, headcount, and requisitioning. AFMIS currently interfaces with Defense Subsistence Management Information System (DSMIS), STANFINS, and the Subsistence Total Order and Receipt Electronics System (STORES), the Joint Subsistence Prime Vendor Food Ordering System.

(8) The central issue facility (CIF) module of the installation support modules (ISM) provides a standardized Army-wide, automated, user-friendly system for the receipt, storage, issue, exchange, and turn-in of authorized organizational clothing and individual equipment OCIE at Army installations. A standard automated CIF system is needed to support peacetime operations and deployment/redeployment of Soldiers in support of both military operations and military OOTW. The Army must field an automated CIF system worldwide, which is capable of outfitting Soldiers with needed OCIE in time to meet deployment schedules while maintaining property accountability. The CIF module improves property accountability and inventory management. The module will allow CIF personnel to provide better support to Soldiers and improve management.

e. Initiatives. Many of the legacy systems mentioned above were designed and developed based on old 1960's technology, i.e. data exchange via floppy diskette and modem, standalone workstations, fragmented/stove-piped, not dependent on constant communications, MILSTRIP, MILSTRAP data formats, just to name a few. These systems have served the Army well, but in an era of rapidly changing requirements and technology, many have reached the end of their life expectancy. As the Army moves forward to transform into a more agile, lethal, and versatile force, it must transform itself to distribution-based logistics, by reconfiguring logistics and reengineering logistics systems by leveraging information and communication technologies that exist today and tomorrow. Ultimately the Army envisions a single, seamless, integrated logistics system that provides accurate and real-time information and, improves overall responsiveness and situational awareness. There are many initiatives underway to modernize and streamline logistics. The logistics systems tomorrow must:

- Enhance deployability.
- Help reduce the logistics footprint in the battlespace.
- Reduce total obligation authority.

(1) *GCSS-A.* GCSS-A is the Army's logistics information and communications system, to eventually replace aging legacy systems. It is being designed to support the Army CSS mission area, which includes the battlefield support functions of arming, fixing, fueling, manning, moving, and sustaining Soldiers and their systems. GCSS-A will establish interfaces with other CSS AISs so that users can gain access to information and exchange operational data in the areas of personnel, medical, finance, training, and unit administration. The databases and processes of the application programs will accommodate system operations in a distributed, shared data computing environment. There are three levels to GCSS-A that are being developed simultaneously:

(a) *GCSS-AT.* – to support the tactical retail environment. This level will produce a set of integrated modules to replace the existing legacy tactical logistics systems.

(b) *GCSS-AS.* – to integrate wholesale logistics with retail level activities.

(c) *GCSS-AJ.* – to address joint Service interoperability requirements. The tactical-retail level of GCSS-A will feed logistics information into the Combat Service Support Control System to provide commanders with up to date real time logistics situational awareness

(2) *Logistics Modernization Program (LMP).* The LMP program objective is to ensure the Army's combat readiness by modernizing the Army's strategic information management systems and logistics processes.

(a) The LMP initiative includes modernization of AMC's business and financial processes and practices utilizing the latest in IT to replace the two largest wholesale logistics systems: the CCSS, which is used to manage wholesale inventory; and the SDS, which is used to manage depot and arsenal operations. LMP supports the ultimate goal of an integrated, seamless logistics process focused on systems interoperability within the context of GCSS-A. LMP follows a unique acquisition strategy: to purchase long-term logistics automated support as a service from an industry leader and perform Business Process Reengineering (BPR). BPR completely redefines how AMC does business, enabling the

command to achieve dramatic reduction in cycle times, out-of-stock rates, and significant increases in on-time delivery rates. LMP utilizes a commercial off-the-shelf product (as opposed to developing government unique code, as done with CCSS and SDS) that will enable the Army to move with and continually reassess the market, capture market-side improvements and reduce software costs.

(b) An Enterprise Resource Planning (ERP) solution was the software selected to provide the modernize services. ERP facilitates standardized processes, incorporates industry best practices and optimizes the integration of functions across supply, finance, manufacturing, ammunition, maintenance (depots, arsenals), HR, etc. The objective is to improve critical business performance metrics, designed around processes, rather than transactions. This application integration allows data to flow seamlessly across functions making data available to commanders in real time.

