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COMBAT SERVICE SUPPORT

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Combat Service Support

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Preface

The purpose of this manual is to provide the authoritative doctrine by which the Army's combat service support (CSS), as part of the national-theater CSS system, supports full spectrum operations. This manual serves as the Army's keystone CSS doctrine and bridges the gap between Army doctrine and joint and multinational doctrine. This manual provides the basis for subordinate CSS doctrine, organizations, training, materiel, leader development, personnel and facilities (DOTMLPF) development to support Army of Excellence (AOE) forces, transitioning Force XXI organizations, and Army Transformation initiatives for a more agile and responsive force.

The intended audiences for this manual include—

- Commanders at all levels to provide a universal understanding of how CSS is organized and functions to support Army, joint, and multinational forces.
- CSS commanders, staffs, and doctrinal proponents to institutionalize the integration of CSS into all Army component, joint force, and multinational missions.
- Military students at all levels and within all branches of the Army to provide a broad knowledge of the CSS structure and how it works.

The fundamental purpose of the Army is to provide to joint force commanders the sustained and decisive land forces necessary to fight and win the Nation's wars. CSS is an enabling operation that provides the means for the Army to conduct full spectrum operations. To support full spectrum operations, CSS must provide support to all possible mixes of offensive, defensive, stability, and support operations. In some operations, especially support operations, CSS may be the decisive operation. CSS is an integral component of all military operations.

Effective CSS maximizes the capabilities of the Army by being responsive to the commander's needs for agility, deployability, lethality, versatility, survivability, and sustainability. This manual discusses how CSS operations can extend the operational reach of combat forces by maximizing technology and minimizing the CSS footprint. It also discusses how technology continues to enhance the supportability of any mission. CSS may be provided by active component, Reserve Component, Department of Defense (DOD)/Department of the Army (DA) civilian, contractor, joint, and multinational assets. Like the other battlefield operating systems, CSS is the commander's business. It must be properly planned, prepared for, managed, executed, and assessed from factory to foxhole to enable commanders to successfully execute and sustain full spectrum operations over time and, thereby, extend the operational reach of the force.

This manual was written in close collaboration with the writers of FM 1, FM 3-0, and FM 100-7. This collaboration ensures that CSS doctrine is consistent with the sound principles of other Army keystone manuals.

ADMINISTRATIVE INSTRUCTIONS

The proponent for this manual is U.S. Army Training and Doctrine Command (TRADOC). Send comments and recommendations on DA Form 2028 (*Recommended Changes to Publications and Blank Forms*) to Commander, U.S. Army Combined Arms Support Command, ATTN: ATCL-CDD, 3901 A Avenue, Suite 220, Fort Lee, Virginia 23801-1899.

Unless stated otherwise, masculine nouns or pronouns do not refer exclusively to men.

The glossary lists most terms used in this manual that have joint or Army definitions. Terms for which this manual is the proponent manual (the authority), are indicated by boldface type in text. For other definitions, the term is italicized in the text and the number of the proponent manual follows the definition.

Chapter 1

Fundamentals of Army Combat Service Support

Combat Service Support: The essential capabilities, functions, activities, and tasks necessary to sustain all elements of operating forces in theater at all levels of war. Within the national and theater logistics systems, it includes but is not limited to that support rendered by service forces in ensuring the aspects of supply, maintenance, transportation, health services, and other services required by aviation and ground combat troops to permit those units to accomplish their missions in combat. Combat service support encompasses those activities at all levels of war that produce sustainment to all operating forces on the battlefield.

JP 4-0

Though global developments and changing security relationships have changed the specific nature of threats, the role of the Army endures. It is the strategic land combat force that provides the nation with the capability to conduct decisive full spectrum operations on land. Combat service support (CSS) capabilities enable Army forces to initiate and sustain full spectrum operations. The fundamental purpose of the Army is to provide the land component of the joint forces that fight and win the Nation's wars, when and where required. Army CSS must always be capable of supporting this mission. It must also be able to support all possible mixes of offensive, defensive, stability, and support operations. In some operations, especially support operations, CSS may be the decisive force of the operation.

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Operations and CSS are inextricably linked. The purpose of CSS is to generate and sustain combat power and expand the commander's operational reach. CSS staff officers, in concert with support operations staffs and other staffs of support organizations, provide relevant CSS information to the commander in terms he can rapidly apply to the situation, enabling him to visualize, describe, and direct operations. He must be able to translate information on status and location of resources into the impact on combat effectiveness in the present and near future. To do this, CSS commanders and staff officers must understand the commander's in-

tent so they can visualize, describe, and direct the activities of their CSS organizations to meet the needs of the supported force. Currently, operations staffs, support planners, and CSS operators, coordinate to reach this understanding by applying their expertise to information available through existing information systems. Future developments in information systems, discussed later in this chapter, will enhance this capability.

CSS IN SUPPORT OF ARMY MISSION ESSENTIAL TASK LIST

1-1. FM 3-0 introduces and discusses the Army mission essential task list (METL). The Army METL lists the essential and enduring capabilities of the Army. While the tasks are not necessarily unique to the Army, they define its fundamental contributions to the Nation's security. CSS plays an important role in each task of the Army METL.

SHAPE THE SECURITY ENVIRONMENT

1-2. Through peacetime military engagement, Army forces significantly contribute to promoting regional stability, reducing potential conflicts and threats, and deterring aggression and coercion. In support operations, such as humanitarian assistance or disaster relief, CSS forces make up a large part of the effort. CSS in support of such operations helps promote goodwill toward the Nation and its ideals. CSS may be obtained through such activities as contracting support for field services, maintenance, and storage facilities that help foster economic prosperity in some nations. Through many day-to-day interactions, CSS forces bolster and strengthen multinational partnerships and foster the development of democratic institutions.

RESPOND PROMPTLY TO CRISIS

1-3. Army forces respond to crises in any environment. They are strategically responsive and versatile enough to support the nature and circumstances of any situation. Responsiveness is the ability to increase force presence, to increase the magnitude of the enemy's dilemma, and to act decisively. CSS is an integral part of the Army's rapid response. A distribution-based CSS system gives commanders increased management control and visibility of supplies, equipment, and personnel moving to and within the theater. The modular design of CSS organizations and their capability to conduct split-based operations give the force commander flexibility in tailoring CSS to meet the immediate need while minimizing lift requirements and the CSS footprint. Additionally, other CSS reach operations enhance responsiveness by using in-theater resources, such as host-nation support (HNS) and theater support contractors, to provide or augment services for deployed forces.

MOBILIZE THE ARMY

1-4. The Army can mobilize Reserve Component forces necessary to meet the contingent needs of combatant commanders or the requirements of war or national emergencies. CSS is a critical part of the mobilization process. As units transition from peacetime to crisis or war, United States (U.S.) Army forces must be quickly brought to wartime readiness in equipment, personnel, supply, maintenance, legal, and medical areas. CSS organizations man and operate mobilization stations and aerial and seaports of embarkation. They also

track unit movements. CSS organizations accomplish such tasks while simultaneously mobilizing their own forces. Currently, 70 percent of the CSS forces are in the Reserve Component. The Army trains and equips these organizations to mobilize and deploy forces, as demonstrated during Operation Desert Shield. During this operation, Reserve Component CSS forces were quickly mobilized and integrated with the active component forces.

CONDUCT FORCIBLE ENTRY OPERATIONS

1-5. Army forces gain access to contested areas from the air, land, and sea. Army forces make it possible to seize areas previously denied by the enemy force. CSS supports forcible entry operations by aerial delivery, logistics over-the-shore operations, and ground transportation capabilities. The versatility of CSS organizations make it possible for CSS forces to support forcible entry operations and quickly convert to sustainment operations, when terrain is secured. The modular aspect of CSS organizations allows them to be tailored as rapidly deployable and tailorable early entry modules. This capability enhances their ability to support forcible entry operations.

DOMINATE LAND OPERATIONS

1-6. Army forces today are the preeminent land forces in the world. That preeminence translates into the ability to dominate land operations—the decisive complement to air, sea, and space operations. The threat or use of Army forces to close with and destroy enemy forces through maneuver and precision, direct and indirect, fires is the ultimate means of imposing will and achieving a decisive outcome. The commander generates and sustains combat power to accomplish his mission by effectively and efficiently providing CSS. The Army CSS system, as a part of the joint personnel and logistics system, provides personnel, equipment, munitions, fuel, transportation support, and other services required to bring combat operations to a decisive conclusion.

1-7. Sustained land operations establish the long-term conditions required by the United States to support National objectives. Army forces are inherently durable, self-sustaining, and self-replenishing. Robust CSS makes sustained land operations possible. CSS consists of a network of people, organizations, and agencies from the continental United States (CONUS) to the area of operations (AO). Sustaining an operation requires close coordination between joint force and CSS planners; they work closely in planning, preparing, executing, and assessing every phase of an operation. Equipped with the latest technology, CSS commanders deliver personnel and materiel to the joint force commander (JFC), when required to increase his operational reach and sustain operations. Future enhancements in CSS technology will give commanders and CSS planners a more accurate common operational picture (COP) to better support Army and joint forces.

PROVIDE SUPPORT TO CIVIL AUTHORITIES

1-8. Army forces adapt and tailor their warfighting capabilities to complement and support civil authorities and agencies at home and abroad. Prompt Army assistance to civil authorities is often a critical and decisive element in disaster relief and crisis resolution. For example, following Hurricane Andrew in 1992, CSS organizations worked closely with the Federal Emergency

Management Agency (FEMA), providing food and water, shelter, clothing, health services, and morale and legal support.

CSS CHARACTERISTICS

1-9. The fundamental characteristics of effective and efficient CSS discussed in FM 3-0 apply throughout full spectrum operations. They are consistent and align with the seven logistics principles in JP 4-0. However, an eighth characteristic, integration, is critical to the Army. These characteristics are not a checklist; they are guides to analytical thinking and prudent planning.

RESPONSIVENESS

1-10. Responsiveness is providing the right support in the right place at the right time. It includes the ability to foresee operational requirements. Responsiveness involves identifying, accumulating, and maintaining the minimum assets, capabilities, and information necessary to meet support requirements. It is the crucial characteristic of CSS; responsiveness involves the ability to meet changing requirements on short notice. Anticipating those requirements is critical to providing responsive CSS.

1-11. Anticipation is being able to foresee future operations and identify, accumulate, and maintain the right mix, capabilities, and information required to support to the force. Anticipation also enables CSS planners to provide input on the Army CSS forces the joint/multinational support force requires, so the commander can properly sequence them in the time-phased force and deployment data (TPFDD) process. Accurate forecasts of potential operations are necessary to develop a force that is strategically responsive, deployable, and fully capable of performing missions it is likely to receive. Many current CSS initiatives focus on improving the force capability to forecast requirements then execute or act on those forecasts. However, no planner can fully predict the course of the future. A dynamic global society places shifting strategic requirements on the military. Operations often evolve in unexpected directions as commanders constantly seek to exploit fleeting opportunities. Therefore, responsiveness rests on anticipation as well as flexibility. CSS units and personnel continually stay abreast of operations plans and remain flexible and ready to tailor available capabilities rapidly to meet changing requirements.

SIMPLICITY

1-12. Simplicity means avoiding unnecessary complexity in conducting (planning, preparing, executing and assessing) CSS operations. It fosters efficiency in National and theater CSS operations. Mission orders, drills, rehearsals, and standardized procedures contribute to simplicity. Emerging CSS information systems can be highly efficient tools to help with such tasks as establishing clear support priorities and allotting supplies and services.

FLEXIBILITY

1-13. Flexibility is the ability to adapt CSS structures and procedures to changing situations, missions, and concepts of operations. CSS plans, operations, and organizations must be flexible enough to achieve both responsiveness and economy. The CSS force provides support in any environment

throughout the spectrum of conflict and adapts as operations evolve. Flexibility may require improvisation (inventing, arranging, or fabricating what is needed from what is on hand). When established procedures do not provide the required support, CSS personnel seek innovative solutions, rapidly devise new procedures, or take extraordinary measures to adapt to the situation.

ATTAINABILITY

1-14. Attainability is generating the minimum essential supplies and services necessary to begin operations. Before an operation begins, the focus of the CSS effort is on generating combat power. The commander sets the minimum level of combat power he needs before an operation begins. This requires integrating operations and CSS planning. It involves the ability to identify and accumulate the critical resources required at the start of an operation.

SUSTAINABILITY

1-15. Sustainability is the ability to maintain continuous support during all phases of campaigns and major operations. One of the characteristics of land combat is duration. CSS personnel must work with operations planners to anticipate requirements over the duration of the operation and with CSS operators to synchronize provision of required supplies and services throughout. CSS personnel must effectively perform their roles to attain the minimum combat power, then be able to follow on with additional resources to sustain operations for as long as required.

SURVIVABILITY

1-16. Survivability is the ability to protect support functions from destruction or degradation. CSS survivability is a function of force protection, which consists of those actions to prevent or mitigate hostile actions against personnel, resources, facilities, and critical information. Integrating CSS with operation plans and force protection plans is critical to CSS survivability. Economy, through such methods as CSS reach operations (discussed in paragraph 3-18) contributes to protecting capabilities by limiting the CSS resources that require protection. Dispersion and decentralization of CSS operations may also enhance survivability. The commander may have to balance survivability with economy in considering redundant capabilities and alternative support plans.

ECONOMY

1-17. Economy means providing the most efficient support to accomplish the mission. Resources are always limited. The commander achieves economy by prioritizing and allocating resources. Economy reflects the reality of resource shortfalls, while recognizing the inevitable friction and uncertainty of military operations. Many CSS developments focus on the ability of the CSS commander to provide required support with the minimum expenditure of resources. Modular forces, split-based operations, and joint and multinational support coordination are some of the methods used to meet these goals. Emerging information technology with modern software packages continue to enhance economy of CSS resources.

INTEGRATION

1-18. Integration consists of synchronizing CSS operations with all aspects of Army, joint, interagency, and multinational operations. First, it involves total integration of Army CSS with the operations (plan-prepare-execute-assess) process. Support of the commander's plan is the goal of all CSS efforts. Effective support requires a thorough understanding of the commander's intent and synchronizing CSS plans with the concept of operations. Army forces conduct operations as part of joint, multinational, and interagency teams in unified actions. Therefore, Army forces integrate their CSS operations with other components of the joint force to—

- Take advantage of each service component's competencies.
- Allow efficiencies through economies of scale.
- Ensure the highest priorities of the joint force are met first.
- Avoid duplicating effort and wasteful competition for the same scarce strategic lift as well as in-theater resources.

CSS FUNCTIONS

1-19. CSS consists of 11 interrelated functions. CSS commanders must carefully plan, manage, and synchronize these functions to accomplish responsive and efficient delivery of CSS. This chapter introduces each of the functions; see chapters 6 through 14 for a detailed discussion of each function:

- Chapter 6, *Supply and Field Services.*
- Chapter 7, *Transportation Support.*
- Chapter 8, *Ordnance Support.*
- Chapter 9, *Health Service Support.*
- Chapter 10*, Human Resource Support.*
- Chapter 11*, Financial Management Operations.*
- Chapter 12*, Legal Support to Operations.*
- Chapter 13*, Religious Support.*
- Chapter 14*, Band Support.*

SUPPLY AND FIELD SERVICES

Supply

1-20. *Supply* is the acquiring, managing, receiving, storing, and issuing all classes of supply, except Class VIII, required to equip and sustain Army forces (see table 6-1). This wide-ranging function extends from determining requirements at the national level to issuing items to the user in theater. (See chapter 6 for Classes I through IV, VI, and VII. See chapter 8 for Classes V and IX. See chapter 9 for Class VIII. See JP 4-07 for Class X.)

Field services

1-21. ***Field services*** **are essential services to enhance a soldier's quality of life during operations. They consist of clothing exchange, laundry and shower support, textile repair, mortuary affairs, preparation for aerial delivery, food services, billeting, and sanitation**. The ARFOR commander determines the

priorities for field service support in coordination with the JFC. (See chapter 6.)

TRANSPORTATION

1-22. *Transportation* is moving and transferring units, personnel, equipment, and supplies to support the concept of operations. Transportation incorporates military, commercial, and multinational capabilities. Transportation assets include motor, rail, air and water modes and units; terminal units, activities, and infrastructure; and movement control units and activities. (See chapter 7.)

MAINTENANCE

1-23. *Maintenance* entails actions taken to keep materiel in a serviceable, operational condition, returning it to service, and updating and upgrading its capability. It includes performing preventive maintenance checks and services; recovering and evacuating disabled equipment; diagnosing equipment faults; substituting parts, components, and assemblies; exchanging serviceable materiel for unserviceable materiel; and repairing equipment (FM 4-30.3). The ultimate key to effective maintenance is anticipating requirements. (See chapter 8.)

EXPLOSIVE ORDNANCE DISPOSAL SUPPORT

1-24. *Explosive ordnance disposal (EOD)* is the detection, identification, on-site evaluation, rendering safe, recovery, and final disposal of unexploded explosive ordnance. It may also include explosive ordnance that has become hazardous by damage or deterioration (JP 1-02). EOD support neutralizes domestic or foreign conventional, nuclear, biological, and chemical (NBC) munitions, and improvised devices that present a threat to military operations and to military and civilian facilities, materiel, and personnel. (See chapter 8.)

HEALTH SERVICE SUPPORT

1-25. *Health service support* (HSS) consists of all services performed, provided, or arranged to promote, improve, conserve, or restore the mental or physical well-being of personnel in the Army and, as directed, for other services, agencies, and organizations. HSS conserves the force by preventing disease and nonbattle injuries (DNBIs); clearing the battlefield of casualties; providing far-forward medical treatment and hospitalization; providing en route care during medical evacuation; providing veterinary, dental, combat stress control, and laboratory services; and ensuring adequate Class VIII supplies, medical equipment, and blood are available. (See chapter 9.)

HUMAN RESOURCE SUPPORT

1-26. *Human resource support* (HRS) provides all activities and functions to sustain personnel manning of the force and personnel service support to service members, their families, Department of the Army civilians, and contractors. These activities include personnel accounting, casualty management, next-of-kin notification, essential personnel services, postal operations, and

morale, welfare, and recreation. Joint doctrine refers to human resource support as personnel service support. (See chapter 10.)

FINANCIAL MANAGEMENT OPERATIONS

1-27. *Financial management* operations (FMO) encompasses the two core processes of resource management and finance operations (JP 1-02). FMO make resources available when and where they are needed, and assist the commander in maintaining fiscal responsibilities. FMO are necessary for contracting and providing real-time information, accounting, and finance-related services. Resource management operations ensure that operational policies and procedures adhere to law and regulations, develop command resource requirements, and leverage appropriate fund sources to meet them. (See chapter 11.)

LEGAL SUPPORT

1-28. *Legal support* is the provision of operational law support in all legal disciplines (including military justice, international law, administrative law, civil law, claims, and legal assistance) to support the command, control, and sustainment of operations. (See chapter 12.)

RELIGIOUS SUPPORT

1-29. ***Religious support*** **is the provision and performance of operations for the commander to protect the free exercise of religion for soldiers, family members, and authorized civilians. It includes providing pastoral care, religious counseling, spiritual fitness training and assessment, and religious services of worship. It also includes advising the command on matters of religion, morals and ethics, and morale**. (See chapter 13.)

BAND SUPPORT

1-30. Army *band support* is the provision of music to instill in soldiers the will to fight and win, foster the support of citizens, and promote National interests at home and abroad. Bands support information operations, provide music to the civilian community, promote patriotism and interest in the Army, and demonstrate the professionalism of Army forces. (See chapter 14.)

ENGINEERING SUPPORT TO CSS OPERATIONS

1-31. Engineering support, though not a CSS function, plays a critical role in delivering CSS by enhancing its capacities. The ability of CSS elements to support Army operations depends on the capacities of the existing theater infrastructure (such as, force reception/bed down and storage facilities, road and rail networks, and ports and airfields) and environmental considerations. Engineer units, normally in a direct support (DS) relationship to CSS headquarters, are responsible for constructing, maintaining, and rehabilitating the theater distribution system. Their responsibilities include support to other services, agencies, and multinational forces. The numbers and types of engineer units involved in such operations depend on mission, enemy, terrain and weather, troops and support available, time available, civil considerations (METT-TC) factors. Of particular importance are the size of the support

bases required, existing host nation (HN) infrastructure, and the perceived threat. (See appendix A.)