(3) TC AIMS II. TC AIMS II is a joint system with the Army as the lead developer. It will be the Army's deployment planning, execution and in-theater transportation and distribution information system that will eventually facilitate the movement of personnel, equipment, and supplies during peace and war and, provides the source data to enable data visibility of forces via the Joint Operation Planning and Execution System. The system is to be fielded in five incremental blocks. Blocks 1 and 2 have been fielded with the remaining functional blocks programmed out through FY 10.

(4) Movement tracking system (MTS) will incorporate digital maps in the vehicles and allow two-way satellite messaging thereby allowing the transportation coordinator the ability to talk to the driver of any truck, regardless of location, without having to put up antennas or involve more Soldiers. MTS will be adaptable to future incorporation of RF technology, automatic reporting of vehicle diagnostics, and other features that support in-transit visibility.

Section V Funding

12-12. Appropriations

Congressionally approved funds and the Army budget structure are divided into appropriations, which support both the AA and Reserve Components. For logistics management purposes, these appropriations can be addressed in two categories; procurement appropriations and operations and maintenance appropriations.

a. Procurement appropriations are used to buy all major items and other selected end items. Selected end items with a unit price in excess of \$25,000 are purchased with procurement appropriations. The current expense/investment threshold cost is established at \$100,000 for budget purposes. This same threshold is also used for accounting and capitalization purposes.

b. Operations and maintenance appropriations support day-to-day operations. It pays for such things as training; unit and major item depot maintenance; and administrative and associated activities. The operations and maintenance appropriation is allocated by Department of Army, to Army commands based upon their mission and the importance of that mission to the Army. These funds are referred to as consumer funds. Between consumer funds and the procurement appropriations, the field commander purchases all of his or her secondary items.

12-13. Army Working Capital Fund (AWCF)

National logistics operations, support costs for secondary items are funded by the AWCF. The AWCF, an element of the Defense Working Capital Fund, was established by OSD beginning in FY 97, following Congressional concerns over the Defense Business Operating Fund. The AWCF incorporates the commercial or business operations previously managed within the individual revolving funds (Stock Fund and the Industrial Fund) into a single revolving or business operations fund. The AWCF is designed to provide a more effective means for controlling the costs of goods and services and a more flexible way of financing and accounting for those costs; to create and recognize contractual relationships between the activity and its customers; to enhance the effective acquisition and use of manpower, materiel, and other resources; and to support the performance budgeting concept by facilitating budgeting, reporting, and control of costs of secondary items. Simply, this means that the cost of providing a product or service "the cost of materiel and logistics support" is passed on to the customer, as in private industry. The payments by Army and other DOD customers (and other government agencies and private concerns as authorized) provide the capital to replenish the AWCF. The AWCF is an integral part of the DOD team, providing support services that are essential to the success of the operating forces. AMC manages functional and financial performance with AWCF. The three activity groups that make up the fund are:

a. *Supply Management, Army (SMA)*. This activity group operates on a buyer-seller relationship basis, buying from industry and maintaining through depot and GS level maintenance, assigned stocks for sale to it customers - primarily to Army operating units. The availability of this materiel impacts equipment readiness. Until implementation of SSF the SMA activity consisted of a wholesale division (AMC) and retail divisions operated at MACOM level (to include AMC, which is an operator of some installations). Under SSF, the two have been merged into one national fund, which is subdivided according to commodity and assigned to major subordinate commands of AMC. This activity group also manages the Army's pre-positioned war reserves. The SMA activity also funds the inventory control point logistics support expenses. The prices for items purchased by the consumer cover the acquisition cost plus the cost of supply operations and transportation. On a FY basis, the SMA has a total operating cost authority (OCA), which limits the

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total amount of supplies and equipment that can be purchased and/or repaired. OCA is “earned” at the national level through sales to consumers. The SMA incorporates the funding procedures needed to purchase supplies in advance from industry for stockage so that items are available upon requisition.

b. Depot Maintenance. The Depot Maintenance activity group gives the Army the capability to repair, overhaul, restore and improve reliability and maintainability, and upgrade weapon systems and equipment; to store and distribute ammunition, war reserve materiel, and other selected items; and to provide tenant support to other AMC, Army, and DOD activities. The Depot Maintenance Group both competes with and partners with private industry to deliver goods and services efficiently and effectively.

c. Ordnance. The Ordnance activity group produces conventional munitions, manufactures large-caliber weapon system components, and provides stockpile management. The group’s activities are managed by JMC, a major subordinate command of the AMC. The JMC serves all branches of the DOD, providing the industrial capability for the manufacture, renovation, and demilitarizing of materiel—specifically of howitzers, gun tubes, mounts, mortars, grenades and smoke rounds, gas masks, and tool sets and kits.

Section VI Security Assistance

12–14. Security Assistance Responsibilities (SA)

a. The Secretary of State is responsible for the overall supervision and general direction of the SA program. The primary responsibility of the Secretary of Defense is to determine military equipment and training requirements, and to procure and supervise the use of equipment by each recipient country. The military departments execute and manage their portion of the SA program under the general direction of the Defense Security Cooperation Agency (DSCA) (see para 20–25a(5)). They also provide technical support and information for use in negotiations on acquisition and co-production agreements that will ultimately affect their plans and programs.

b. The President, through DOS channels, determines which foreign countries are eligible to purchase defense articles, training, and other services from U.S. sources. Purchase requests from foreign countries of major items of equipment are sent to their respective U.S. Embassy with copies to DOS, DSCA, and the military departments. Purchases of parts and other non-major items can be addressed directly with the military departments. Congress must be notified of any offer to sell defense articles and services valued at \$50,000,000 or more, major defense equipment valued at \$14,000,000 or more, and design and construction services valued at \$200,000,000 or more.

c. ARSTAF SA responsibilities are to develop and issue overall policy and program guidance. Operations are assigned to MACOMs. The major SA policy player in the ARSTAF is the Deputy Assistant Secretary of the Army (Defense Exports and Cooperation (DASA [DEC])). The DASA (DEC) coordinates the development and issuance of Army-wide SA policy in coordination with the Army G–3, Army G–1, Army G–2, USACE, Judge Advocate General, and the various agencies within the ARSEC. The SA responsibilities of the various DA staff elements are focused on overall program guidance with coordination of the various functional areas a prime responsibility of the DASA (DEC). The operational aspects of the SA program including management of FMS cases, FMF, and IMET are assigned to MACOMs. AMC, as the Army executive agent for Materiel Services, is responsible for the operational aspects of approved FMF (except training and design and construction services) and military assistance programs (MAP). TRADOC manages the operational aspects of FMS training at CONUS and OCONUS schools, and IMET programs.

(1) Again, the DASA (DEC) is the principal ARSTAF spokesman and ARSTAF proponent for SA. S/he is responsible for SA policy and procedural guidance. He or she has direct access to and interacts with the Vice CSA, the Under Secretary of the Army and other members of the ARSEC, OSD, other Military Departments, agencies, commands, and activities relative to SA matters. S/he has DA tasking authority over all ARSTAF agencies, MACOMs, and field activities on matters pertaining to SA. As the ARSTAFF spokesman for SA, s/he is responsible for providing policy and guidance to the Army executive agent and other agencies or MACOMs for SA when required.

(2) AMC is the Army’s principal agent for supplying FMS materiel. It fulfills its responsibilities through USASAC. USASAC, working with other AMC elements, develops the necessary data to consummate sales and supervise their execution. This operational responsibility extends from the initial long-range planning, which involves the development of requirements for materiel and services, to the signing of agreements, coordination of all aspects of support, delivery of the goods and services, and completion of final accounting. USASAC is the focal point between the U.S. Army and friendly nations, ensuring that actions remain on course throughout the life cycle of the SA process.

(3) USASAC also oversees AMC’s participation in the Munitions Control Program. This program involves the development of Army positions on commercial export license applications for the export of military items, technical data, and services to foreign countries. Export license applications, commonly called munitions cases, pertain to the export of defense articles and services, or technical data, described in the U.S. Munitions List contained in the DOS’s International Traffic in Arms Regulation. The DOS and the Office of the Deputy under Secretary of Defense (Trade Security Policy) refer certain export license applications to the Army for evaluation. The objectives of this evaluation are to control the export of classified or critical technology for which the United States has the technological lead, and which has the potential to significantly threaten U.S. national security if provided to certain foreign governments; to provide the Army position on the effect of proposed exports on national security; and to control export sales that could

interfere with Army programs. Through coordination with appropriate AMC technical elements, USASAC provides a recommended position on whether particular export license applications should be approved.