CSS FORCE AGILITY

1-32. The changing nature of modern warfare requires Army forces to be strategically responsive to a wide range of threats, while economically maximizing the Army's effectiveness. FM 3-0 describes an agile Army force. Agile forces are mentally and physically able to transition within or between types of operations with minimal augmentation, no break in contact, and no significant additional training. Responsiveness, flexibility, and economy are key CSS characteristics that enable CSS forces to support an agile combat force and execute operations more swiftly than their opponents. They help get the force what it needs to initiate, sustain, and extend operations. Agile CSS forces allow combat forces to adapt quickly to full spectrum operations and missions, while expending as few resources as possible and minimizing the CSS footprint.

1-33. Agile Army CSS requires planning and development within the context of unified action—operations that involve joint, multinational, and interagency organizations. Department of Defense (DOD) executive agent directives, combatant commander lead-service designations, interservice support agreements, contracted support arrangements, and multinational support agreements help commanders tailor the deployment of Army CSS organizations and make overall support as effective, yet as economical as possible.

1-34. Another aspect of an agile CSS force is the growing seamless nature of the Army's CSS structure. Elements of the strategic base, such as the U.S. Army Materiel Command (USAMC) logistics support element (LSE) and U.S. Army Medical Research and Materiel Command (USAMRMC) elements, deploy to AOs. Commanders integrate them into the overall CSS force. They provide support at the operational level and, in certain scenarios, the tactical level.

1-35. Other aspects of an agile CSS force are modular designs, the ability to tailor CSS organization for the supporting mission, and the ability to conduct split-based operations.

MODULAR DESIGNS

1-36. Selected CSS units are structured as modular organizations. This involves company-level force structure designs in which each major company subelement has a cross-section of the company's total capabilities. This allows commanders to employ individual modules to provide a support function, while the rest of the unit remains operational. This lower-level force tailoring enhances responsiveness.

CSS FORCE TAILORING

1-37. CSS force tailoring refers to determining and deploying the right mix of CSS units to support the force or mission. CSS commanders must deploy the right type of CSS unit to maximize effectiveness and efficiency, and to minimize the CSS footprint.

SPLIT-BASED OPERATIONS

1-38. *Split-based operations* refer to performing certain CSS administrative and management functions outside the joint operations area (JOA), whether in a secure location in the communications zone (COMMZ), at an intermediate staging base (ISB), or at home station. Soldiers and civilians can perform personnel, materiel, and distribution management functions without deploying to the JOA if the information systems are adequate. This helps minimize strategic lift requirements, reduce the CSS footprint in theater, and still meet support requirements.

DISTRIBUTION-BASED CSS

1-39. The Army has begun the challenging transition from a supply-based to a distribution-based CSS system. Distribution-based CSS replaces bulk and redundancy with velocity and control. During this transition, some units may not be able to execute all operations 100 percent according to distribution doctrine. However, only an agile distribution-based CSS system will allow Army forces to be strategically responsive and operationally effective across the full range of military operations. Distribution includes all the actions performed to deliver required resources (units, materiel, personnel, and services) to, from, and within a theater. Distribution-based CSS includes visibility, management, and transportation of resources flowing to supported forces, as well as the information systems, communications, and physical and resource networks of the distribution system. Chapter 5 discusses distribution-based logistics. FM 100-10.1 details the Army's role in theater distribution. JP 4-01.4 covers theater distribution. The following are critical aspects of a distribution-based system.

CENTRALIZED MANAGEMENT

1-40. Distribution management centers /elements (DMC/Es) are being added to support commands. DMC/Es manage the Army's role in theater distribution. Critical to the central management functions of the DMC/E is having integrated, end-to-end visibility and control of the Army's piece of the distribution system capacity and distribution pipeline flow to maximize its efficiency.

MAXIMUM USE OF THROUGHPUT

1-41. ***Throughput* is the flow of sustainability assets in support of military operations, at all levels of war, from point of origin to point of use. It involves the movement of personnel and materiel over lines of communications using established pipelines and distribution systems.** Throughput distribution bypasses one or more echelons in the system to minimize handling and speed delivery forward. Distribution-based CSS emphasizes using containerization, to include palletization and packaging (within materiel-handling equipment constraints), to accommodate support and improve velocity. Velocity is achieved by throughput of resources from the sustaining base directly to tactical-level support organizations as much as possible.

CONFIGURED LOADS

1-42. *A configured load* is a single or multicommodity load of supplies built to the anticipated or actual needs of a consuming unit, thereby, facilitating

throughput to the lowest possible echelon. Configured loads leverage the efficiencies of containerization and capabilities of containerized roll-on/off platforms (CROPs) when possible. The two types of configured loads are mission-configured loads (MCLs) and unit-configured loads (UCLs).

- MCLs are built inside a theater of operations for a specific mission, unit, or purpose. Resources (personnel, equipment, and supplies) in a hub in the COMMZ/ISB or corps area are normally configured as MCLs.
- UCL is a configured load built to the known requirements of a consuming unit. These loads are normally built in the corps AO to be delivered directly to the consuming unit.

SCHEDULED DELIVERY

1-43. Scheduled delivery involves moving resources from the supporting organization to the supported units at agreed-on time intervals. Distribution managers at each echelon coordinate with the supported unit to establish scheduled delivery times for routine replenishment. Generally, this includes items such as bulk fuel, ammunition, and operational rations.

TIME-DEFINITE DELIVERY

1-44. Time-definite delivery (TDD) is a commitment between the CSS manager and the supported commander and specifies order-ship times (OSTs) within which specified commodities requested by the supported unit must be delivered. The commander responsible for both the supporting and supported organizations establishes the TDD as part of the distribution plan. TDD parameters are normally expressed in terms of hours or days for each major commodity. Establishing OSTs involves making trade-offs between responsiveness and the length of lines of communication (LOC). If the commander wants to establish shorter TDD schedules, he has to accept larger stockage levels forward on the battlefield, shorter LOC, or both, with an accompanying loss of flexibility and agility.

VELOCITY MANAGEMENT

1-45. Effective distribution depends on the movement control principle of maximum use of carrying capacity. This principle involves more than loading each transport vehicle to its maximum cubic carrying capacity. It also means using all available transport capability in the most efficient manner. While allowing for adequate equipment maintenance and personnel rest, transportation operators should keep transportation assets loaded and moving as much as the situation permits. Adhering to the principles of velocity management may conflict with this principle. Delivering a shipment rapidly may require transporting it in a less-than-truckload shipment. Individual commanders and logisticians must consider the ramifications of maximizing the carrying capacity or transporting in less-than-truckload shipment when developing the distribution plan.

1-46. *Velocity management* (VM) is an Army-wide total quality management, process-improvement program. VM strives to provide world-class logistics support while providing a hedge against unforeseen interruptions in the lo-

gistics pipeline by leveraging information technologies and optimizing its processes. The overarching objective is to get supplies into the hands of the warfighter in days or hours, not weeks. VM optimizes the Army's entire logistics process by using a simple three-step methodology: define, measure, and improve. VM's objective is to find and eliminate non-value processes, thereby enhancing the responsiveness of the distribution system.

1-47. VM dramatically improves the responsiveness and efficiency of the Army logistics system. VM works with logistics applications and technology as process enablers. Examples include radio frequency identification devices (RFIDs), the automated manifest system (AMS), optical memory cards (OMCs), the materiel release order control system (MROCS), and stacked barcode symbologies. These enablers provide commanders, from strategic to tactical level, the ability to maintain visibility of materiel movement, receipt, storage, and inventory throughout all logistics operations. Information systems, such as joint total asset visibility (JTAV) and Global Transportation Network (GTN), integrate multiple distribution and transportation enablers into a single data warehouse.

1-48. Several management tools give the logistician the ability to manage assets proactively and provide responsive support. One such tool is the web-based Integrated Logistics Analysis Program (ILAP). ILAP gives the CSS community an interactive database to analyze logistics performance and manage materiel assets. ILAP will become the management module in the emerging Global Combat Service Support—Army (GCSS-A).

1-49. Another management tool is the equipment downtime analyzer (EDA), a decision support tool that improves measurement of equipment readiness and its components. This improves the commander's ability to identify the underlying causes of current equipment readiness problems and project those that might arise during anticipated operations. It works by combining data from various Army databases to provide a comprehensive picture of overall operational results. EDA enhances the commander's capability to focus constrained resources where they will have the greatest effect on keeping equipment ready to fight (whether by improving equipment reliability, performing battlefield damage assessment and repair or maintenance actions, or reducing repair time).

1-50. For deployment planning and contingency operations, logisticians can use the deployment stock planner (DSP) to create a deployment authorized stockage list (ASL) tailored to their specific mission and environmental conditions. The DSP is a software tool that allows a unit to compare a deployment stock package to its current ASL quickly, allowing the unit to make any necessary changes to the package.

1-51. VM's performance metric is customer wait time (CWT). CWT measures the speed and efficiency of the logistics community's ability to support the soldier in the field. CWT begins when the requirement is established in the Unit-Level Logistics System (ULLS)/Standard Army Maintenance System (SAMS) and ends when receipt is recorded in ULLS/SAMS.

1-52. A key component to VM is establishing and maintaining site improvement teams (SITs) by installation commanders. Commanders organize SITs

to focus on logistics processes on their installation. The SIT membership should consist of the organization's subject matter experts (SMEs) who understand the complexity of the site's logistics processes and services. The SIT uses the methodology of define, measure, and improve for logistics optimization at the organization level. The program of the SIT includes a review of VM-established metrics and those metrics listed in AR 710-2 and AR 750-1, and a translation of these metrics into logistics process objectives for the organization. Ultimately, VM enhances total performance as the Army reduces stockpiles and converts to precision, speed, and tailored logistics. It helps CSS commanders provide more predictable, versatile, and mobile support to warfighters.

SITUATIONAL UNDERSTANDING

1-53. A factor that enables an agile CSS force to focus a distribution-based system to respond to and meet the needs of the operational commander is situational understanding (SU). *Situational understanding* is the product of applying analysis and judgment to the common operational picture to determine the relationships among the factors of METT-TC (FM 3-0). For the CSS planner SU is enhanced through the use of advanced, seamless information technology, as exemplified by the capability of the combat service support control system (CSSCS) coupled with the future capability of GCSS-A. A discussion of the key elements of SU follows. These elements are in various stages of development.

COMMON OPERATIONAL PICTURE

1-54. An *operational picture* is a single display of relevant information within a commander's area of interest (FM 3-0). A *common operational picture* is an operational picture tailored to the user's requirements, based on common data and information shared by more than one command (FM 3-0). The COP portrays the same CSS and operational data, the threat, and the environment at all echelons in near real-time to provide commanders and CSS managers the identical battlefield picture. Commanders and managers require this picture to ensure unity of command and integrate operations and CSS. A seamless information network combined with asset visibility and GCSS-A, the new standard Army management information system (STAMIS) for CSS, will ultimately provide a COP that is comprehensive and synchronized with the information from CSSCS.

SEAMLESS INFORMATION NETWORK

1-55. A seamless information network will provide the ability to autonomously exchange large volumes of information across data platforms, such as GCSS-A and CSSCS, and among multiple echelons of command, from the tactical to the strategic level. It will include the capability to determine the actual status of selected weapon systems via assessing the system maintenance and supply (ammunition and fuel) postures directly and feeding the information into the CSS network. It will fuse operational and CSS data to make distribution-based CSS and split-based operations possible. It will also enhance the security of CSS assets by providing a COP.

TOTAL ASSET VISIBILITY

1-56. Timely and accurate visibility is necessary to distribute assets on time. Visibility begins at the point where materiel starts its movement to the theater—be that a depot, commercial vendor, or a storage facility—and continues until it reaches the requestor/user. The information is digitized and entered into CSS information systems. Critical to visibility is the capability to update that source data dynamically with the near-real-time status of resources from subsequent CSS systems until they arrive at their ultimate destinations.

INTEGRATED STAMIS

1-57. An integrated STAMIS is one that incorporates multiple types of functionality within a single system and shares database information between functionalities. GCSS-A is an example of an integrated STAMIS. It will interface with other CSS information systems to provide users access to the maximum amount of information with the minimum amount of data entry. Ultimately, full integration of data and CSS systems will eliminate the need for an application interface.

DIRECTIONS IN CSS DEVELOPMENT

1-58. Today Army forces seek to dominate an expanded AO with a minimal number of deployed troops, through depth and simultaneous attack. Because future operations will often entail a nonlinear, noncontiguous AO, CSS personnel will face vast challenges. They will have to meet various simultaneous demands across a potentially large AO with a reduced CSS force presence. The Army can accomplish its mission with an agile system when the distribution flow suffers no breaks in the seams between levels. Its real success, however, will depend on fielding a force that consumes fewer resources.

1-59. To meet these challenges, the Army is transforming. As the Army transforms, it must continue to sustain the legacy force (Force XXI and Army of Excellence organizations) as it moves toward developing and fielding the Objective Force. The Stryker brigade combat team (SBCT) now being developed will consist of lethal and highly mobile Army units that will deploy to preclude large-scale aggression and shape the situation in the land AO for much earlier decisive operations. In small-scale contingencies (SSC), combinations of modernized brigades and forcible entry units will provide JFCs with decisive capabilities. When fielded, the Objective Force will possess the strategic responsiveness necessary to conduct decisive, shaping, and sustaining operations in a manner similar to that of Operation Just Cause, but against more robust opponents.

1-60. As the Army transforms, so must CSS. CSS transformation is much more than just putting new technology on top of old processes. It requires CSS forces to be able to deploy rapidly to support current and future forces, effectively sustain full spectrum operations, and synchronize Army with joint efforts. The CSS transformation charter has a three-fold goal:

- Enhance strategic responsiveness to meet deployment timelines.
- Reduce CSS footprint in the AO.

- Reduce logistics costs without reducing warfighting capability and readiness.

1-61. Enhancing strategic responsiveness requires optimizing Army support organizations and streamlining support procedures. Establishing a national logistics provider could maximize effectiveness and efficiencies by providing not only deployment support but also sustainment support. Common unit designs will enhance flexibility by deploying unit modules based on METT-TC, instead of entire units. Standardizing loads when possible maximizes lift capabilities.

1-62. The Army is developing and maximizing the use of strategic mobility enablers. This effort includes—

- Developing and improving its information system capabilities and CONUS/theater infrastructure.
- Prepositioning required support to minimize lift requirements.
- Leveraging technology to build high-speed/ultra-large sealift and airlift capabilities.
- Improving support infrastructures; and leveraging future technologies to develop precision munitions, fuel-efficient engines, and built-in prognostic and diagnostic technology.

1-63. In the long term, minimizing the CSS footprint in the AO also requires a cultural change. The Army must leverage the use of contractors and host-nation support assets; develop procedures for split-based operations; and use ISBs when feasible. These are some of the key aspects of reducing the U.S. CSS footprint in the AO, and the cornerstones of CSS reach operations. (See chapter 3.)

1-64. The final goal of CSS transformation is to *transform* the institutional CSS components of the Army, reducing CSS costs without reducing warfighting capability and readiness. Some components of CSS cost reduction are the single stock fund, national maintenance program (NMP), and improved depots and arsenals.

1-65. Achieving the Army Transformation requires a cultural change in how the Army views CSS. It requires new approaches to such areas as database management and dependence on organizations outside the military for support. Traditional geographic-based CSS relationships, with wholesale and retail orientations and breaks between providers at various levels of war, must be transformed into a seamless CSS continuum. In a rapidly changing strategic environment with dramatic advances in technological applications to military operations, CSS doctrine must be flexible. CSS personnel must be willing and able to apply evolving principles and techniques to varying dynamic situations.

1-66. An enhanced COP and full synchronization of effort are critical to success. Support personnel must have an increased awareness of what is required and what is available. Understanding what is required relies on synchronizing CSS operations with operational activities through the Army battle command system (ABCS). Support will become more efficient and effective through improved anticipation, as CSS personnel are better able to foresee

future operations and identify, accumulate, and maintain the assets, capabilities, and information required to support them.

1-67. Awareness of what is available and the ability to direct it to where it is needed at the required time requires total integration of all elements of the CSS system—including active and Reserve Component Army, joint, multinational, civilian, and other agencies. The system must network decision makers as well as those responsible for executing CSS operations. It must link combatant commanders, and service staff managers, personnel support managers, materiel managers, distribution managers, services managers, information managers, and CSS operators. This network will support continued CSS capability enhancements through initiatives such as telemedicine, total asset visibility, VM, and predictive anticipatory maintenance capability.

1-68. A number of future maintenance initiatives will also increase the agility and economy of the CSS force. The shift towards a low-level maintenance concept (field maintenance and sustainment maintenance) reduces the requirement for extensive repair facilities, tools, and personnel to push forward by providing units the capability to replace faulty equipment forward and repair in the rear. In addition, the multicapable maintainer, augmented by highly portable automated diagnostic aids and on-board weapon system prognostics/diagnostics will replace modules and line replaceable units more effectively, rapidly returning weapon systems and vehicles to mission-capable status. Battlefield computers will have built-in tests, built-in diagnostics, and eventually prognostics. Finally, combining organizational and direct support maintenance maximizes economy in forward maintenance elements.

1-69. *Information systems* are the equipment and facilities that collect, process, store, display and disseminate information. These include computers—hardware and software—and communications, as well as policies and procedures for their use (FM 3-0). Objective Force information systems will greatly enhance the ability of CSS commanders and staffs to communicate status and near-term capabilities to force commanders, as well as to anticipate requirements. They will include, within weapon system platforms, a full set of sensors that report weapon status in terms of readiness, required maintenance, fuel, manning, and ammunition. This information will be transmitted to either GCSS-A or CSSCS or both, depending on the specific information. For example, fuel status would go to CSSCS for battalion supply officers and forward support battalion support operations personnel to track status and plan fueling operations, while maintenance prognostic information would go to GCSS-A for initiation of work order and parts requests. GCSS-A will update CSSCS as part of its next scheduled update. GCSS-A will be the main scheduled information feed to CSSCS.

1-70. Transition to this future CSS system will occur incrementally; the Army is currently implementing some initiatives. Other initiatives are scheduled within the life cycle of this manual. For example, some aspects of the future system (such as using host-nation support, the USAMC LSE, or contracting) will involve refining current systems and practices. Implementing other elements of the system, such as the national maintenance program and VM, has already begun but will continue to evolve. Still other compo-

nents (such as the information systems and space-based capabilities) will take a significant long-term effort to bring to maximum effectiveness.

Chapter 2

CSS in Unified Action

As emphasized throughout this manual, the Army does not operate alone. In today's world, the U.S. military conducts joint operations and often participates in multinational and interagency operations. Therefore, a great degree of coordination, cooperation, integration, and unity of effort in combat service support (CSS) operations is imperative for success. This chapter addresses Army CSS participation in joint and multinational operations. This information is consistent with joint and multinational doctrine.

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JOINT LOGISTICS AND PERSONNEL OPERATIONS

2-1. Per JP 4-0, each service is responsible for the logistics and personnel support of its own forces, except when support is otherwise provided for by agreements with national agencies or multinational partners, or by assignment to common, joint, or cross-servicing support arrangements. The combatant commander may determine that common servicing would be beneficial within the theater. If common servicing is more beneficial, the combatant commander may delegate the responsibility for providing (or coordinating) that support for all service components in the theater (or designated area) to the service component that is the dominant user, or most capable of providing that service.

2-2. Joint logistics and personnel support and Army CSS are inherently linked, although there are slight differences in their functions. Figure 2-1 shows the differences between joint logistics and personnel support functions, and Army CSS functions. Joint logistics and Army CSS include supply, services (the Army calls them field services), maintenance, transportation, and health service support (which Army doctrine defines slightly differently than joint doctrine). Additionally, joint logistics include general engineering, which is not an Army CSS function. Army CSS includes explosive ordnance disposal (EOD), which is not a joint logistics function. Under joint doctrine, personnel support includes legal, religious, and finance support as functions. Army CSS doctrine uses the term human resource support but lists legal, religious, financial management, and band support as separate functions.

Joint Logistic Functions	Combat Service Support Functions
Supply Services Maintenance Transportation Health Services Support General Engineering	Supply Field Services Maintenance Transportation Health Service Support Explosive Ordnance Disposal Human Resource Support Legal Support Religious Support Financial Management Band Support
Joint Personnel Functions	
Personnel Support Legal Support Religious Ministry Financial Management	

Figure 2-1. Relationship between Joint Logistics and Joint Personnel, and CSS Functions

RESPONSIBILITIES

2-3. Planning, preparing for, and executing joint logistics begin at the top level of U.S. military. This section discusses the responsibilities of the Chairman of the Joint Chiefs of Staff, combatant commanders, service component commanders, and joint land force component commanders.