12–15. Co-production

Another facet of USASAC's SA responsibilities is co-production, which encompasses any program that enables an eligible foreign governmental organization, or designated commercial producer, to acquire substantial "know-how" to manufacture or assemble, repair, maintain, and operate a specific system or individual military item. The "know-how" furnished by the United States is on a reimbursable basis and may include research, development, production data, and/or subassemblies, managerial skills, procurement assistance, or quality control procedures. Co-production may be limited to the assembly of a few end items with a small input of in-country produced parts, or it may extend to a major manufacturing effort requiring the build-up of capital industries. As in the case of conventional military sales and associated supply support arrangements, the co-production programs perpetuate utilization of items common to U.S. forces, thereby promoting rationalization, standardization, and interoperability.

Section VII

Summary, references, websites, & professional reading list

12–16. Summary

a. This chapter addressed the nature and structure of the Army logistics system. It is a large, complex system that must be properly managed if it is to perform to the expectations of the COCOM commanders. The struggle continues to find balance between logistics effectiveness and logistics efficiencies.

b. The Army G–4 is the policy, with overall responsibility to assure that the individual pieces fit together and operate in harmony, one with the other. To do this, the Army G–4 establishes broad policies and procedures, and monitors and guides the development of standard logistics systems for use at all echelons.

c. The Army's national-level logistics system is operated by the AMC in concert with other key Army, joint and non-DOD agencies. AMC operates through its major subordinate commands and SRAs to fulfill the Army's need for national logistics support. The Army's materiel requirements are divided into commodity groupings with each commodity command assigned one or more of these groupings. The commodity commands collectively determine the Army's requirement, procure or overhaul necessary assets, position them in the appropriate depots, and issue in response to the Army's needs.

12–17. Selected official military references

- a. DOD Directive 5105.22, *Defense Logistics Agency (DLA)*.
- b. DOD Directive 5134.1, *Undersecretary of Defense for Acquisition, Technology, and Logistics - USD (AT&L)*.
- c. CJCS Manual 3500.04C, *Uniform Joint Task List*.
- d. Army Regulation 10–5, *Organizations and Functions, Headquarters, Department of the Army*.
- e. Army Regulation 10–25, *United States Army Logistics Integration Agency*.
- f. Army Regulation 12–1, *Security Assistance, International Logistics, Training, and Technical Assistance Support and Responsibilities*.
- g. Army Regulation 60–10, *Army and Air Force Exchange Service General Policies*.
- h. Army Regulation 700–4, *Logistics Assistance*.
- i. Army Regulation 700–127, *Integrated Logistic Support (ILS)*.
- j. Army Regulation 700–137, *Logistics Civil Augmentation Program (LOGCAP)*.
- k. Army Regulation 700–138, *Army Logistics Readiness and Sustainability*.
- l. Army Regulation 725–50, *Requisition, Receipt, and Issue System*.
- m. Army Regulation 750–1, *Army Materiel Maintenance Policy and Retail Maintenance Operations*.
- n. Joint Publication 4–0, *Doctrine for Logistic Support in Joint Operations*.
- o. Field Manual 3–0, *Operations*.
- p. Field Manual 3–31, *Joint Force Land Component Command (JFLCC) Handbook*.
- q. Field Manual 63–3, *Corps Support Command*.
- r. Field Manual 63–4, *CSS–Theater Army Area Command*. (Under revision to address the restructured and re-named Theater Support Command (TSC))
- s. Field Manual 63–11, *Logistics Support Element, Tactics, Techniques, and Procedures*.
- t. Field Manual 100–10, *Combat Service Support*.
- u. Field Manual 100–10–1, *Theater Distribution*.
- v. Field Manual 100–10–2, *Contracting Support on the Battlefield*.
- w. Field Manual 100–16, *Army Operational Support*.
- x. Field Manual 100–17–3, *Reception, Staging, Onward movement, and Integration*.

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- y. Field Manual 100-21, *Contractors on the Battlefield*.
- z. Field Manual 100-22, *Installation Management*.