Chairman of the Joint Chiefs of Staff

2-4. The Chairman of the Joint Chiefs of Staff is responsible for preparing joint logistics and mobility contingency plans, and for recommending the assignment of logistics and mobility responsibilities to the armed forces in accordance with those plans. He is also responsible for advising the Secretary of Defense (SECDEF) on manpower and personnel issues affecting the readiness of the armed forces and the force structure required for attaining national security objectives.

Combatant Commander

2-5. For a combatant commander, there are three important facets of CSS: command, management of CSS operations, and execution of support operations.

2-6. **Command**. First, CSS is a function of command. In the logistics area, the combatant commander's directive authority for logistics meets this principle. The combatant commander's directive authority includes issuing subordinate commanders' directives, including peacetime measures necessary to ensure—

- Effective execution of approved operation plans (OPLANs).
- Effectiveness and economy of operation.
- Prevention or elimination of unnecessary duplication of facilities.

- Avoidance of the overlapping of functions among the service component commands).

The combatant commander's directive authority for logistics cannot be delegated, except for common item support. When the combatant commander gives a service component common-user logistics (CUL) responsibilities, he must specifically define the responsibilities. On the personnel side, the combatant command (command authority) (COCOM) of the combatant commanders allows them to direct and approve the aspects of personnel support necessary to carry out assigned missions and to standardize personnel policies within the command, as necessary, to carry out assigned missions.

2-7. **Management**. Joint doctrine describes several techniques for managing/controlling joint logistics and personnel operations. JP 5-00.2 discusses how a joint task force (JTF) manpower and personnel directorate (J1) handles manpower and personnel, and also establishes a joint reception center (JRC), as described in JP 1-0. The logistics directorate (J4) manages logistics operations, including establishing a logistics readiness center (LRC). JP 4-0 describes the boards and centers that J4s may use to monitor and coordinate logistics activities. It also describes how a joint force commander (JFC) may establish in OPLANs a joint theater logistics management (JTLM) element to fuse movement control and materiel management to synchronize the capabilities of the joint force. In addition to the JRC and a JTLM element, potential joint logistics centers, offices, and boards include—

- Joint movement center.
- Subarea petroleum office.
- Joint civil-military engineering board.
- Joint facilities utilization board.
- Combatant commander logistics procurement support board.
- Theater patient-movement requirements center.
- Joint blood program office.
- Joint mortuary affairs office.
- Global patient-movement requirements center.
- Joint materiel priorities and allocation board.
- Joint transportation board.

2-8. **Execution**. Services and service components execute CSS functions. Title 10, United States Code (10 USC), and JP 0-2 specify that individual services retain responsibility for logistics support. However, CUL support may be controlled and provided by other means. Authority for such arrangements may come from four sources:

- DOD executive agent directives and instructions.
- Interservice support agreements (ISSAs).
- Acquisition and cross-servicing agreements (ACSAs).
- Combatant commander's OPLANs, orders, and directives.

Note: Logistics DOD executive agent directives and instructions are normally focused on strategic-level activities, but they may be directly related to CUL-related functions in a particular joint or multinational operation. In all U.S. military operations, the geographic combatant commander is responsible for ensuring that the specific CUL responsibilities are clearly delineated within his area of responsibility (AOR).

2-9. Options for executing logistics support to a joint force include any combination of the following:

- Single service component dedicated support—each service component supports its own forces.
- Lead service or agency support—a lead service or agency provides common user/item support to one or more service components, and governmental or other organizations. In some operational situations, lead service support may include operational control (OPCON) or tactical control (TACON) of other service logistics organizations.

2-10. JP 4-07 has more information on these authorities and options.

Service Component Commander

2-11. Service component commanders normally provide personnel support to service forces assigned to joint commands. When service representation within an area of operations (AO) is limited, the joint force J1 coordinates appropriate personnel support through other service components.

Joint Force Land Component Commander

2-12. Establishment of a joint force land component may influence the process of providing CSS to a joint force. When a JFC decides a joint force land component is required, he establishes it. The joint force land component commander (JFLCC) is normally the commander of the ground component (Army or Marine Corps) that has the preponderance of land forces. The JFC makes the JFLCC responsible for—

- Recommending the proper employment of land forces.
- Planning and coordinating land operations.
- Accomplishing such operational missions as may be assigned.

2-13. While the JFLCC is responsible for conducting (planning, preparing, executing, and assessing) land operations, the responsibility for CSS to joint/multinational land forces remains primarily with the service components. The individual service component commands retain overall responsibility for providing logistics and personnel support to their own forces, unless otherwise directed. The JFLCC J1 and J4 provide critical functional expertise to the JFLCC in the areas of personnel and logistics. These primary staff officers focus on key personnel and logistics issues that may have a significant effect on the land portion of the campaign. Generally, they manage by exception. Routine administrative/personnel and logistics management are the responsibility of the JFC and the subordinate service component commands. The JFLCC only becomes involved in logistics and personnel issues that the

individual services are unable to resolve on their own and that have a direct impact on the ground portion of the campaign.

2-14. Normally the JFLCC J1 and J4 do not participate in the JFC boards and centers; these are predominately service responsibilities. The JFLCC J1 and J4 may participate on JFC boards and centers when there are issues critical to conducting ground operations. This JFLCC participation is separate and distinct from the service component participation. The joint transportation board and joint movement center may have a significant impact on the ability of the JFLCC to execute ground operations successfully. When there are logistics issues that only affect ground operations, the JFLCC J4 may elect to convene a board or center to coordinate the ground logistics effort or prioritize scarce resources. Separate JFLCC boards and centers are established by exception only. Existing JFC boards and centers should be the normal forum to facilitate ground operations.

CUL Responsibilities

2-15. Service component forces, especially the Army service component command (ASCC), as well as agencies such as the Defense Logistics Agency (DLA) are often required to provide significant levels of CUL support to other service components, multinational partners, and other organizations (such as nongovernmental organizations [NGOs]). Army echelons above corps (EAC) support units (such as the theater support command [TSC]) normally provide Army CUL support; however, these actions are carried out under the auspices of the ARFOR commander and are not a JFLCC responsibility.

JOINT LOGISTICS AND PERSONNEL PLANNING

2-16. Joint logistics and personnel activities are complicated operations that can enhance or hinder a combatant commander's combat power. An understanding of the combatant commander's concept of operations and early involvement by the joint logistics and personnel staffs ensure that theater deployment and sustainment requirements are balanced with the right type and amount of joint logistics and personnel capabilities. This balance allows successful accomplishment the mission. Logistics and personnel planning are the responsibility of the combatant commander, in close coordination with the services, defense agencies, and multinational partners.

2-17. Proper joint logistics and personnel planning, adequate resource availability, and transportation assets reduce the need for emergency measures and improvisations, which are usually expensive and often have an adverse effect on subordinate and adjacent commands. Joint logistics and personnel planners avoid focusing solely on the deployment problem at the expense of sustaining the employment portion of the campaign. Planners identify critical issues distinct to a specific OPLAN they must support. These issues include the increased demand associated with an expanding force, critical supply items, constrictive distribution bottlenecks, control of all means of transportation, and the provision of supplies and services.

2-18. The combatant commander's strategic and operational joint logistics and personnel planning focuses on the ability to generate and move forces and materiel into the theater base and on to desired operating locations, where the operational CSS concepts are employed. The service components

perform tactical logistics planning. JP 1-0, JP 4-0, and JP 5-0 provide guidance on joint CSS planning.

THE ARMY ROLE IN JOINT LOGISTICS AND PERSONNEL OPERATIONS

2-19. The ASCC commander exercises administrative control (ADCON) over all Army forces within the combatant commander's AOR. The ASCC commander is responsible for preparing, training, equipping, administering, and providing CSS to Army forces assigned to combatant commands. The ASCC commander is responsible for providing ARFOR to subordinate joint forces, including CSS forces and support resources to support those subordinate joint forces. The ASCC commander is also responsible for meeting any CUL requirements within a particular joint force and tailors the ARFOR accordingly.

2-20. The ASCC is responsible for all Title 10 functions within the combatant commander's AOR.

Subject to the authority, direction, and control of the Secretary of Defense and subject to the provisions of chapter 6 of this title, the Secretary of the Army is responsible for, and has the authority necessary to conduct, all affairs of the Department of the Army, including the following functions:

(1) Recruiting.
(2) Organizing.
(3) Supplying.
(4) Equipping (including research and development).
(5) Training.
(6) Servicing.
(7) Mobilizing.
(8) Demobilizing.
(9) Administering (including the morale and welfare of personnel).
(10) Maintaining.
(11) Construction, outfitting, and repair of military equipment.
(12) Construction, maintenance, repairs of buildings and structures, utilities, acquisition of real property and interests in real property necessary to carry out the responsibilities specified in this section.

10 USC

2-21. The ASCC commander's principal CSS focus is on operational-level CSS. Operational-level CSS focuses on theater support involving force generation and force sustainment. Chapter 4 discusses functions associated with operational-level CSS.

2-22. Support stems from a variety of sources, including contractors, DA/DOD civilians, U.S. and allied military organizations, and host-nation support (HNS) resources.

2-23. The ASCC commander focuses on generating and moving forces and materiel into theater as well as sustaining these forces during campaigns and other joint operations. In all joint operations, coordinating and executing CSS operations is a service responsibility unless otherwise directed by executive agent directives, combatant commander lead service designations, or ISSAs. The ASCCs, in concert with their associated geographic combatant commanders, are responsible for identifying CSS requirements, coordinating re-

source distribution from the strategic base, allocating necessary CSS capabilities, and establishing requisite Army CSS command and control (C2) relationships within the theater. Furthermore, the ASCC commander is responsible for properly executing all Army lead service or ISSA-related CUL requirements within the theater.

2-24. An ARFOR is designated whenever Army forces are involved in an operation. Even if separate Army forces are conducting independent operations within a joint operations area (JOA), there is only one ARFOR headquarters in that JOA. ASCCs, numbered Army, and corps headquarters (with augmentation) are capable of serving as ARFOR headquarters. In certain small-scale contingencies, a division headquarters may be designated as ARFOR headquarters; however, a division headquarters requires extensive augmentation for this mission.

2-25. Within the context of the JFC's plan, the ARFOR headquarters conducts both the operational and tactical-level sustaining operations to include—

- Support of reception, staging, onward movement, and integration (RSO&I) operations.
- Tactical-level CSS.
- Distribution management operations, to include synchronization of materiel management and movement control.
- Support to reconstitution of Army units.
- Execution of CUL support responsibilities.
- Security of CSS, maintenance of the lines of communication (LOC), and C2 of tactical combat forces (TCFs).

2-26. Within the JFC's framework of responsibilities, the ARFOR headquarters carries out planning responsibilities associated with CSS, as well as assigned lead service support to other services and organizations. The support structure starts with a nucleus of minimum essential support functions and capabilities focused on force generation within the theater. As the deployed force grows, the support structure gains required capabilities. The theater support structure must provide support to the engaged forces; to units in (or passing through) the communications zone (COMMZ); and to other units, activities, forces, and individuals as the JFC directs.

2-27. ARFOR include the tactical-level CSS organizations (discussed in chapter 4) that provide support to tactical forces. The ASCC commander tailors an ARFOR to its mission, providing any EAC-level support organizations it requires. These may be the multifunctional TSC as well as specialized engineer, finance, medical, personnel, and transportation EAC-level commands. (FM 4-93.4 discusses the early entry and buildup of the TSC.) Each of these Army EAC support units is structured to deploy tailorable, early-entry, functional modules during the early stages of force projection operations. These tailored organizations give the ARFOR commander the requisite CSS functional expertise and C2 capabilities to execute operational-level support missions assigned to the ARFOR. Furthermore, these modular organizations may expand as necessary to provide the proper level of support for each operation or phase. Additionally, the DLA and the U.S. Army Materiel Com-

mand (USAMC) may provide support teams that expand the functional expertise and service capabilities of the ARFOR. When tailoring an ARFOR, the ASCC commander balances the ARFOR's tactical and operational requirements against other support requirements, such as CUL.

2-28. The ASCC commander ensures that the ARFOR not only has adequate operational-level CSS capability to meet both Army Title 10 and lead service requirements, but also has adequate C2 and staff capabilities to plan, prepare for, execute, and assess operations to meet them. This is especially significant when a tactical-level unit, such as a division or corps, is the foundation of the ARFOR. In these situations, the ASCC/ARFOR commander may choose to establish a single operational-level support headquarters to assist in planning and executing Army Title 10 and CUL functions. The TSC, in many cases, is the preferred building block for such a headquarters. However, it could be built on other support commands, such as an engineer command (ENCOM) or area support group (ASG). In any case, staff representatives or liaison personnel from other attached support units, other services as appropriate, and multinational partners, as required, should staff the operational-level support command. Chapter 4 contains more details on the role of the ASCC and TSC.

2-29. Although CSS is a service responsibility, the Army has been designated to provide certain support to other services and organizations in a variety of Department of Defense directives (DODD). As previously noted, these directives focus on strategic-level activities, but they may be related to CUL support in a specific operation. Normally EAC support organizations provide this support. As stated above, a corps or division as the ARFOR may provide very limited support depending on the size and scope of the mission, but either will most likely require augmentation. Support to other services and organizations must be coordinated with all responsible agencies and integrated into the support plan. Table 2-1 lists tasking documents and responsibilities assigned to the Army on a relatively permanent basis. However, the support responsibilities of the Army vary for each of these. In addition, despite these guidelines, the geographic combatant commander retains the authority to assign lead responsibility for a specific operation to the service or agency to best meet the operational requirements.

Table 2-1. Representative Army Lead Responsibilities for Support to Other Services and Agencies.

Tasking Document	Support Responsibility
SECDEF Memo	Veterinary Support including food inspection
DOD Memo	Mortuary Affairs
DODD 1315.6	Troop Construction Support to OCONUS USAF
DODD 2310.1	Executive Agent for DOD Enemy Prisoner of War Detainee Program
DODD 4500.9	Common-User Land Transportation in Overseas Areas
DODD 4500.9	Intermodal Container Management

Table 2-1. Representative Army Lead Responsibilities for Support to Other Services and Agencies.	
Tasking Document	**Support Responsibility**
DODD 4500.9	Overseas Ocean Terminal Operations
DODD 4525.6	Management of Military Postal Services
DODD 4705.1	Executive Agent for Land-Based Water Resources
DODD 5030.49	Executive Agent for the Customs Inspection Program
DODD 5160.65	Management of Conventional Ammunition
DODI 4140.50	Locomotive Management
DODD 4140.25	Management of Bulk Petroleum Products, Natural Gas, and Coal
SECDEF Memo	Executive Agent for the Joint Mortuary Affairs Program

2-30. A combatant commander may designate a service, usually the dominant user or most capable service/agency, to provide other common item/service support (see JP 4-07). ARFOR CUL functions may include—

- In-theater receipt, storage, and issue Class I, II, III (B), IV, VIII and IX, and water during wartime.
- Medical evacuation (ground and rotary-wing aircraft) on the battlefield.
- Transportation engineering for highway movements.
- Finance, banking, and currency support.
- Processing and settlement of claims by (or against) the United States, as designated in DODD 5515.8.
- Settlement of Federal tort claims by employees.
- Unexploded ordnance (UXO) disposal.
- Controlled disposal of waste explosives and munitions.
- Mortuary affairs support.
- Providing airdrop equipment and systems.
- Billeting, medical, and food service support for transient personnel during other-than-unit moves.
- Handling of hazardous materials (HAZMAT).

MULTINATIONAL CSS OPERATIONS

2-31. Army forces support multinational operations throughout the world. They operate in alliances and coalitions. A major objective when Army forces participate in multinational CSS operations is to maximize operational effectiveness while improving cost effectiveness and economy of effort for all nations involved.

2-32. In multinational operations, CSS is primarily a national responsibility. However, relations between the United States and its North Atlantic Treaty

Organization (NATO) allies have evolved to where CSS is viewed as a collective responsibility (NATO Military Committee Decision [MCD] 319/1). In multinational operations, the multinational commander must have sufficient authority and control mechanisms over assets, resources, and forces to achieve his mission. It would be very inefficient and expensive for each nation of an alliance or coalition to perform CSS functions separately. This separate support would also hinder the multinational commander's ability to influence and prioritize limited CSS resources to support the operation and accomplish the mission.

2-33. The focus of multinational CSS operations is integrated, coordinated, and cohesive support. Major challenges of multinational CSS may include differences in language, doctrine, stockage levels, mobility, interoperability (especially of automated C2 systems), infrastructure, standards of support, and national resource limitations.

2-34. Support provided and received in multinational operations must be in accordance with existing legal authorities. For example, 10 USC, Chapter 138, authorizes exchanging support between U.S. services and those of other countries. It authorizes DOD acquisition from other countries by payment or replacement-in-kind, without establishing a cross-servicing agreement. CSS authorized under 10 USC, Chapter 138, does not include major end items, missiles, or bombs. It does include food, billeting, petroleum, oils, transportation, communications services, medical services, ammunition, storage, spare parts, maintenance services, and training.

2-35. Under ACSA authority (10 USC 2341 and 2342), the Secretary of Defense can enter into agreements for the acquisition or cross-service of logistics support, supplies, and services on a reimbursable, replacement-in-kind, or exchange-for-equal-value basis. These agreements may be with eligible nations and international organizations of which the United States is a member. An ACSA is a broad overall agreement that is generally supplemented with an implementing agreement (IA). The IA contains points of contact and specific details of the transaction and payment procedures for orders for logistics support. Neither party is obligated until the order is accepted.

2-36. Under these agreements, common logistics support includes food, billeting, transportation (including airlift), petroleum, oils, lubricants, clothing, communications services, medical services, ammunition, base operations, storage services, use of facilities, training services, spare parts and components, repair and maintenance services, calibration services, and port services. Items that may not be acquired or transferred under the ACSA authority include weapon systems, major end items of equipment, guided missiles, nuclear ammunition, and chemical ammunition (excluding riot control agents).

2-37. Typically, multinational operations occur within the structure of a coalition or alliance, both of which provide challenges for executing common support. A *coalition* is an ad hoc arrangement between two or more nations for common action. It is clearly the more challenging common support environment. An *alliance* is the result of formal agreements (such as treaties) between two or more nations for broad, long-term objectives that further the common interests of the members (JP 1-02). NATO is an example of an alli-

ance. No single command structure fits the needs of all alliances or coalitions and various models could evolve depending on the operation.

COALITIONS

2-38. Coalitions normally form as a rapid response to unforeseen crises, for limited purposes and for a limited length of time. Many coalitions are formed under the auspices of the United Nations (UN). The UN does not have a military organization and, therefore, no preplanned formal military structures.

Parallel Command

2-39. During the early stages of a contingency, nations rely on their own military command systems to control the activities of their forces. Hence, the initial coalition arrangement most likely involves a *parallel command* structure. (See FM 3-0, para 2-50.) Under a *parallel command* structure, the coalition does not designate a single, multinational commander. Member nations retain control of their own national forces, and the coalition partners write a plan effecting coordination among the participants. Parallel command is the simplest to establish. While other command structures may emerge as the coalition matures, the parallel model is often the starting point. For multinational CSS operations, the parallel command structure is the least effective.

Lead Nation Command

2-40. As the coalition matures, members often opt to centralize their efforts by establishing a command structure built around the structure of one of the nations. If nations are very similar in cultures, doctrine, training, and equipment, or if extensive cooperative experience exists, an integrated command structure may be effective. This direct approach requires each armed force to receive, understand, plan, and implement missions in the same manner as the other nations. This is known as *lead nation command* (FM 3-0, para 2-51). The lead nation command structure concept recognizes one nation in the lead role and its C2 system predominates.

2-41. Other nations participating in the operation provide liaison personnel to the lead nation headquarters. The lead nation commander, working in close coordination with the commanders of the other national contingents, determines appropriate command, control, communications, intelligence, and CSS procedures. Robust liaison is essential to develop and maintain unity of effort in multinational operations. Staff augmentation may also be required if a partner has unique organizations or capabilities not found in forces of the lead nation. This augmentation provides the commander with a ready source of expertise on the respective partners' capabilities during planning and execution.

Role Specialization

2-42. Although not a command structure, role specialization is a method used in multinational CSS operations to maximize unity of effort and efficiencies for the multinational force. In role specialization, one nation or organization assumes the sole responsibility for procuring and providing a particular class or subclass of supply or service for all or part of the multinational force. Normally performed at EAC, role specialization may be executed at a lower level, depending on the size of the force. Role specialization is normally used for a

finite mission and time because of the great burden it places on the nation or organization. If properly planned and negotiated, this approach promotes greater efficiency if one multinational force member—

- Is already well established in the area.
- Has contractual arrangements in place.
- Has a unique relationship with the populace
- Has a much greater capability than other nations.

ALLIANCES

2-43. Alliance participants establish formal, standard agreements for broad objectives. Alliance nations strive to field compatible military systems, follow common procedures, and develop contingency plans to meet potential threats. As forces of these nations plan and train together, they develop mutual trust and respect.

2-44. An alliance may use an integrated staff, instead of merely augmenting the staff of one nation's organization with other national representatives. Each primary staff officer could be a different nationality; usually the deputy commander represents a major participant other than the lead nation. An integrated staff demonstrates the burden sharing and commitment of the partner nations. An alliance organized under a multinational, integrated command structure provides unity of command. The NATO command structure is a good example. NATO has a single commander, the Supreme Allied Commander, Europe (SACEUR), who is designated from a member nation. His staff and the subordinate commands and staffs several tiers removed (EAC, corps, and below) are multinational and multi-Service. The key ingredients in an integrated alliance command are a single designated commander, a staff comprised of representatives from all member nations, and subordinate commands and staffs integrated to the lowest echelon necessary to accomplish the mission.

2-45. In most recent operations, the United States has operated within the NATO alliance, which has a military organization to support its political goals. The United States has also agreed to various NATO standardization agreements (STANAGs) and NATO MCDs that enhance interoperability. For example, NATO MCD 389 addresses the emergence of smaller, but diverse and unpredictable risks to peace and stability. In particular, the committee agreed that future security arrangements would require easily deployable, multinational, multi-Service military formations tailored to specific kinds of military tasks. These include humanitarian relief, peacekeeping, and peace enforcement, as well as collective defense. The forces required would vary according to the circumstances and would need to be generated rapidly at short notice.

2-46. Effective command and control arrangements are essential to allow multinational JTFs to operate effectively. A multinational JTF headquarters is formed around core elements from selected parent headquarters. NATO headquarters and other contributing partner countries augment it as necessary, using a modular approach, to meet the requirements of the specific mission.

2-47. NATO's multinational JTF attains a much higher degree of multinational integration than previous attempts. This is true both in the number of existing and emerging multinational units and in the deeper multinational integration at lower levels of command. Consequently, CSS systems and structures must adapt to that reality. To assure the enhanced logistics authorities and responsibilities of NATO commanders and enable NATO headquarters at the different levels of command to coordinate logistics support properly within their AO, the NATO nations developed the Multinational Joint Logistics Center (MJLC). The MJLC provides structural and procedural tools for the NATO commander to exercise his logistics authorities and responsibilities in an effective and well-coordinated fashion.

MULTINATIONAL LOGISTICS PLANNING

2-48. Maximum unit effectiveness requires commanders to assemble the optimal array of support assets, relationships, and procedures. To do this, commanders must concurrently analyze engineer support of the multinational force with mission clarification and force composition. Commanders must emphasize their analyses of coalition/alliance member capabilities and willingness to support organic elements and other force components equally with combat planning.

2-49. Staffs should evaluate the level of standardization and interoperability among participating nations and, when situations permit, agree on which nations will provide support functions for the multinational force, and the procedures and methods for how to provide the support. (See JP 3-16 and FM 100-8 for multinational operations doctrine. See JP 4-08 for logistics support to multinational forces doctrine. See Allied joint publication [AJP] 4, and Allied logistics publication [ALP] 4.2 for NATO logistics support operations doctrine, to include employing an MJLC.)

Chapter 3

CSS in Full Spectrum Operations

FM 3-0 describes the doctrine of full spectrum operations as offensive, defensive, stability, and support operations. This chapter discusses combat service support (CSS) to full sprectum operations. It discusses the four types of Army operations and how CSS influences these operations through its effect on operational reach and sustainability. Finally, it discusses force projection as the responsive means of getting Army forces employed in full spectrum operations. It also includes a discussion of how CSS reach operations support the force while minimizing the Army CSS footprint in the area of operations.

CSS TO OFFENSIVE, DEFENSIVE, STABILITY, AND SUPPORT OPERATIONS

3-1. CSS planning to support offensive, defensive, stability, and support operations requires a thorough mission analysis, careful identification of the supported force, and an understanding of the commander's intent and concept of operations. CSS planners must consider all specified and implied requirements and be aware of resources available, including those of other U.S. services, the host nation, and theater support contracting capabilities.

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CSS IN OFFENSIVE OPERATIONS

3-2. CSS in the offense is characterized by high-intensity operations that require anticipatory support as far forward as possible. Commanders and staffs ensure adequate support for continuing the momentum of the operation as they plan and synchronize offensive operations. Plans should include agile and flexible CSS capabilities to follow exploiting forces and continue support. Commanders and staffs plan for increased quantities of fuel and selected other classes of supply, as well as for maintenance and recovery of damaged equipment. Planners consider casualty rates and preposition medical treatment and evacuation capabilities forward to clear the battlefield efficiently. The biggest challenge to plans for supporting a rapidly moving force may be the lengthening lines of communication (LOC). Transportation support must be closely coordinated to deliver essential support to the right place at the right time. CSS assets must follow exploiting forces to ensure continuity of support. Plans for all offensive phases must enable CSS elements to react

quickly to changing needs, just as total asset visibility (TAV) helps commanders quickly reprioritize assets as situations dictate.

3-3. During offensive operations, critical needs present great challenges. The most important materiel is typically Class III and Class V. Service support plans direct the movement of Class III and Class V resupply to meet predicted requirements. As advancing combat formations extend control of the area of operations (AO), personnel elements face similar challenges to reconcile and report command strength information, report casualty information, and conduct replacement operations.

3-4. Offensive operations put a high demand on maintenance elements. To continue momentum, task-organized maintenance support teams may operate with forward elements. Similarly, widely dispersed forces and longer LOC require all transportation resources, including aerial delivery assets, to deliver supplies well forward. Movement control personnel manage movement priorities in accordance with the commander's priorities.

3-5. The higher casualty rates associated with offensive operations increase the burden on medical resources. Combat support hospitals may move forward to prepare for offensive operations. If the increased numbers of casualties overwhelm medical resources, nonmedical transportation assets may be needed for evacuation. Following an offensive operation, combat stress casualties may be more prevalent and require moving combat stress teams forward.

3-6. Plans should also provide for religious support, which may become critical during offensive operations. Chaplain support through counseling and appropriate worship can help reduce combat stress, increasing unit cohesion and productivity.

3-7. Using contractors in offensive operations entails great risks. However, the force commander may be willing to accept risk and use contractors in forward areas. Contractor support outside of AOs may help minimize Army CSS force structure at locations such as intermediate staging bases (see paragraph 3-82). Chapter 5 discusses contractors in further detail.

CSS IN DEFENSIVE OPERATIONS

3-8. The commander positions CSS assets to support the forces in the defense and survive. CSS requirements in the defense depend on the type of defense. For example, increased quantities of ammunition and decreased quantities of fuel characterize most area defensive operations. However, in a mobile defense, fuel usage may be a critical part of support. Barrier and fortification materiel to support the defense often has to move forward, placing increased demands on the transportation system. The maintenance effort focuses on returning primary weapon systems and critical equipment to mission capable status. Defensive operations may allow CSS assets to field services and refit degraded units. CSS planners and operators also prepare to resume support to the offensive operations projected to follow the defense.

3-9. CSS managers direct routine resupply of forecasted requirements to designated units, as stated in the service support plan. They should push Class IV directly to battle positions, when possible, and give Class V the highest

priority. The increased expenditures of ammunition significantly impact transportation assets. Throughput of supplies from the echelons above division (EAD) to the lowest-level supply support activity (SSA) expedites deliveries.

3-10. The task of medical units is to triage casualties, treat and return to duty, or resuscitate and stabilize for evacuation to the next higher echelon of medical care or out of the theater of operations. Medical treatment facilities should locate away from points of possible hostile actions.

3-11. Using contractors in forward areas during defensive operations may entail unacceptable risk. If not, they may provide support in rear areas of forward deployed units.

CSS IN STABILITY OPERATIONS

3-12. CSS in stability operations involves supporting U.S. and multinational forces in a wide range of missions. Stability operations range from long-term CSS-focused operations in humanitarian and civic assistance (HCA) missions to major short-notice peace enforcement missions. Some stability operations may involve combat. Tailoring CSS to the requirements of a stability operation is key to success of the overall mission. In stability operations, small task-organized CSS forces may operate far from traditional chains of command and support agencies that cannot sustain themselves. Stability operations also include large-scale operations that support peacekeeping and peace enforcement. These operations may or may not involve direct hostile action to U.S. forces and may have nearly the same CSS requirements as offensive or defensive operations. Contracted services and support may significantly augment Army CSS capabilities in major stability operations.

3-13. In addition to the movement control challenges typically presented by joint and multinational operations, large numbers of nongovernmental organizations (NGOs) sharing the same LOC and node facilities usually complicate movement control in stability operations. As in any major multinational operation, forces may establish a multinational movement control center to prioritize usage.

3-14. Maintenance units often have to support civilian assets as well as those of other military forces. In United Nations (UN) operations, the UN may purchase U.S. equipment for other multinational forces. In such cases, those forces may not have the capability to service the equipment. U.S. units may provide support or identify support packages. Also, the desired end state may require that maintenance support for stability operations include reestablishing or upgrading the infrastructure maintenance capabilities. This may entail providing tools and equipment.

3-15. For medical personnel, stability operations often result in more frequent and direct contact with the local population. Planners consider the mix of care-provider skills, instrument sizes, drugs, and supplies to support pediatric, geriatric, and obstetric missions. Human resource support activities (such as postal and morale, welfare, and recreation [MWR]) may have a higher priority and be a more immediate requirement during long-term stability missions than during offensive and defensive missions; long-term stability missions operate at a reduced tempo. These morale-related services be-

come a major focus to both commanders and soldiers. Using contracted services and support may augment some CSS units. (See FM 3-07.)

CSS IN SUPPORT OPERATIONS

3-16. CSS is often the primary focus of a support operation. Army forces often provide assistance to civil authorities and respond to national and international crises that include significant humanitarian assistance requirements best met with CSS capabilities. In many support operations, Army CSS units conduct the decisive operation. The ability of Army forces to move large amounts of equipment and supplies under adverse conditions and provide small tailored forces on short notice makes Army CSS forces a valuable asset in both domestic support operations and foreign humanitarian assistance missions. Distributing food, water, supplies, field services, and medical support is often the primary emphasis of support operations; the Army has trained personnel and deployable assets to provide such support. Transportation, supply, and medical units are often most in demand.

3-17. The key to success in many support operations is interagency coordination. Only in the most extreme situations does the U.S. military provide relief directly to those in need. In most support operations, the U.S. military assists NGOs in providing the required support. Multinational support, host nation support, and support from NGOs may reduce the demands on transportation, medical, food, water, and housing resources. (See FM 3-07.)

OPERATIONAL REACH AND SUSTAINABILITY

3-18. *Operational reach* is the distance over which military power can be employed decisively (FM 3-0). The goal of the CSS effort is to enable the commander to initiate and sustain operations over time as well as extend the operational reach of the force. Operational reach relates to distance; sustainability relates to the ability of the force to conduct operations over time. The following is a discussion about how CSS influences both.

3-19. If military operations extend beyond a commander's operational reach, they reach the culminating point. In the offense, the culminating point is that point in time and space where the attacker's effective combat power no longer exceeds the defender's or the attacker's momentum is no longer sustainable, or both. In the defense, the culminating point is that instant at which the defender must withdraw to preserve the force. (See FM 3-0 for a discussion of culminating point.) To avoid this, the commander may choose an intentional operational pause or a reduction in tempo. Commanders can extend operational reach by moving forces, repositioning CSS assets, and securing LOC forward.

3-20. Several of the interrelated CSS factors that affect operational reach and sustainability are the scope of support, distribution networks, sources of support, and availability of materiel. The commander may adjust any of these factors to extend operational reach or enhance sustainability, but incurs additional risk by doing so. He must do a rigorous risk analysis before adjusting factors.

SCOPE OF SUPPORT

3-21. The scope of support refers to the types and levels of support to provide to the force. The commander decides whether to provide all the CSS functions (and all subfunctions) or to defer certain types of support early in an operation or perform support functions at a reduced level. For example, he may defer food preparation, laundry support, and MWR in the early stages of an operation. However, the phase of the operation is just one consideration in determining what support to provide and to what standard. Other considerations include the type of operation, level of hostility, time available to prepare, expected duration of the operation, and resources available in the AO.

3-22. Adjusting the scope of support can extend operational reach and remove the need to move support assets forward. However, it has an associated risk. Deferring some functions (such as laundry or MWR) may simply result in reduced morale. However, deferring or reducing other functions (such as maintenance) has significant impacts, and the commander must carefully manage the associated risk.

DISTRIBUTION NETWORK

3-23. The distribution network consists of the information system and physical and resource networks. It has critical effects on operational reach and sustainability. The *information system network* provides the means to achieve asset visibility through the flow of information among the CSS elements at all levels. The *physical network* consists of the capabilities of fixed structures and established facilities. It includes factories, warehouses, airfields, seaports, roads, railroads, inland waterways, pipelines, terminals, bridges and tunnels, and buildings. The capacity of the physical network defines the point of diminishing returns of resources (people and machines), influences the feasibility of courses of action, and characterizes the risk inherent in the network. For example, in seaport operations, the capacity of the port is defined in short tons that can move through the port per day. The *resource network* consists of the people, materiel, and machines operating within and over the physical network. It includes a mix of military and civilian organizations and equipment.

3-24. A key element of distribution management is managing the capacity of the distribution system. Enhancing its capacity can extend operational reach or sustainability. The force can employ information systems in theater to enhance those networks. Engineers to repair or construct facilities to increase the capacity of the physical network may be critically important.

3-25. The commander can deploy CSS units to the AO to operate support facilities as part of the resource network. Though each of these may extend operational reach or enhance sustainability, they also carry risks. The primary risk is a potentially larger Army CSS footprint, to the detriment of combat force capabilities. However, the risk analysis associated with this decision is complex. (See FM 100-14.) On one hand, deploying CSS assets required to enhance the distribution system causes an additional burden on strategic lift as well as adding to the overall CSS requirements in theater. On the other hand, if the distribution system cannot provide responsive distribution support, the commander must accept other mitigating actions or increased risk.

(For example, he may have to increase supply stocks in the AO to compensate for decreased ability to move supplies to the AO quickly; or he may choose to accept the risk of operating without robust supply stocks or a responsive distribution system.) In any case, the operational commander has to weigh his options carefully.

SOURCES OF SUPPORT

3-26. The sources of support can also influence operational reach and sustainability. CSS may come from a myriad of DOD, Army, joint, multinational, contracted, and host nation support sources. Integrating CSS from all available sources maximizes the efficiency and effectiveness of the overall CSS effort. CSS personnel should always exploit all available sources based on a valid risk assessment and mission, enemy, troops, terrain and weather, time available, civil considerations (METT-TC). (FM 100-14 discusses risk assessment. When published, FM 6-0 will discuss the factors of METT-TC.)

3-27. However, adjusting sources of support through expanding contracted support also has risks. FM 3-100.21 discusses the risks associated with using contractors to provide support. Risk factors include exposing contract personnel to imminent danger in hostile environments and a possible lack of flexibility in support. Risks with relying on interagency or multinational sources may include lower reliability or varying standards of support. Solid, in-place support contracts and support agreements are critical when using contractors and multinational support.

AVAILABILITY OF MATERIEL

3-28. Availability of materiel is directly related to all three of the other factors. Materiel is available to a force through accompanying stocks and resupply. Internal constraints on a force's accompanying stocks include the upload capacity of its troops and equipment, the storage capacity for materiel not uploaded, and the transportation assets available to move supplies from stockpiles to their point of employment. Enhancing resupply by improving distribution networks or capitalizing on host-nation or locally contracted support and materiel can lessen the need to deploy and establish large stockpiles in theater. Also, increasing its unit basic load (UBL) may extend a unit's operational reach and sustainability, but this may prove impractical due to limited unit storage and transportation capabilities. Normally, if a unit's UBL is increased, it needs transportation augmentation to maintain agility. The commander has to balance unit agility with the threat of disruptions in the distribution system.

CSS IN FORCE PROJECTION

3-29. The Army's ability to project power with the most capable forces at the decisive time and place relies on focused CSS that is responsive, flexible, and precise. Distribution-based CSS provides rapid crisis response, tracks and redirects assets en route, and delivers tailored CSS packages directly to strategic, operational, and tactical levels. It must be fully adaptive to the needs of the Army's dispersed, mobile forces and provide support in hours or days versus weeks. It enables joint forces to be mobile, versatile, and deployable from anywhere in the world.

3-30. Since many CSS enablers are not yet fielded, not all facets of distribution-based CSS are currently executable. Distribution and other CSS functions and organizations are being modernized to incorporate information technologies that will allow Army forces to transition from the rigid vertical organizations of the past to more flexible, precise CSS structures. Modular and specifically tailored CSS packages are evolving in response to wide-ranging contingency requirements. Service and DOD agencies are working jointly and with the civil sector to take advantage of advanced business practices, commercial economies, and global networks.

3-31. Information technologies to support force projection and velocity management enhance airlift, sealift, and prepositioning capabilities. This enhancement lightens deployment loads, assists in the precision of distribution systems, and extends the reach and longevity of systems currently in the inventory. The combined impact of these improvements will be a smaller, more deployable, and more capable force.

FORCE PROJECTION CHARACTERISTICS

3-32. Current world situations require the Army to deploy a first-rate force effectively and efficiently, perform complex and difficult missions, and redeploy it as quickly and efficiently as it deployed. To accomplish this, Army forces require the four characteristics of force projection: precision, synchronization, speed, and relevant information.

Precision

3-33. Precision applies to every activity and each piece of data within force projection. Its effect is far-reaching; the payoff is speed. Precise deployment equipment lists, for example, ensure that CSS staff can quickly assign correct lift assets against the requirement. Precision in loading increases departure speed and safety. Precision in meeting the joint force commander's timeline supports his concept of employment. Current doctrine, realistic training, adequate support structure, and enablers provide the framework for precision. Such current and future CSS efforts as configured loads and modular, rapidly tailorable CSS units enhance precision.

Synchronization

3-34. Synchronization is a critical force projection characteristic. Just as a commander arranges activities in time and space to gain the desired effect during employment, he should also synchronize deployment activities to close the force successfully. Resources (such as lift assets, technical enablers, time, and information) are scarce. However, effectively synchronizing resources produces maximum use of every resource. Synchronization normally requires explicit coordination among the deploying forces and staffs, supporting units and staffs, a variety of civilian agencies, and other services. Synchronization is best achieved when supported with situational understanding based on timely and accurate data from information technologies that create a common operational picture (COP) and are enhanced with automated optimization, scheduling, and decision aids.

3-35. The CSS contributions to the force projection processes, as discussed in the paragraph 3-38, are key elements to synchronize with other activities to

project the force. Extensive joint exercises and training are the key to successful synchronization.

Speed

3-36. Speed is more than miles per hour; it is the sustained momentum achieved with the complete complement of joint lift assets. The bulk steadily delivered by ship can often outpace the pieces delivered by air. Speed is also the velocity of the entire force projection process, from planning to force closure. In deployment, speed of force projection should be directed to the timely arrival of throughput enablers; maintaining unit integrity; and delivering capability, not just individual units. Factors such as efficient planning tools, agile ports, submission of accurate information, safe and efficient loading, and trained unit movement officers are instrumental elements contributing to deployment speed.

Relevant Information

3-37. *Relevant information* is all information of importance to commanders and staffs in the exercise of command and control (FM 3-0). Successful force projection requires commanders to combine knowledge of the deployment process, judgment, and relevant information. Relevant information is the basis on which the commander makes decisions. The deploying commander must make crucial decisions on employment in a short period of time; these decisions set the tone for the remainder of the deployment. Many of the decisions are irretrievable or very hard to change. For example, understanding the time-phased force and deployment data (TPFDD) is imperative to making decisions on high-priority items, sequencing, use of time, and prioritization. Also, knowledge of the theater throughput allows the commander to manage deployment to enable employment. Having relevant information and understanding the deployment process is fundamental to achieving the situational understanding that allows the commander to effectively command and control deployment operations.

FORCE PROJECTION PROCESSES

3-38. JP 3-35 lays out the five interrelated processes involved in force projection: mobilization, deployment, employment, sustainment, and redeployment. CSS elements are involved in all five processes providing support to the force projected, and as part of that force. The concept of support for the deployed force in theater dictates which CSS elements mobilize and deploy as a part of the contingency force. (See figure 3-1.)

3-39. Commanders of combatant commands, joint forces, Army service component commands (ASCCs), ARFOR, theater support commands (TSCs), and other echelons above corps (EAC) CSS commands have primary responsibility for CSS planning and preparation within a theater. Their staffs perform CSS planning and preparation activities in accordance with operational priorities and in coordination with their strategic and tactical counterparts. Through technological advances (such as improved asset visibility, the Global Transportation Network [GTN], and improved distribution methods) CSS planners prepare CSS plans that meet the commander's intent, support the concept of operations, and accomplish the mission.

3-40. Improving the theater-base capabilities may require early deployment of maintenance, engineering, or terminal operations forces. Contracting, medical, legal, and resource management personnel who arrange access to host nation capabilities at staging and support bases should be among the first to deploy. The requirement for adequate CSS capability is especially critical in the early stages of operations, when buildup of combat power is critical and forces are vulnerable.

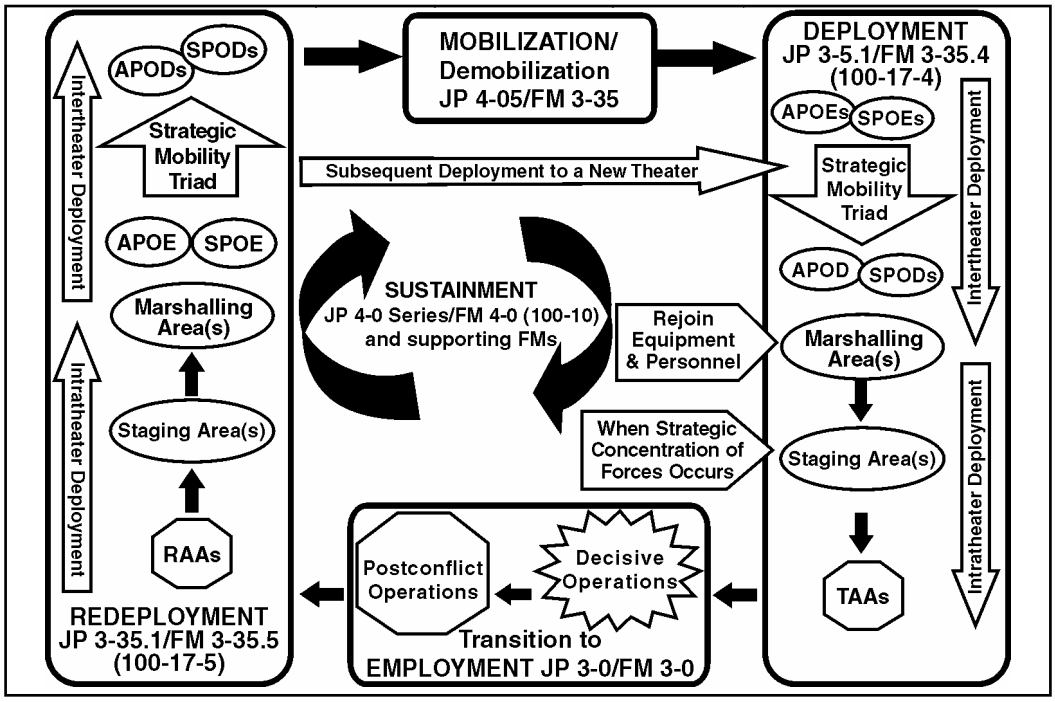

Figure 3-1. Force Projection Processes (normal entry, not forcible entry into theater)

3-41. Identifying and planning theater infrastructure requirements during mission analysis are essential to establishing the support base and enhancing the responsiveness and sustainability of the force. The time required to establish a support base depends greatly on the extent and nature of the civil and military infrastructure in theater before operations begin. When there are ports, airfields, roads, depots, repair facilities, supplies, and transportation facilities, CSS operations can begin quickly without having to establish a new support base. When there is *neither* facilities, supplies, *nor* a distribution network, Army units may have to operate for a considerable period from austere theater bases until they build CSS facilities. In an austere theater, where operations may initially be restricted, CSS and construction units should arrive early in the deployment flow. Chapter 5 discusses, in detail, these considerations in the logistics preparation of the theater.

Mobilization

3-42. *Mobilization* is the process by which the armed forces or part of them are brought to a state of readiness for war or other national emergency. This

includes activating all or part of the Reserve Components and assembling and organizing personnel, supplies, and materiel. (See JP 1-02 for a complete definition. JP 4-05 and JP 4-05.1 provide the joint doctrine for mobilization. FM 100-17 establishes Army doctrine.) As discussed in these publications, CSS for mobilization involves extensive personnel processing (see FM 12-6), and filling unit equipment and supply shortages. Installations provide life support and the CSS required to train mobilizing units and individuals.

3-43. Actual mobilization and deployment from continental United States (CONUS)/outside continental United States (OCONUS) force projection bases are primary responsibilities of strategic-level CSS elements. As the TPFDD is developed, the geographic combatant commander and U.S. Transportation Command (USTRANSCOM) allocate transportation assets to ports of embarkation (POEs) and coordinate load planning/uploading of personnel, equipment, and initial sustainment stocks (such as ammunition basic loads [ABLs], UBLs, combat prescribed loads, authorized stockage lists [ASLs] and operational loads).

3-44. A flexible decisionmaking process referred to as a graduated response (GR) controls the pace and extent of mobilization. GR triggers readiness and response actions incrementally to provide timely, yet reversible, steps that increase the U.S. national security emergency preparedness posture. The levels of mobilization response include selective mobilization, Presidential selected Reserve call-up, partial mobilization, full mobilization, and total mobilization. While levels of mobilization are progressive, they do not always progress from a lower level to a higher level.

3-45. Military mobilization requires assembling and organizing resources in 12 interdependent resource areas:

- Manpower.
- Supplies and equipment.
- Transportation.
- Facilities.
- Industrial base.
- Training base.
- Health service support.
- Communications.
- Host-nation support.
- Environment.
- Legal authorities.
- Funding.

Mobilization decisions occurring in any one area might influence other areas.

Deployment

3-46. Deployment operations support the initial projection of forces and, once deployed, link the deployed forces with their home station and the strategic-level sustainment base. Ready supplies are available for issue pending additional procurement or expansion of the industrial base to support anticipated

requirements. *Deployment* is the relocation of forces and materiel to desired operational areas. Deployment encompasses all activities from origin or home station through destination, specifically including intra-continental United States, intertheater, and intratheater movement legs, staging, and holding areas (JP 4-0). The deployment process includes all planning, preparation, execution, and assessment activities beginning with a mission requiring deployment of U.S. forces.

3-47. The four deployment phases are—

- Predeployment activities.
- Fort to port (movement to and activities at the port of embarkation [POE]).
- Port to port (movement to the port of debarkation).
- Port to destination (reception, staging, onward movement, and integration [RSO&I]).

3-48. These phases describe the major activities from point of origin to a prescribed destination. They are continuous and iterative and depend on the joint force commander's (JFC) and ARFOR commander's concepts for employment and changes in mission.

3-49. **Predeployment activities**. Predeployment activities are actions taken to prepare forces for deployment. They are essentially constant and on-going activities performed at home station before and continuing after warning or alert notification. Predeployment activities include training validation; deployment planning, to include force protection plans (see detailed discussion in paragraph 3-52); task organization; equipment maintenance; and soldier readiness processing (SRP). During normal peacetime operations, predeployment activities involve preparation for crisis response and force projection missions, always considering the operational requirements of the supported force commander.

3-50. The Army designates, equips, and trains organizations to perform force projection missions. Units conduct routine collective deployment training to ensure the Army forces, manpower, and materiel can deploy to meet the JFC's mission requirements. Units maintain trained unit movement officers and deployment data (such as, unit movement plans, organizational equipment lists [OELs], and load plans).

3-51. Installations must prepare and maintain support plans and appropriate ISSAs for POEs. Some units and individuals deploy from OCONUS locations. While they are subject to the same deployment preparation requirements as those deploying from CONUS, the support structure may be significantly different. Normally, such support derives from the geographic combatant commander and subordinate ASCC policies and procedures.

3-52. Due to potential terrorist activity against U.S. forces, all units integrate force protection (including antiterrorist) plans into movements through high-threat areas. Commanders include the following areas in force protection predeployment planning:

- Threat and vulnerability assessments. Units assess the threat and their own vulnerability prior to deployment.

- Security planning. Units take the results of threat and vulnerability assessments and develop security plans for self-protection while in transit. Although emphasis is on movements through high-threat areas, commanders should not discount appropriate security measures for movements in lower-threat areas. The commander should consider advanced or on-board security augmentation for travel through high-threat areas. Commanders/senior Army representatives accompanying the movement are responsible for ensuring that security measures sufficiently address vulnerabilities. Movements may require tailored intelligence/counterintelligence support, host-nation assistance, or preplanned alternative routes based on the vulnerabilities associated with the movement.
- Training. Units moving through high-threat areas ensure personnel receive pre-deployment training on rules of engagement, the AOR threat orientation, defensive tactics, techniques, and procedures (TTPs)/exercises, and security equipment. Training is performance-oriented and provides soldiers and leaders the skills required to defend against a terrorist threat and mitigate the effects of an attack.
- Movement tracking. Major Army commands (MACOMs) will establish a process for units with 30 or more personnel to track movements through high-threat areas. MACOMs are required to report specific movements to Headquarters, Department of the Army G-3.
- Logistics. Predictability and support of unit movements are a unit's greatest vulnerability. Unit commanders must understand that predictability places a higher demand on the unit's ability to know the local threat, assess unit vulnerabilities, and develop self-protection measures.

3-53. **Fort to Port**. When a unit receives movement guidance, it begins movement to and activities at the POE. For deployments supporting a JFC's operation/exercise, the unit must complete SRP, be verified as operationally ready, and be configured for movement. The unit submits required documentation for movement to installation unit movement coordinators, undergoes inspections to ensure accurate unit deployment lists (UDLs), and prepares personnel manifests.

3-54. Movement to OCONUS POEs is the responsibility of the geographic combatant commander whose theater POEs are supporting the deployment operation. If theater movement requirements exceed theater capability, the geographic combatant commander can request augmentation of theater airlift assets with USTRANSCOM common-user assets.

3-55. Activities at POEs focus on staging, marshaling, and loading personnel, units, equipment, and supplies on designated transportation assets prior to movement to ports of debarkation (PODs). Load planning is driven by the deployment concept and lift assets supporting deployment, the anticipated operational environment, and the anticipated situation at the POD to receive, offload, and reassemble mission capable organizations. Forces and materiel may be combat loaded, unit loaded, or administratively loaded for deployment. *Combat loading* arranges personnel and equipment in a manner designed to conform to the anticipated tactical situation and is significantly less

efficient than unit or administrative loading. *Unit loading* allows troop units to move with their equipment and accompanying supplies on the same conveyance. It is more efficient than combat loading and maintains unit integrity better than administrative loading. *Administrative loading* achieves maximum use of troop and cargo space without regard to tactical considerations. The unit must sort equipment and accompanying supplies before they can use them. As the Army undergoes transformation, it is making efforts during the development of the objective force to eliminate reception and staging in theater. Extensive efforts at the home stations and supporting installations will be required to ensure strategic transportation assets are loaded in such a way that forces may begin operations immediately on arriving in the AO.

3-56. The TPFDD synchronizes arriving personnel, equipment, and supplies with mission needs during deployment, and echelons, configures, and schedules units for movement. Time phasing allows for rapid theater reception and onward movement of arriving personnel, equipment, and supplies.

3-57. During a typical deployment, commanders temporarily lose direct control, but not command authority, of unit personnel and equipment at the POE. USTRANSCOM, through its subordinate transportation component commands (TCCs) assumes transportation and reporting responsibilities (but not command authority) for embarked personnel, equipment, and materiel until they arrive at the POD and unload from common-user transportation. Transportation and reporting responsibilities include transporting, accounting for, tracking, and guiding deploying personnel, equipment, and supplies from the POE to the POD. CSS staffs account for and track personnel and cargo using movement data provided by the moving forces. Operational commanders and staffs are responsible for tracking and reporting unit movement and locations, and force build-up of operational capability. Commanders of the deploying force have the inherent command responsibility to reassemble their forces after movement, consistent with their mission requirements and task organization. FM 100-17 discusses the fort-to-port aspect of deployment.

3-58. **Port to Port**. Movement to PODs can be conducted using common-user and organic or assigned/attached lift assets. PODs include seaports of debarkation (SPODs) and aerial ports of debarkation (APODs). USTRANSCOM conducts movement to PODs on common-user transportation in consultation with the supported and supporting combatant commanders. USTRANSCOM's primary responsibility is ensuring operational effectiveness in support of the JFC's deployment requirements while striving to attain the most efficient use of transportation resources. Alternatively, movement to PODs on organic or assigned/attached lift is the responsibility of the deploying unit commander in response to mission guidance from the supported JFC.

3-59. Careful planning and flexible execution characterize successful deployments. Careful and detailed planning ensures that only required personnel, equipment, and supplies are scheduled for movement; unit movement changes are minimized; and the flow of personnel, equipment, and supplies into theater does not exceed lift availability and the theater reception capability. When planning for deployments where there are only austere port facilities or where there may be no port at all, deployment planners may have to augment the POD operation with Army or Navy watercraft assets, or un-

dertake a joint logistics over-the-shore (JLOTS) operation. USTRANSCOM coordinates en route support (such as, refueling, escort, and clearances) based on mutual support agreements and foreign clearance guides.

3-60. **Port to Destination**. The last phase of deployment (joint reception, staging, onward movement, and integration (JRSOI]) is the responsibility of the supported combatant commander and subordinate JFC. *Joint Reception Staging Onward movement and Integration* comprises the essential processes required to transition arriving personnel, equipment, and materiel into forces capable of meeting operational requirements (JP 4-01.8). The Army refers to these same processes as RSO&I. Deployment is not complete until the deploying unit is a functioning part of the in-theater force. Theater support personnel meet the initial transportation and reporting responsibilities for deploying unit personnel, equipment, and supplies based on the combatant commander's movement control and JRSOI plans. The supported combatant commander returns complete direct control to the deploying unit commander when personnel, equipment, and supplies arrive at, and transition through, the POD. Units deploying on organic or external lift assets coordinate in-theater arrival with the supported combatant command to facilitate terrain management and in-theater reception. If additional lift assets are needed in theater to support onward movement of arriving forces and materiel, the supported combatant commander's movement control element, with supporting commands or the host nation (HN), may augment theater lift assets. Since airfields and ports may not contain an organic force protection capability, the combatant commander and subordinate JFC plan for augmenting these sites with defensive/security forces, as deemed necessary.

3-61. RSO&I is the critical link between deploying and employing forces in the AO. The RSO&I objective is to create a seamless flow of personnel, equipment, and materiel from offload at PODs through employment as reassembled, mission-capable forces. The time between the initial arrival of the deploying unit and its operational employment is potentially the period of its greatest vulnerability. During this transition period, the deploying unit may not be able to fully sustain itself, defend itself, or contribute to mission accomplishment because some of its elements have not attained the required mission capability. RSO&I planning focuses on rapidly integrating deploying units and quickly making them functioning and contributing members of the force.

3-62. The supported combatant commander is overall responsible for JRSOI planning, and the subordinate JFC is overall responsible for the JRSOI execution. This includes all actions required to make arriving units operationally ready then integrating them into the force. CSS units and personnel play critical roles in building combat power in theater. The capability of strategic lift to move personnel, equipment, and supplies to the reception points must be matched by the capability to receive and process the force. The combatant commander must have visibility of the deployment flow to control the rate as well as the sequence of deploying forces.

3-63. Early in a deployment, a movement control module from the TSC, in conjunction with Air Mobility Command (AMC) forward elements, opens a common-user APOD reception area. If sea lines of communication (SLOC)

support the theater, the Military Traffic Management Command (MTMC), is the seaport manager for all common-user SPODs under the single-port manager (SPM) concept. The supported combatant commander has several options available for the port operator: using a deployable transportation group or MTMC under a command arrangement agreement (CAA), stevedoring contracts, or host-nation support.

3-64. Early in a force projection operation, the supported combatant commander regulates the transportation flow. To regulate transportation, the combatant commander must ensure that adequate support and reception assets are effectively coordinated through a theater reception plan and either available at the POD or deployed early in the movement schedule to facilitate JRSOI and distribution. This expedites personnel and materiel into the AO. During force projection operations under hostile conditions, soldiers have to perform many of the port functions. Once hostilities subside or cease, these types of activities may transition to MTMC-administered contract operations.

3-65. Terminal operations, line-haul, heavy equipment transport (HET), and movement control assets to provide surge sealift SPOD reception capability become available on arrival of Army prepositioned afloat (APA) assets. Other terminal operations, mode operator, and movement control resources may establish inland rail and water terminals to support resources flowing into the theater via land LOC.

3-66. Support elements are also required for life support at ports and staging areas. Terminal operations, line-haul and HET, supply, maintenance, and other required functional capabilities, along with TSC headquarters, movement control agency (MCA), and materiel management center (MMC) early-entry modules (EEMs) establish the initial Army portion of the theater sustainment base. The TSC commander and support operations staff ensure that subordinate support elements execute mission support according to theater-level priorities in close coordination with the ARFOR CSS and operations planners. The initial focus is on building combat power according to the commander's plan.

3-67. RSO&I is a critical operational challenge that relies on CSS elements for successful execution. Even self-sustaining units that arrive in theater are heavily dependent on other early-entry CSS elements (such as components of the TSC) until they reunite with their equipment. As deploying units assemble, efforts focus on preparing for future operations and integrating units into the force. JP 4-01.8 is the doctrinal publication on joint RSO&I. FM 100-17-3 contains the Army doctrine for RSO&I. FM 4-93.4 discusses the role of the TSC in providing CSS during RSO&I and during employment/ sustainment.

Employment/Sustainment

3-68. The CSS force package tailored for each contingency is streamlined, strategically mobile, and focused on the demands dictated by the contingency. This optimizes CSS resources and minimizes the operational and CSS footprint in the AO. Early-entry forces should exploit regionally available assets to include joint, multinational, HNS, and theater support contracting resources for transport, supply, and services to the maximum extent possible within the associated risk.

3-69. Initial CSS in the theater relies on a combination of UBLs and critical sustainment stocks, either from prepositioned stocks (ashore or afloat) or stocks designated to arrive early in a force projection operation. In any case, the CSS staff integrates sustainment stocks into the deployment flow to support elements arriving early on.

3-70. Early in an operation, CSS is conducted by a theater force opening package (TFOP). Arriving in theater, the TSC MCA, TSC MMC, and functional command EEMs of the TFOP establish information system links with joint- and strategic-level C2/CSS information systems to acquire visibility of CSS operations. As a minimum, information system connectivity is established with—

- USTRANSCOM for visibility of strategic air flow and ship schedules.
- U.S. Army Materiel Command (USAMC) and the U.S. Army Medical Materiel Agency (USAMMA) for visibility of Army prepositioned stocks (APS).

The key is to communicate to the force commander in operational terms the anticipated status of combat power as the staff receives and integrates it into the force. In smaller contingency operations, an augmented corps support command (COSCOM) or other CSS unit may have to execute these operational-level CSS functions.

3-71. In accordance with the JFC's guidance and theater contracting policy, the TFOP assesses and acquires available HN infrastructure capabilities identified in the logistics preparation of the theater (LPT) plan and updates the distribution plan. This includes directing the required logistics civil augmentation program (LOGCAP) contracts by the USAMC logistics support element (LSE) module of the TFOP. It also includes activating HNS infrastructure agreements and establishing non-HNS theater contracts for supplies and services under the coordination of the principal assistant responsible for contracting (PARC) to support the theater-level distribution plan. The PARC is assigned to the TSC but is normally attached to the ARFOR headquarters. Using acquired HN infrastructure and the functional capabilities of the TFOP's early-entry modules, the TFOP activates the nodes of the theater distribution network in accordance with the distribution plan. It establishes the initial Army theater RSO&I capabilities.

Redeployment

3-72. *Redeployment* is the transfer of forces and materiel to support another joint force commander's operational requirements, or to return personnel, equipment, and materiel to the home and/or demobilization stations for reintegration and/or out-processing (JP 3-35). The commander must conduct redeployment in a way that facilitates using redeploying forces and sustainment equipment and supplies to meet new missions. Therefore, if redeployment is not a retrograde operation, it is, in fact, a new deployment in which the current AO becomes a power projection platform. The same operational phases, planning, and coordination actions required for deployment are required for redeployment. See FM 100-17-5 for details covering redeployment.

3-73. During redeployment, the CSS reception, staging, and onward movement orientation must shift from a forward to a rearward flow of resources.

Based on the combatant commander's priorities, and in coordination with the JTF and ASCC/ARFOR staffs, the TSC support operations staff makes required modifications to the distribution plan to synchronize assembling, reconstructing, and moving resources to theater APOEs and SPOEs.

3-74. The TSC, through its support operations section, typically controls redeployment of Army forces from assembly areas (AAs) through redeployment assembly areas (RAAs) to APOEs/SPOEs. The TSC MCA coordinates unit movement requirements with USTRANSCOM strategic lift assets. The support operations functional directorates and distribution management center (DMC) of the TSC work with the functional commands to coordinate and monitor medical, personnel, field services, maintenance, customs and, in some cases, engineer support at AAs, RAAs, and APOEs/SPOEs. The TSC MMC ensures sustainment materiel and adequate blocking, bracing, packaging, and tie-down materials are available to expedite the flow of units departing the theater.

CSS REACH OPERATIONS

3-75. Critical to supporting full spectrum operations is minimizing the Army CSS footprint in the theater, thereby reducing strategic lift requirements and enhancing the strategic responsiveness of Army forces. A key to achieving this objective is CSS reach operations. *Combat Service Support reach operations* involve the operational positioning and efficient use of all available CSS assets and capabilities, from the industrial base to the soldier in the field (FM 3-0). CSS reach operations refer to deploying the minimum essential Army CSS elements to the AO and establishing links to, and fully exploiting all available sources of, support. As Figure 3-2 depicts, CSS reach operations include using normal support relationships and reaching in all directions to acquire available support from contractors, HNS, other services, multinational partners, and NGOs.

3-76. Sources of support available to Army CSS elements in the AO include—

- Strategic-level CSS provider contingency elements.
- CSS management and technical support from nondeployed elements of Army CSS organizations and strategic-level CSS providers in the AO.
- Prepositioned equipment and supplies.
- HNS.
- Theater support contractors.
- Other service components.
- Allies and coalition partners.

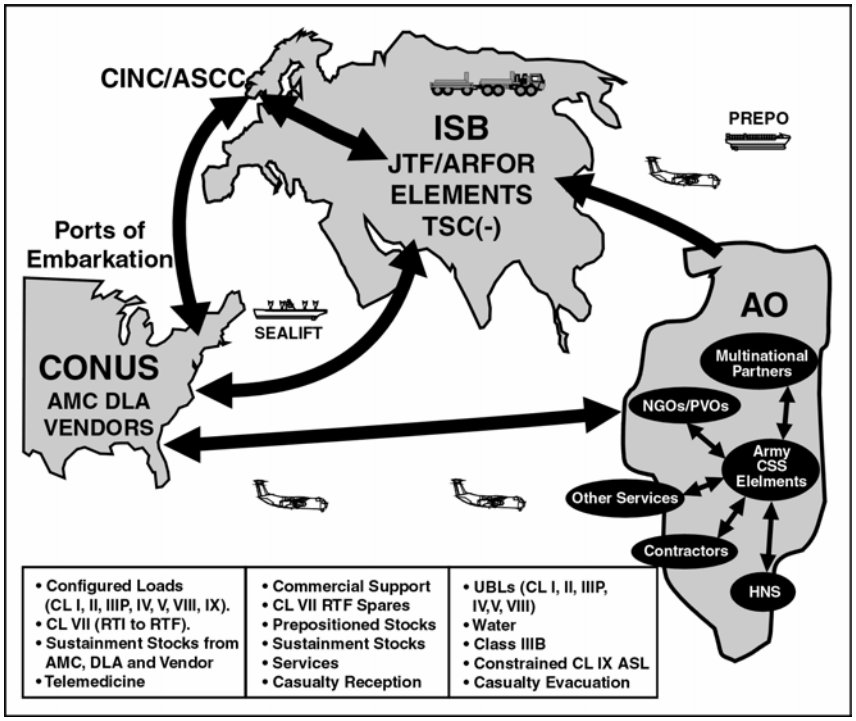

Figure 3-2. CSS Reach Operations

3-77. Deployed elements of the TSC and other CSS organizations integrate support with deployed elements of several strategic providers. For example, DLA sends a DLA contingency support team and USAMC sends an LSE to an AO, as required.

3-78. Deployed Army elements also reach back to elements of their organizations that do not deploy. A prime example is split-based operations. Split-based operations involve deploying only minimal essential CSS management cells to AOs with links back to home station (or in some cases an intermediate staging base [ISB]). With proper information system links, deployed elements may receive support from some strategic-level providers (discussed in chapter 4). Telemedicine is an example of technical support available outside of the AO. The COSCOM and TSC MMCs are also capable of performing some materiel management functions from home station, but again, robust and reliable information systems are essential to make split-based operations work.

3-79. Another aspect of CSS reach operations involves deliberate positioning of stocks and units/capabilities dedicated for a specific operation. The commander may position these stocks and/or units at home station, an ISB, or another location within or near the theater of operations or joint operations area (JOA). For example, minimal explosive ordnance disposal, personnel, or legal resources could deploy to an AO, with other assets positioned at an ISB

for rapid insertion into the AO, if required. This minimizes the CSS footprint in the AO while still providing a relatively high level of responsiveness.

3-80. Reliance on HNS and theater support contractors are another facet of reaching to available sources and minimizing the deployment of Army CSS units into the AO. (Chapter 5 covers these sources of support.)

3-81. Finally, Army CSS elements integrate support from joint and multinational sources available in the AO. Commanders weigh the risk of joint and, especially, multinational support; this support may not be as reliable or responsive as organic Army support.

INTERMEDIATE STAGING BASE

3-82. An *intermediate staging base* is a secure staging base usually established near to, but not in, the area of operations (FM 3-0). While not a requirement in all situations, the ISB may provide a secure, high-throughput facility when circumstances warrant. The commander may use an ISB as a temporary staging area en route to a joint operation or as a long-term secure forward support base. An ISB may serve as a secure transportation node that allows the switch from strategic to intratheater modes of transportation and provides a staging area where units can redistribute and finalize their accompanying loads. When possible, an ISB takes advantage of existing, sophisticated capabilities, serving as an efficient transfer point from high-volume commercial carriers to a range of tactical, intratheater transport means that may serve smaller, more austere ports.

3-83. The ISB may enhance the strategic responsiveness of the deploying force by providing continuous and wide-ranging capabilities. Army forces may use an ISB in conjunction with the other joint force elements to preposition selected CSS capabilities for rapid deployment into the JOA (discussed previously under CSS reach operations, paragraph 3-75). ISB personnel may perform limited CSS functions (such as materiel management and selected maintenance support routinely performed in the communications zone [COMMZ]). ISBs may also serve as secure staging areas for redeploying units, noncombatant evacuation operations (NEO), and redeployment or evacuation of other individuals and units, until strategic lift is available to final destinations. Using ISBs when operationally feasible may allow joint forces to minimize the CSS footprint in an AO, thus enhancing the combatant commander's ability to meet operational requirements rapidly.

DECISION ON USING AN ISB

3-84. Using an ISB is operationally dependent on, and must support, the combatant commander's campaign plan. It is normally located within the theater of operations and outside the AO. The JFC determines the feasibility of using an ISB, its location, and when it should be established and disestablished. This determination is based on the availability, length, and security of the LOC (water, air, and rail) between the ISB and the JOA, and on the criticality of a specific support function. However, there are disadvantages inherent in using ISBs. An ISB is a transshipment point, so it may add extra time and handling to the deployment or CSS process. Further, additional infrastructure (personnel and equipment) is required to operate the ISB.

3-85. In an ideal situation, secure bases are available within the AO for RSO&I operations and continued support of the deployed force, lessening the need for an ISB. Unfortunately, the very situation that results in deploying forces may negate the advantages of basing within the AO. The JFC weighs factors (such as the theater operational situation, the need to minimize the CSS footprint in the AO, and using strategic lift to move CSS capabilities) when determining the risk of basing within the AO. In cases where the joint force must secure a lodgment to project the force, an ISB may be critical to success.

Taszar: The ISB for Operation Joint Endeavor

In Operation Joint Endeavor, continental United States (CONUS) and U.S. Army, Europe (USAREUR) units en route to Bosnia were deployed to Taszar, which served as an ISB, staged and either loaded on railcars or prepared for onward movement for a 12-hour convoy to staging area Harmon. At the height of the operation, the ISB covered an area of some 35 square kilometers and processed 200 containers per day. Various CSS support functions performed there provided life support and services, expedited the movement and repair of equipment, and assisted in mode change for the onward movement.

LOCATION

3-86. Coordinating with the host nation for using an ISB is a Department of State responsibility. Commanders should identify ISB sites as early in the deliberate planning process as possible and complete measures to prepare the selected areas as quickly as possible.

3-87. Selecting an ISB is a JFC decision; however, if the Army component operates the ISB, the ARFOR commander should have a critical role in the selection process. Planners must carefully consider the location because, once established, ISBs are inherently difficult to move and relocating an ISB may adversely impact the entire operation. The ISB should accommodate sufficient Army command and control, combat support (CS), CSS, and joint support to enable projecting the force into the AO. Commanders should locate the ISB beyond the range of enemy tactical and operational fires and outside the adversary's political sphere of influence. They should secure the ISB against special operations forces (SOF) and terrorists. The factors of METT-TC and the operating range (or reach) of intratheater lift assets that must operate between the ISB and the AO influence the location of the ISB.

3-88. There may also be situations where forces might need ISBs located outside the theater of operations. The greatest distances of displacement might be as much as 1,000 nautical miles; however, the expected distance is hundreds of miles for two important reasons: First, commanders need to base tactical aviation within 300 to 500 nautical miles of the theater to have a steady presence. Second, the sustaining operations that make air bases and land forces viable need roughly the same distance to be effective. The commander should leverage existing air facilities and seaports.

3-89. ISB facilities need not necessarily be in a single contiguous location. A single ISB may include facilities in noncontiguous locations as long as the distance between these facilities does not significantly hamper ISB C2. As a minimum, there is one staging area for each airport and seaport reception complex. However, the size of the deployment, the host nation infrastructure, and the requirement to disperse the arriving force adequately may compel the JFC to establish multiple staging areas.

STAGING ACTIVITIES

3-90. Once established, an ISB has two basic roles. First is the traditional role as a staging base for deploying units in transit to an AO. The focus in this role is on throughput. The ISB may be the initial theater reception and staging facility. Deploying forces debark from strategic lift, reassemble, and prepare for missions in the AO. For deploying forces transiting through, ISBs allow supported commanders time to gather additional intelligence on the AO and finalize plans following briefings and rehearsals. Also, deploying soldiers can recuperate after long trips from their home station. ISB requirements for the staging activities depend on the deployment flow, time lines, and the requirements of the transient force population.

3-91. The second ISB role is serving as the principal staging base for entry operations. Using an ISB this way allows the JFC to project the maximum combat power into the JOA. For example, a Stryker brigade combat team may arrive at the ISB by strategic air and sealift. They reassemble, prepare for operations, and conduct a joint entry operation using Army watercraft.

3-92. Onward movement from the ISB to the JOA may be multimodal and require some level of reassembly in the AO. Transportation assets employed in onward movement normally include strategic and theater assets, including, truck, rail, sea, and airlift. These movements are a part of deployment and should be included in the TPFDD.

SUPPORT ACTIVITIES

3-93. Potentially the most important role of an ISB is as a remote support base as a part of CSS reach operations. This may involve three types of support capabilities beyond support required as part of the staging activities.

3-94. First, certain elements engaged in split-based operations may locate in an ISB. Other elements operating in CONUS, another theater, or another ISB perform the remaining functions. Ideally, these forces should conduct split-based operations from home station vice the ISB, but communication requirements may not allow this. Elements at an ISB may perform such functions as distribution management, materiel management, and some personnel or legal functions. Split-based operations require the appropriate structuring of management organizations with information systems and depend on adequate communication links between the ISB and the JOA.

3-95. The second part of an ISB functioning as a remote support base in CSS reach operations involves the deliberate positioning of stocks and units/ capabilities dedicated for a specific operation. The commander can position these stocks and units at an ISB for rapid movement into the AO via intratheater transportation. The purpose of positioning capabilities at an ISB is to

increase responsiveness of support and sustainability of the force, while keeping the CSS footprint in the AO to a minimum. The commander may integrate this concept using split-based operations. For example, the commander may move legal resources providing support from an ISB to the AO quickly if the commander, due to a change in the operational situation, needs them there. Different methods of using an ISB are on-going concepts being developed as part of the Army CSS transformation campaign.

3-96. The final role of an ISB in CSS reach operations is performing certain support functions at an ISB that were traditionally performed in a COMMZ. For example, an ISB may provide sustainment maintenance or higher levels of medical treatment if evacuation assets and time considerations allow.

ISB CAPABILITIES

3-97. A number of capabilities are required to perform the various staging and support activities (discussed above). Much of this support is dedicated to ISB overhead and not in direct support of the force in the AO. Examples of facilities and capabilities that may be required at an ISB include—

- Signal support.
- Contracting support to acquire local supplies or services.
- Field feeding, water, and ice for transient troops.
- Billeting.
- Command post sites.
- Field shower and laundry facilities.
- Bulk petroleum, oils, and lubricants (POL) for ground and aviation requirements.
- Repair parts.
- Ground maintenance support.
- Roads and grounds support.
- Utilities operation and repair support.
- Power management/distribution support.
- Aviation intermediate maintenance (AVIM) support.
- Materials handling equipment (MHE).
- Medical facilities.
- Civil-military operations.
- Intelligence preparation of key leaders and troops.
- Legal advice supporting ISB operations and legal support for personnel transiting to or deployed in the AO.
- Human resource support.
- Mail service.
- Finance support (to include limited currency exchange).
- Mortuary affairs.
- Military police.

- MWR support (including telephones and Army and Air Force Exchange Service [AAFES]).
- Religious support.
- Ammunition supply.
- Explosive ordnance disposal (EOD) support.
- Fire prevention/control.
- Waste management: non-potable water, solids, medical and hazardous waste.
- General engineering support.
- Runways and hardtop surfaces for container handling/trailer transfer and maintenance operations.
- Training facilities.

3-98. Support operations staffs should plan for maintenance support teams (MSTs) and AVIM teams to perform repairs at the ISB. Plans may include providing a hot refuel site to support deploying aviation forces and a refueling on-the-move site for refueling deploying ground vehicles. Depending on the environment, a mobile water supply team may be needed to set up a bulk water distribution site for both ISB support and transient personnel.

3-99. The ISB needs adequate facilities to accommodate the billeting, feeding, and sanitation requirements of the base. In addition to a maintenance unit to repair aircraft and other transportation assets, a force provider module can provide feeding, shower, and laundry support. Supply elements can be used to operate the MHE and storage facilities for rations, jet fuel, oils, lubricants, ammunition, and medical supplies at the ISB. A safe haven may be required when long-range transportation is unavailable to move, at one time, all evacuees from the HN to the United States.

ISB ELEMENTS

3-100. Support at an ISB may come from numerous sources: other services, multinational partners, HNS, strategic providers, contractors, and Army organizations. Using theater support contractors is particularly desirable in ISB operations. FM 100-10.1 and FM 3-100.2 cover this option in more detail. The commander may task elements of the EEMs to command and control the ISB. An area support group (ASG), if available within required time parameters, should operate an ISB rather than a corps support group (CSG) because it leaves the CSG free to accompany or precede a JTF into the AO. Also, a fully resourced ASG has the staff elements and units necessary to operate an ISB. A CSG requires augmentation to perform those functions.

3-101. ASGs are subordinate units of the TSC. The basic mission of the ASG is to provide direct support (DS) CSS to designated units and elements within its AO, which may be an ISB. Depending on how long forces are to remain at the intermediate staging base—

- Field feeding personnel may provide hot meals.
- DS Class III supply point personnel may provide limited transport of fuel from HN sources.
- Other DS unit supply personnel may issue from prepositioned stocks.

- MSTs may provide emergency repairs to unit equipment before the units depart the airfield.
- AVIM teams may provide maintenance on aircraft.
- Movement control teams (MCTs) may commit truck assets to line-haul unit basic loads of ammunition for plane-side issue to units deploying by air.

3-102. As the ISB site begins to develop, the requirement for a health service support (HSS) base increases. The HSS force structure is tailored to requirements ranging from those of a single brigade to those needed to support a corps plug (including Level III care and air evacuation) through a fully matured theater with a medical command (MEDCOM) in place. (FM 4-02 discusses levels of care.) The initial HSS structure may be limited to medical C2, logistics, Level I and II treatment, and evacuation functions. Elements of a brigade, division, or area support medical company may meet these capabilities.

3-103. Early-entry elements of a combat support hospital (CSH) are required to support ISB personnel as well as the deploying force. As the ISB grows, corps medical elements may deploy into it. Specific elements, such as combat stress control, medical laboratory, preventive medicine, or veterinary detachments may be needed to augment U.S. or HN services. With the growth of the ISB and the corresponding supported force, the requirement for more extensive HSS capabilities may arise. These capabilities may be services such as an area support medical battalion (ASMB), ground and air evacuation companies, forward surgical teams (FST), an area support dental company, a medical logistics battalion, or a CSH. The arrival of the CSH provides an initial Level III capability. The medical logistics battalion provides medical logistics support to the ISB. The commander synchronizes medical logistics operations with other theater logistics operations.

3-104. Force provider modules, engineer forces, and contractors may establish staging areas; supply early-entry units may establish commodity-oriented SSAs for staging sustainment stocks. Consistent with the distribution plan, USAMC and USAMMA transfer APS to theater SSAs. The early-entry module also employs a combination of HNS, contracts, and functional CSS modules to establish the distribution system infrastructure and sustain operations.

CSS IN URBAN OPERATIONS

3-105. Missions of U.S. forces are changing from the Cold War's forward-deployed forces to the more complex missions of a post-Cold-War projection force. For U.S. forces, these new missions may involve an increase in military operations in urban areas. *Urban operations* include offensive, defensive, stability, and support operations conducted in a topographical complex and adjacent natural terrain where manmade construction and high population density are the dominant features (FM 3-0). Although urban operations have occurred throughout history, their frequency and scale are likely to increase due to adversaries seeking protection within cities. Cities are likely battlegrounds where weaker enemies attempt to negate the advantages Army forces have in more open terrain. (FM 90-10 discusses urban operations.)

3-106. Preparing for urban operations presents a significant challenge for CSS personnel. Urban operations are CSS-intensive, demanding large quantities of materiel and support for military forces and noncombatants displaced by operations. A thorough LPT is critical in developing an adaptable urban operations CSS plan. CSS planners conduct the LPT to assess the situation and determine how to support the commander's plan. Commanders identify urban areas in their AOs that could become urban battlefields and direct their staffs to prepare detailed studies for those possible contingencies. CSS planners may find products from the intelligence preparation of the battlefield (IPB) useful in assisting in this CSS analysis. Conversely, the LPT may contribute to the IPB with the discovery of critical resources and infrastructure influencing the operational plan that may remain hidden without a careful CSS analysis.

3-107. Relevant information about the urban AO, as it pertains to LPT, is critical in terms of the following:

- Supported commanders' intents and concepts of operation.
- Transportation infrastructure (air, rail, waterways, pipelines, subway).
- Telecommunications and information systems posture.
- Traffic pattern and flow; selection of main and alternate supply routes.
- Local resources with military CSS value.
- Local population sentiments (friendly/non-friendly).
- Contracting, bartering, and trading capabilities.

3-108. The nature of the urban environment creates distinct demands on CSS units and operations. Though the infrastructure of an urban environment may be a source of valuable resources (such as supply systems, services, personnel, and facilities) CSS planners must know the potential threat and force protection requirements that urban society may present. Criminals, gangs, or riotous mobs may serve to disrupt CSS operations. Urban operation causes increased ammunition consumption, higher casualty rates, and transportation difficulties resulting from rubble. Units must accomplish maintenance operations, such as equipment recovery, expeditiously because disabled vehicles may block narrow streets or roadways.

3-109. Other CSS factors in urban operations often include the following:

- Increased consumption of small arms ammunition and explosives due to fighting in close quarters and breaching barriers.
- Increased consumption of precision munitions, which are needed to target enemy locations while limiting collateral damage and civilian casualties.
- Decreased consumption of certain large-caliber and area-type munitions.
- Increased consumption of nonlethal munitions.
- Increased aerial delivery requests.

- Increased medical workload due to increased casualties and difficulty in locating and reaching wounded soldiers above and below ground level.
- Increased mortuary affairs workload.

3-110. Airfields, ports, and rail and road hubs are predominately located in urban centers. Therefore, CSS organizations frequently locate their bases in urban areas. They may have to provide support from either inside or outside these urban areas. They may also have to support large numbers of small units widely dispersed throughout an urban area or dispersed in multiple urban areas.

3-111. CSS assets are a high-payoff target for potential adversaries in urban operations. LOC are more difficult to maintain—access may be limited to a few key routes easily blocked by rubble or manmade roadblocks that soldiers cannot easily bypass. Routes may be limited, making CSS more easily interdicted than in open terrain. Congestion, rubble, debris, and craters may also limit wheeled and tracked vehicle movement, mandating alternative modes of transportation. Planners may have to consider such nontraditional means of distribution as precision airdrop and manpacking supplies.

CSS TO SPECIAL OPERATIONS FORCES

3-112. Most SOF units locate in CONUS and operate in a force-projection mode. The U.S. Army Special Operations Command (USASOC) has aligned its Special Operations Support Command (SOSCOM) and SOF CSS organizations and activities with the U.S. Army's concept of force projection. This change allows SOF to integrate organic CSS elements within the theater support structure for continuous and responsive sustainment to deployed Army special operations forces (ARSOF).

3-113. In a mature theater, the theater base is established, prepositioned stocks and operational stocks are in place, and support agreements exist. When operating in a fully developed CONUS or overseas base, ARSOF operate as part of, or collocated with, a conventional force. They receive support from three primary sources:

- Army Title 10 support through Army CSS units.
- CUL lead service units (in most cases Army CSS units).
- SOF channels for SOF-peculiar items that are beyond normal CSS element capabilities.

3-114. In a developing theater, ARSOF units bring enough resources to survive and operate until the United States sets up a bare-base support system or arranges for HNS. The bare-base support system may function from CONUS, stocks afloat, or from a third country. Until this system becomes operational, the joint force special operations component commander (JFSOCC) may authorize SOF units to request items through their parent units or directly from the CONUS wholesale CSS system. ARSOF units may request CSS for SOF-peculiar and conventional items through the special operations theater support elements (SOTSEs). The SOTSEs are forward deployed, regionally oriented elements from the SOSCOM with the mission to coordinate ARSOF CSS support. (See FM 100-25.)

3-115. Sustaining special operations is a challenge for CSS planners and operational units. Each SOF operation requires some combination of mature theater and contingency CSS. Special operations CSS planners apply their knowledge of conventional CSS operations to meet specific SOF needs. The fundamentals of contingency CSS apply to most SOF operations.

3-116. The nature of special operations frequently imposes stringent operations security (OPSEC) requirements on the CSS system. Certain special operations are extremely sensitive and require compartmentalization of their support to avoid compromise. Supporting CSS commanders ensure OPSEC within their own activities.

3-117. SOF units are comparatively small and, except for special operations aviation, consume few critical combat supplies (Class I, bulk Class III, and Class V). However, they use special operations-peculiar and low-density items of standard and nonstandard configuration. The solution to SOF CSS requirements is theater-specific and situation-dependent.

3-118. Each type of ARSOF unit depends on the support system for a different mix of general support (GS), DS, and, in some cases, unit-level support. For example, the special forces group has organic support companies at the battalion level, but the ranger regiment has almost no organic CSS capability and depends on home station and SOSCOM for logistics support

Chapter 4

Roles and Responsibilities

This chapter frames combat service support (CSS) organization roles and responsibilities in the context of the levels of war. The boundaries among the levels of war are not distinct. This is particularly true in CSS, where advances in technology and initiatives to create a more agile CSS force have made the distinctions among levels increasingly difficult to define. The following discussions are reference points.

REFERENCE POINTS

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4-1. FM 3-0 discusses the levels of war as doctrinal perspectives that clarify the links between strategic objectives and tactical actions. The levels of war are the strategic, operational, and tactical levels. Levels of command, size of units, types of equipment, or types of forces do not define the levels of war; the effect or contribution of actions on achieving strategic, operational, or tactical objectives define those levels.

4-2. The strategic level is that level at which a nation, often as one of a group of nations, determines national and multinational security objectives and guidance, and develops and uses national resources to accomplish them. The geographic combatant commander has a strategic perspective with respect to his area of responsibility and is responsible for unified actions that integrate joint, multinational, and interagency activities. The theater strategy relates to both U.S. National strategy and operational activities within the theater.

4-3. The operational level is the level at which campaigns and major operations are conducted and sustained to accomplish strategic objectives within theaters or areas of operations (AOs). The operational level links the tactical employment of forces to strategic objectives. The focus is on operational art. Commanders of Army service component command (ASCCs) and ARFOR commanders within joint task forces normally operate at this level.

4-4. The tactical level is the realm of close combat, where friendly forces are in immediate contact and use direct and indirect fires to defeat or destroy enemy forces and to seize or retain ground. Exposure to close combat separates Army forces from most of their counterparts. Army forces fight until the purpose of the operation is accomplished. Because of this, they are organized to endure losses, provided with CSS to generate and sustain

combat power, and trained to deal with uncertainty. *Tactics* is the employment of units in combat. It includes the ordered arrangement and maneuver of units in relation to each other, the terrain, and the enemy to translate potential combat power into victorious battles and engagements (FM 3-0).

STRATEGIC-LEVEL ROLES

4-5. The strategic level deals with attaining national objectives. It involves the integrated efforts of the President and Secretary of Defense (SECDEF), the Joint Chiefs of Staff, and several National agencies, including the Department of Defense (DOD). However, many of the agencies discussed in this chapter may perform functions associated with the strategic, operational, and tactical levels, either through split-based operations or by deploying elements to the AO.

4-6. Strategic-level support links the global economic base (people, resources, and industry) to military operations in theater. At this level, the joint staff, military departments, U.S. Transportation Command (USTRANSCOM), Defense Logistics Agency (DLA) , and other DOD agencies focus on force readiness and supporting force projection operations.

4-7. In force-projection operations, strategic-level support elements fill the distribution pipeline with personnel and materiel resources, and possess the capability to provide services required by the supported joint forces commander (JFC). To support both readiness and force projection, they conduct industrial operations, maintain the industrial base, provide information services, provide strategic-level services (such as depot supply and maintenance, and defense-wide base operations support), and manage strategic stockpiles (such as Army prepositioned assets). Other strategic-level functions include—

- Determining support requirements at global and regional levels.
- Acquiring resources while forging strategic alliances.
- Coordinating industrial base activity.
- Integrating human resources, medical, financial management, materiel, services, and distribution management information systems of the Army with other military services and nongovernmental organizations (NGOs).
- Providing home base support and services.
- Maintaining strategic-level medical services and facilities.
- Determining requirements for stockpiling and prepositioning resources, afloat and on land around the world.
- Deploying and maintaining forward-presence forces.
- Identifying mobilization and demobilization requirements and resources.
- Providing strategic mobility.

4-8. Strategic-level CSS elements are the links between strategic and operational bases. They consist of agencies and organizations from the private sector and the DOD.

INDUSTRIAL BASE

4-9. The Army depends primarily on private industry as the foundation for military materiel production. Therefore, the defense industrial base has a significant impact on the conduct of wars due to the long lead times required to build up the industrial base. Active plants and production lines have some capability to surge. Repair parts manufacturers may be able to surge production for items that sustain deployed weapon systems. Active end-item production lines obtain urgent critical parts and subsystems. National policy requires the use of commercial materiel as much as possible.

DEPARTMENT OF DEFENSE AND DEFENSE AGENCIES

4-10. The SECDEF is the principal assistant to the President in all matters relating to the DOD. DOD performs its functions under the SECDEF's authority, direction, and control. Of particular note in CSS, the SECDEF issues directives, instructions, and memoranda delineating DOD Executive Agency responsibilities under the authority of 10 USC 165(c). The Chairman of the Joint Chiefs of Staff (CJCS), as the principal military advisor to the president and the SECDEF, is assigned specific supervisory and joint operation planning responsibilities in the areas of strategic direction, strategic planning, and joint operation planning. JP 0-2 outlines the responsibilities of the DOD and Joint Chiefs of Staff. A number of defense agencies play roles in the overall CSS for military forces. Some of the agencies are discussed in the following paragraphs.

Defense Logistics Agency

4-11. The DLA is DOD's major logistics agency. Controlled and directed by the Under Secretary of Defense for Acquisition, Logistics, and Technology, DLA functions as an integral element of the DOD military logistics system. It provides worldwide distribution support to the military departments and the combatant commands, and to other DOD components, Federal agencies, foreign governments, and international organizations. DLA is responsible for providing consumable items of common supplies and services within DOD. Its responsibilities include worldwide integrated management of subsistence, petroleum, and property disposal operations. DLA manages or distributes more than 80 percent of existing stocks of defense materiel, including service-owned stocks and nearly all of the fuel and petroleum products for military use. It is the lead DOD organization for automated identification technology (AIT). DLA provides logistics and service support to the services through its supply centers and agencies.

4-12. DLA procures, stores, and distributes items to support the military services and other customers. In addition, it buys and distributes hardware and electronic items used in maintaining and repairing military equipment. The services determine their requirements for supplies and other materiel, and establish their priorities. DLA administers and supervises—

- The Federal Catalog System.
- The Defense Personal Property Reutilization Program, including worldwide disposal of excess personal property, recovery of precious metals, and disposal of hazardous waste.
- The DOD Industrial Plant Equipment Reserve.

- The Defense National Stockpile.

4-13. DLA provides reutilization and marketing services in the joint rear area (JRA). Initially, salvage and excess materiel destined for the Defense Reutilization and Marketing Office (DRMO) is collected in the corps and division areas as the situation permits. As the theater matures, DLA-directed activities may use host-nation support (HNS) to assist in evacuating this materiel to the communications zone (COMMZ) for inspection, classification, and disposal.

4-14. During joint operations, DLA assists the supported combatant commander by establishing a DLA contingency support team (DCST) to consolidate in-theater management of DLA operations and provide a single point of contact. The level of support provided by the DCST is based on the mission and tasks assigned to DLA by the combatant commander. DLA is increasingly provides support in theater operations.

Defense Contract Management Agency

4-15. The Defense Contract Management Agency (DCMA) is the DOD contract manager. Controlled and directed by the Under Secretary of Defense for Acquisition Logistics and Technology, DCMA supervises and administers contracts with over 20,000 suppliers who deliver goods and services to DOD. DCMA functions as an integral element of the DOD acquisition system by providing worldwide contract administration services to the military departments and the combatant commands, as well as to other DOD components, Federal agencies, foreign governments, and international organizations.

4-16. DCMA provides a range of contract administration services to DOD. Functions include precontract award services to acquisition program offices, on-site surveillance, delivery order compliance (on time, within cost, and quality performance), payment and financial management services, contract close-out services, and acceptance and functional check flights following production, depot maintenance, or modification of aircraft for all services. DCMA serves as the executive agent for DOD in performing independent reviews of procurement practices at other defense agencies.

4-17. DCMA is the combat support agency that provides worldwide post contract award and contract administration services, to include administering civilian augmentation program contracts (including logistics civil augmentation program [LOGCAP]). Contracting officers or a buying activity may delegate to DCMA any or all contract management functions listed in FAR Part 42.302. Additionally, DCMA provides joint and multinational commands a near real-time, reachback look into the industrial base and assists service components, combatant commanders, and the joint staff with analyzing industry capabilities, capacities, and production surge capability to meet contingency needs.

4-18. DCMA assists the service component or combatant commander as follows:

- During exercises and contingencies, and on request from the supported commander, DCMA provides a tailored contingency contract

administration services (CCAS) team to provide a single focus for all DCMA activities.

- During peacetime and contingencies DCMA provides a headquarters-based contingency operations center (COC) to act as a focal point for deliberate, crisis action and exercise planning, and for policy and doctrine.
- During peacetime and contingencies, DCMA assigns operations officers to assist the joint staff and combatant commanders in day-to-day DCMA coordination.

Defense Finance and Accounting Service

4-19. As the DOD executive agent for finance and accounting, the Defense Finance and Accounting Service (DFAS) plays a critical role in supporting joint operations. However, the services retain tactical finance personnel to provide the finance and limited accounting support required for their deployed forces during operations. DFAS is responsible for DOD finance and accounting policies, procedures, standards, systems, and operations to support combatant commanders and the services. In addition, DFAS is responsible for centralized cost capturing of the operation. DFAS can provide liaison personnel to augment the staff of a joint task force (JTF) J8 (director for force structure, resources, and assessment) and comptroller as required. (See JP 1-06.)

Defense Security Cooperation Agency

4-20. The Defense Security Cooperation Agency (DSCA), under the authority, direction, and control of the Assistant Secretary of Defense for International Security Affairs, serves as the DOD focal point and clearinghouse for developing and implementing security assistance plans and programs. DSCA monitors major weapon sales and technology transfer issues, budgetary and financial arrangements, legislative initiatives and activities, and policy and other security assistance matters. It also supports developing cooperative programs with industrialized nations. DSCA's Office of Humanitarian Assistance and Demining is responsible for managing the overseas humanitarian, disaster, and civic aid appropriation; oversight of the combatant commander's operational demining and humanitarian and civic assistance (HCA) programs; and the DOD humanitarian assistance program (HAP). HAP provides excess, nonlethal property to authorized recipients; arranges funding and space-available transportation for NGOs to deliver humanitarian goods to countries in need; coordinates foreign disaster relief missions; and procures, manages, and arranges for delivery of humanitarian daily rations (HDR) to those in need. JP 4-07 and JP 4-09 provide a detailed discussion of the DSCA.

Defense Information Systems Agency

4-21. The Defense Information Systems Agency (DISA) is responsible for planning, developing, and supporting command, control, communications, computer, and intelligence (C4I) systems that serve the needs of the SECDEF. It provides guidance and support on technical and operational C4I issues affecting the office of the SECDEF, the military departments, the CJCS and the joint staff, the combatant commands, and the defense agencies.

DISA ensures the interoperability of the global command and control system—Army (GCCS-A), the global combat service support system-Army (GCSS-A), and the other CSS command and control, asset visibility, and transportation systems (as discussed in chapter 5).

DEPARTMENT OF THE ARMY AND STRATEGIC-LEVEL COMMANDS

4-22. The Secretary of the Army is responsible for the administration and support of all Army forces. The Secretary of the Army fulfills these responsibilities by exercising administrative control (ADCON) through the commanders of the ASCCs of the combatant commands. (FM 3-0 discusses ADCON.) The military departments exercise authority and responsibilities codified under U.S. law, DOD directives, and joint doctrine that describe the command relationships between combatant and component commanders. The Army, like other military services, is responsible for the following CSS-related functions enumerated in DODD 5100.1 and the applicable sections of Title 10. These include the following:

- Exercising authority to conduct all of the department affairs, to include organizing, supplying, equipping, training, servicing, mobilizing, demobilizing, administering, and maintaining forces.
- Preparing forces and establishing reserves of manpower, equipment, and supplies for effectively prosecuting war and military operations other than war.
- Recruiting, organizing, training, and equipping interoperable forces for assignment to combatant commands.
- Conducting research; developing tactics, techniques, and organizations; and developing and procuring weapons, equipment, and supplies essential to fulfilling SECDEF-assigned functions.
- Planning for using other services intrinsic capabilities that may be available. This could include planning for and executing interservice support agreements (ISSAs) for supply, maintenance, and transportation operations.
- Providing common item support, as directed by the SECDEF, for service forces, including procurement, distribution, supply, equipment, and maintenance.
- Training, administering, and providing common-item support of Army forces wherever employed. Providing common-item support is accomplished through the CSS planning portion of the crisis action and deliberate planning processes. (See JP 5-0.) Logistics preparation of the theater includes peacetime planning actions taken by CSS personnel at all echelons to maximize support to the supported combatant commander's plan.
- Operating organic land vehicles, aircraft, and ships or craft. However, the services logistics assets could be subject to the geographic combatant commander exercising directive authority for logistics.
- Determining service force requirements and recommending force requirements to support national security objectives and strategy, and to meet the combatant commands operational requirements.

4-23. A number of strategic-level CSS commands and agencies provide vital support to Army and other supported forces.

U.S. Army Materiel Command

4-24. U.S. Army Materiel Command (USAMC) performs assigned materiel and related functions for research, development, test and evaluation; acquisition, logistics support, and technical assistance for materiel systems; and other materiel-acquisition management functions. It provides Army national-level maintenance support and serves as the DOD single manager for conventional ammunition. USAMC missions include—

- Providing equipment and services to other nations through the Security Assistance Program.
- Developing and acquiring nonmajor systems and equipment.
- Providing development and acquisition support to program managers.
- Maintaining the industrial mobilization capabilities necessary to support the Army.
- Managing Army prepositioned stocks (APS), less Class VIII, worldwide.
- Managing the LOGCAP. (See chapter 5.)

4-25. USAMC also manages operational policies, programs, objectives, and resources associated with operational projects worldwide. All of the above functions and capabilities are available to the ASCC/ARFOR through the USAMC logistics support element (LSE). See FM 63-11 for information on the LSE.

4-26. USAMC is the Army's single stock fund (SSF) manager and serves as the single national manager with sole obligation power for the Army Working Capital Fund, Supply Management Army (AWCF-SMA). In this capacity, USAMC consolidates management of current wholesale, theater, corps/installation, and division authorized stockage list (ASL) inventories into a seamless logistics and financial system and creates 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) bypass the SSF and are transmitted directly to DLA.

4-27. USAMC is also the national maintenance manager (NMM) and oversees the national maintenance program (NMP). The NMP is characterized by single maintenance standards for repairing and returning components to AWCF stocks. The NMP is an enabler of the SSF and eliminates unnecessary maintenance redundancy throughout the Army. Under the NMP, installations compete for contracts to conduct source of repair (SOR) work for reparable exchange (RX) line items that have a National requirement.

U.S. Army Medical Research and Materiel Command

4-28. The U.S. Army Medical Research and Materiel Command (USAMRMC) is a major subordinate command of the U.S. Army Medical Command (USAMEDCOM). It is responsible for the life-cycle management of medical materiel from basic laboratory research through advanced development,

prototyping, procurement, delivery to units, maintenance, and disposal. This command operates six medical research laboratories and institutes within CONUS that make up the core science and technology capability of the command. Further, this command operates subordinate units exclusively focused on medical materiel development, contracting, medical logistics management, health facility planning, and information management and technology.

U.S. Total Army Personnel Command

4-29. The U.S. Total Army Personnel Command (USTAPERSCOM) integrates, manages, monitors, and coordinates military personnel systems to develop and optimize the Army human resources in peace and war. The commander of USTAPERSCOM is the Army functional proponent for the military personnel management system within the objectives set by the Deputy Chief of Staff for Personnel. USTAPERSCOM major functions include the following:

- Carry out the nine major functional categories of the Army personnel life cycle: force structure, acquisition, individual training and development, distribution, deployment, sustainment, professional development, compensation, and transition.
- Man the force, and provide personnel support and personnel services to soldiers, their families, and organizations.
- Synchronize all military personnel activities to achieve efficient and cost effective execution of all military personnel processes on an Army-wide basis to ensure current and future personnel requirements are defined.
- Interact with personnel organizations in the field, including U.S. Army training centers, U.S. Army garrisons, divisions and corps, installations, and forward deployed bases to ensure policy, procedures, and service delivery systems support operational requirements at all levels.

USTRANSCOM and Transportation Component Commands

4-30. USTRANSCOM provides air, land, and sea transportation and common-user port management at air/seaports of embarkation and debarkation for DOD. The commander, USTRANSCOM serves as the DOD single worldwide manager for common-user ports of embarkation and debarkation. The single port manager concept ensures the seamless transfer of cargo and equipment in any given theater. Supported combatant commanders determine movement requirements and required delivery dates. The commander, USTRANSCOM is the supporting commander who, with the transportation component commands, provides a complete movement system from origin to initial theater destination. The USTRANSCOM component commands operate the Defense Transportation System (DTS). JP 4-01 covers DTS-specific operations.

4-31. The Military Traffic Management Command (MTMC), a major U.S. Army command, is the transportation component command of USTRANSCOM responsible for surface transportation management. MTMC provides common-user ocean terminal and traffic management services to

deploy, employ, sustain, and redeploy U.S. forces on a global basis. MTMC conducts transportation engineering to ensure deployability and feasibility of present and future deployment assets. Additionally, MTMC is the worldwide seaport manager under the single port manager concept for all common-user seaports of embarkation (SPOEs) and seaports of debarkation (SPODs). When designated, MTMC may also serve as the port operator, using stevedoring, services contracts, or HNS.

4-32. The Air Mobility Command (AMC) is a major U.S. Air Force command. As a transportation component command of USTRANSCOM, AMC provides common-user airlift, air refueling, and strategic aeromedical evacuation transportation services to deploy, employ, sustain, and redeploy U.S. forces on a global basis. Additionally, AMC is the single aerial port manager and, where designated, operator of common-user aerial ports of embarkation (APOEs) and aerial ports of debarkation (APODs).

4-33. The Military Sealift Command (MSC) is a major command of the U.S. Navy. As a transportation component command of USTRANSCOM, MSC provides common-user and exclusive-use sealift transportation services to deploy, employ, sustain, and redeploy U.S. forces on a global basis.

FEDERAL AGENCIES AND ORGANIZATIONS

4-34. Numerous other Federal agencies play a role in CSS operations. This section briefly summarizes the CSS role of several key agencies.

Department of State

4-35. The Department of State (DOS) is the lead agency for coordinating and distributing Class X items that support nonmilitary programs (such as, economic and agricultural development, civic action, and various relief and education programs).

Department of Transportation

4-36. Under the National Plan for Emergency Preparedness (Executive Order 12656), the Secretary of Transportation leads the Federal transportation community. During National defense emergencies and in periods of crisis, the Secretary of Transportation has a wide range of delegated responsibilities, including executive management of the Nation's transportation resources. JP 4-01 contains a detailed account of Department of Transportation (DOT) responsibilities.

Federal Emergency Management Agency

4-37. The Federal Emergency Management Agency (FEMA) coordinates the emergency preparedness actions of all Federal agencies, including distributing military support to civil authority missions. As the key agency for emergency assistance to civil authorities, it coordinates all military support directly with the Director of Military Support (DOMS). Close coordination with FEMA is essential in most domestic support operations (DSO).

U.S. Customs Service

4-38. The U.S. Customs Service is a Department of the Treasury bureau responsible for enforcing U.S. laws concerning carriers, cargo, and persons

entering and departing the United States. Its responsibilities include assessing and collecting duties; detecting and intercepting contraband, including drugs; and ensuring that imported material meets the requirements for legal entry. All forces and materiel redeploying to CONUS require U.S. customs clearance.

U.S. Postal Service

4-39. The U.S. Postal Service (USPS) is part of the global distribution network that supports joint force operations by moving DOD mail, including material shipped via parcel post. The military postal system is an official extension of USPS outside continental United States (OCONUS). The Military Postal Service Agency (MPSA), a joint service staff headquarters under the executive direction of Department of the Army, is the DOD single military mail manager and point of contact with USPS. MPSA conducts DOD contingency planning and provides postal support to combatant commanders. Transporting official and personal mail to and from forces OCONUS is a MPSA responsibility. Mail is moved using a combination of military and commercial carriers through overseas military mail hubs and deployed service postal units.

General Services Administration

4-40. The General Services Administration (GSA) provides common-use items to DOD through a network of customer service centers and distribution centers. GSA is a major source for general commodities (such as office supplies and paper products, tools, furniture, paints, and chemicals). GSA also provides vehicle acquisition and leasing service and is the Federal contracting agency for the government purchase card program and domestic express small-package delivery service.

Army and Air Force Exchange Service

4-41. Army and Air Force Exchange Service (AAFES) mobile field exchanges are deployable truck- or tent-based resale outlets that provide health and comfort merchandise support to deployed forces. AAFES civilian employees operate these nonappropriated fund activities. Merchandise originates from AAFES system stock.

SUPPORTED GEOGRAPHIC COMBATANT COMMANDS

4-42. Geographic combatant commanders are responsible for developing joint plans and orders in response to mission taskings in their areas of responsibility (AORs). They are responsible for developing effective and efficient CSS concepts that use various support techniques, to include CUL and other CSS tailored to operation-specific circumstances. Ultimately, geographic combatant commanders are responsible for coordinating with DLA, USTRANSCOM, and service component commanders to provide integrated CSS.

4-43. Combatant commanders are the key to ensuring that CSS to campaigns and other operations conducted within their AOR are properly planned, prepared for, executed, and assessed. One way they accomplish this is through their directive authority for logistics, which includes issuing directives to subordinate commanders. These directives include peacetime

measures necessary to ensure effective execution of approved operation plans, effectiveness and economy of operation, and preventing or eliminating unnecessary duplication of facilities, and overlapping functions among service component commands. During peacetime, the scope of the logistics authority exercised by a combatant commander is consistent with the peacetime limitations imposed by legislation, DOD policy or regulations, budgetary considerations, local conditions, and other specific SECDEF- or CJCS-prescribed conditions. During crisis action, wartime, or where critical situations make modifying the normal logistics process necessary, the combatant commander's logistics authority enables him to use all necessary facilities and supplies of all forces assigned to his command to accomplish their missions. Joint CSS doctrine and policy developed by the CJCS establishes wartime support guidance that assists the combatant commander in conducting successful joint operations.

4-44. As units transfer to the supported combatant commander, the combatant commander's activities and roles change. Specifically, combatant commanders—

- Ensure overall effectiveness and economy of the joint force, service component, and applicable agency CSS plans.
- Establish the critical item list and allocate critical resources.
- Coordinate supply support among service components.
- Establish supply build-up rates.
- Establish stockage levels for selected critical items.
- Prioritize joint theater distribution and CSS effort.
- Manage all intratheater movement.
- Manage the deployment, employment, and redeployment of forces, and the retrograde of materiel.
- Coordinate the overall logistics preparation of the theater effort.
- Prevent or eliminate unnecessary duplication of facilities and overlapping functions among the service component commands.
- Achieve required economies by clearly identifying detailed CSS planning and specific lead service or agency CUL designations in the operations plan (OPLAN)/operations order (OPORD) or directives.
- Ensure proper and detailed delegation of directive authority for common-item support to the appropriate joint force, service component, or agency as either a CUL lead or a formal single integrated theater logistics manager (SITLM).

4-45. The combatant commander delegates to service component commanders directive authority for logistics (DAL) for specific, common-item support. Overall authority for CSS remains with each of the service component commanders. Delegated common item support authority—accomplished through either temporary CUL lead or long-term SITLM responsibilities—must be clearly delineated in, and executed in accordance with, combatant commanders' OPLANs/OPORDs or directives.

SUBORDINATE JOINT FORCE COMMANDS

4-46. The subordinate joint force commander (JFC), normally a subordinate unified command or JTF, works for a combatant commander who has overall responsibility for conducting CSS for joint operations. However, the JFC establishes a manpower and personnel directorate (J1) and logistics directorate (J4) that coordinate personnel and logistics support through the combatant commander. They also coordinate with any subordinate JTFs, service components, and agency J1 and J4s or equivalent staff officers. While each service is responsible for the CSS of its own forces, the service components will use the common distribution network and other combatant commander-directed CUL support to execute the overall CSS mission. The subordinate JFC plays a major role in optimizing resources and synchronizing support to the assigned forces. To execute these responsibilities effectively, the joint force J1 and J4 need to fully understand the force CSS requirements, the operations required to sustain them, and specific CUL and DAL designations from the combatant commander. They must also actively manage the conduct of CSS operations to meet the JFC's intent. JP 4-07 has a more detailed discussion on the combatant commander's directive authority for logistics.

OPERATIONAL-LEVEL ROLES

4-47. CSS at the operational level links strategic- and tactical-level CSS. Support personnel at the operational level coordinate support from the strategic level to meet requirements at the tactical level. Operational CSS includes the support required to conduct campaigns and major operations. A *campaign* is a related series of military operations aimed at accomplishing a strategic or operational objective within a given time and space (JP 1-02). A *major operation* is a series of tactical actions (battles, engagements, strikes) conducted by various combat forces of a single or several services, coordinated in time and place, to accomplish operational, and sometimes strategic objectives in an operational area (FM 3-0).

4-48. The combatant commander's concept for the campaign or major operation is the basis for support planning. Like strategic-level CSS, operational-level CSS is usually a joint effort and often a multinational effort. Army support at this level is integrated into the total support system required to conduct joint/multinational campaigns and other military activities. The combatant commander's strategic logistics concept will focus on the ability to generate and move forces and materiel in the theater base and to desired operating locations, where operational-level logistics concepts are employed.

4-49. Operational-level CSS focuses on theater support operations that involve force generation, force sustainment, and redeployment. The initial focus is on generating a force ready to conduct operations. Sustainment begins during force generation but becomes the primary focus once operations begin. Key Army functions associated with operational-level CSS include the following (numbers refer to *Universal Joint Task List* tasks)—

- Coordinating supply of arms, munitions, and equipment (OP 4.1).
- Synchronizing supply of fuel (OP 4.2).

- Maintaining equipment and stocks that support the supply system (OP 4.3).
- Coordinating support of forces (OP 4.4); including, human resources (OP 4.4.1.1), field services (OP 4.4.1), health services (4.4.3), religious (OP 4.4.6), financial (OP 4.4.2), and legal (OP 4.4.7).
- Managing materiel (OP 4.5), controlling movement (OP 4.5.1), and managing distribution (OP 4.5).
- Providing lead service CUL to other services, multinational partners, and civilian agencies (OP 4.5).
- Establishing, managing, and maintaining sustainment facilities, including storage areas (OP 4.6) and medical facilities (OP 4.4.3.3).
- Planning, coordinating, managing, and supervising the positioning (OP 1.2) and security (OP 6.2) of CSS activities.
- Acquiring, managing, and distributing funds to conduct in-theater contracting to acquire supplies and services to support the mission (OP 4.8).

4-50. Key elements of the Army's CSS structure at the operational level include dedicated transportation, general support supply, sustainment maintenance, Level III health service support (with in-theater hospital facilities, see chapter 9), and personnel support elements. Direct support elements also provide support. Many of the stocks to support the AO are stored by operational-level CSS units, allowing tactical-level CSS units to remain as mobile as possible. Support at this level includes common support to joint and multinational forces, as required. Many different sources contribute to these support functions, including contractors, DA and DOD civilians, U.S. and multinational military organizations, and host nation (HN) resources.

ARMY SERVICE COMPONENT COMMAND

4-51. At the combatant command level, the ASCC consists of the Army service component commander and all the Army forces assigned to the combatant command or further assigned/attached to a subordinate unified command or JTF. The ASCC has responsibilities that derive from Title 10. (See paragraph 2-19.) These Title-10 responsibilities include planning, preparing, training, equipping, administering, and providing CSS to Army forces assigned to combatant commands.

Note: Attached, in joint lexicon, simply means a temporary C2 relationship.

4-52. The ASCC may be required to support the geographic combatant commander by conducting land operations to support or attain the combatant commander's objectives. These land operations often are conducted by a subordinate ARFOR headquarters, such as an augmented corps or division, as part of a JTF. Even in operations where the ASCC commander is not exercising operational control over Army forces, he remains responsible for providing the necessary capabilities, including CSS. Chapter 2 discusses in

more detail the ASCC and ARFOR commander roles in providing common support within unified action.

4-53. Initiating and sustaining operations depends on CSS technology enablers and effective distribution, including accurate and timely total asset visibility (TAV)/in-transit visibility (ITV). The main components of an ARFOR CSS operations are continued flow of supplies contained within the deployment airflow and using prepositioned stocks until the sea lines of communication (SLOC) are opened. In addition to synchronizing the activities of the EAC organizations (discussed in paragraph 4-54), the ARFOR headquarters leverages CSS capabilities not initially deployed (such as personnel services) until these capabilities can close. Planners tailor ARFOR sustainment operations to the mission and force requirements, and rely on intratheater lift and distribution-based CSS. The goal is providing effective and responsive CSS while minimizing the CSS footprint in the AO. The ASCC, along with the subordinate ARFOR, if applicable, ensures proper balance between combat and support forces during deployment planning. Key to this balance is achieving enhanced strategic responsiveness without undue risk in the supportability of the operation

4-54. An ARFOR headquarters plans how to leverage the support provided by different CSS agencies from CONUS and other global providers into the AO to meet its units needs. This includes reaching back to National-level assets, as necessary, for such things as forward repair activities (FRAs) or other critical strategic-level support. The ARFOR headquarters must be able to integrate the capabilities provided by Army forces, contractors, multinational military partners and HNS to build and sustain combat power.

MULTIFUNCTIONAL AND SPECIALIZED COMMANDS

4-55. A number of Army commands habitually operate at the operational level. In some situations, especially at the lower end of the spectrum of conflict, tactical-level CSS organizations may perform operational-level support missions. If so, they require augmentation, typically from the EAC organizations described in paragraph 4-66 or their subordinate units. As described in the next section, tactical CSS organization capabilities are limited and generally focused on direct support to tactical forces.

4-56. The support structure starts with a nucleus of minimum essential support functions and capabilities focused on force generation. As the deployed force grows, the support structure gains required capabilities. The theater support structure must provide support to engaged forces; to units in or passing through the JRA; and to other units, activities, forces, and individuals as the JFC directs. FM 4-93.4 describes an operational-level theater force opening package and possible build-up of operational-level CSS forces.

4-57. Army CSS organizations at the operational level often interface with elements of the strategic sustainment base that may deploy into the theater of operations. National sustainment base operational-level and tactical-level contingency support may include the DLA's and DCMA's contingency support teams, USAMC LSE, contractors supporting a military force, and USTRANSCOM (through its transportation components, MTMC, and MSC).

Key to integrating these support elements is establishing proper and well understood C2 relationships among these organizations, the subordinate JTF, and service components.

Theater Support Command

4-58. This multifunctional logistics command provides area support to designated elements in the JRA and sustainment support to tactical forces. The TSC provides C2 of EAC logistics organizations and other organizations, as directed by the ASCC commander. FM 4-93.4 details the organization (including the structure and capabilities of organizations that may be assigned or attached), functions, and build-up of a TSC in a force-projection operation.

Area Support Group

4-59. Area support groups (ASGs) are subordinate units assigned to the TSC. They are responsible for area support in an AO and may provide support to corps or other forces. The mission of the ASG is to provide direct support (DS) logistics support to designated units and elements within its AO. This support typically includes DS supply (less ammunition, classified map supply, and medical supply and support), DS maintenance, and field services, as well as other support directed by the ARFOR commander through the TSC. ASGs can also provide GS supply and sustainment maintenance support to TSC and DS supply organizations, and sustainment maintenance to support the theater. If an operational-level ammunition group is not established, specialized battalions assigned to the ASG provide ammunition support. ASGs can support ISB and RSO&I operations. Early entry modules (EEMs) of specialized units may be attached to an ASG headquarters EEM during initial stages of an operation.

4-60. ASGs provide a variety of support to units stationed in or passing through their AOs. The AO assigned to an ASG depends on the density of military units and materiel to support, and on political boundaries and identifiable terrain features. ASGs are located along LOC to take advantage of the transportation network and provide responsive support. FM 54-40 contains additional details on the composition and capabilities of ASGs.

Transportation Command

4-61. Through subordinate transportation units, the Army TRANSCOM provides transportation support to Army, joint, and multinational forces as directed by the JFC/ASCC commander. It provides policy and technical guidance to all Army transportation units in theater and directs allocation of Army transportation resources in coordination with the ASCC/ARFOR headquarters and the theater joint transportation board. FM 55-1 and FM 4-93.4 have more information on the Army TRANSCOM.

Medical Command

4-62. The Medical Command (MEDCOM) directs health service support to designated elements in theater. It provides policy and technical guidance to in-theater Army medical units and maintains technical links to the ASCC/ARFOR staff surgeon and to strategic-level medical activities. The MEDCOM provides a wide range of medical capabilities; develops policies,

plans, procedures, and programs; and supervises training and administrative support of medical brigades. FM 4-02, FM 8-42, and FM 8-55 describe these and other functions.

Personnel Command

4-63. The theater personnel command (PERSCOM) maintains and reports on personnel readiness of theater forces, conducts theater sustainment operations necessary to man the force, and provides personnel services and support. It exercises C2 over assigned and attached theater-level Army personnel units. FM 12-6 covers the units, operations, and relationships involved in providing personnel support at this level.

Finance Command

4-64. The Finance Command (FINCOM) conducts operational-level finance operations. In coordination with the ASCC/ARFOR Deputy Chief of Staff for Resource Management, it provides staff advice on financial management matters and provides financial management policies and procedures for Army financial management activities in the theater. It may also exercise C2 over finance battalions not assigned to finance groups. FM 14-100 contains details on the FINCOM and other finance organizations that operate within the theater.

Engineer Command

4-65. Engineer command (ENCOM) C2 engineer units provide the full spectrum of engineering support. This includes general engineering, topographic support, and operational-level mobility/countermobility/survivability support to Army, joint, and multinational forces. The ENCOM and subordinate EAC engineer units normally provide either general support or direct support to the TSC and other CSS units. Technical engineering services include construction design/management, real estate acquisition and management, real property maintenance activities (RPMA), electric-power generation/distribution, troop construction, facility rehabilitation and repair, environmental engineering support, and transportation engineering support. ENCOMs typically push the engineer work lines of EAC engineer assets forward into the combat zone to facilitate the forward focus of corps engineer assets and to accomplish tasks beyond the corps engineer's capabilities. Examples of such tasks are constructing/maintaining main supply routes (MSRs) (with specific emphasis on LOC bridges), inland petroleum distribution systems (IPDS), forward landing strips, and forward-positioned medical facilities. (See FM 5-116.)

TACTICAL-LEVEL ROLES

4-66. The goal of CSS at all levels is to generate and sustain combat power at the tactical level. This discussion covers multifunctional organizations and staff functions providing CSS at this level. Detailed discussions of various functional CSS units are in the associated functional chapters of this manual. CSS at the tactical level includes all functions necessary to support battles and engagements. (FM 3-0 and FM 3-90 discuss battles and engagements.) The focus of tactical-level CSS is to provide the CSS necessary to meet the commander's intent and concept of operations, and to maximize his freedom

of action. It involves synchronizing all CSS functions. Tactical-level CSS is more immediate than operational-level CSS. Support personnel operate at the forward end of the support pipeline. They rely heavily on the effective application of agility, velocity, and situational understanding. Effective tactical CSS depends on—

- An effective C2 system to coordinate and execute CSS operations.
- An effective distribution-based CSS system that combines agility, velocity, and information system capabilities to form a seamless distribution pipeline from the factory to the foxhole.
- Agile CSS organizations to carry out the responsibilities of delivering CSS to the warfighter

4-67. Tactical CSS elements provide coordinated and tailored support for the warfighter. These elements provide support as close to the point of need as possible to satisfy specific tactical requirements.

4-68. The corps support command (COSCOM) and division support command (DISCOM) function as the major subordinate commands responsible for directing and managing logistics (less medical) support within their supported unit AOs. They coordinate and supervise the implementation of policies and directives relative to supporting current and future operations. They develop plans and orders in concert with operations planners to ensure continuous support operations. The fluidity of battle demands constant changes to these support plans.

4-69. COSCOM/DISCOM CSS management consists of coordinating and integrating personnel, equipment, facilities, communications, and procedures to accomplish the mission in compliance with the commander's intent. If the COSCOM or DISCOM is the senior Army support headquarters in the theater, it may require significant augmentation in those areas in which it lacks staff expertise and/or functional support capabilities. For example, the commander may augment COSCOM with a comptroller, resource management staff officers, and transportation units to enable it to oversee and execute port clearance and terminal operations. The DISCOM supporting a division serving as the ARFOR probably requires significant staff augmentation to assist in coordinating joint logistics and operational-level CSS units to execute operational-level CSS missions.

4-70. The COSCOM/DISCOM accomplishes centralized control and management through subordinate functional control centers. In the Army of Excellence (AOE) organization, the corps materiel management center (CMMC) and corps movement control battalion (MCB) operate under the staff supervision of the COSCOM support operations officer. Likewise, in the AOE division, the division materiel management center and division movement control office perform essentially the same tasks, but on a smaller scale. However in Force XXI organizations, many of the functions of the CMMC, MCB, division materiel management center (MMC), and division movement control office have been, or will be, under the staff supervision of the distribution management center (DMC) in the COSCOM/DISCOM headquarters. The scope of distribution management varies at each respective level of command, but the basic functions remain the same (discussed in chapter 5).

STAFF RESPONSIBILITIES

4-71. At the tactical level, some CSS functions are performed by the commander's staff. When published, FM 6-0 will discuss staff functions in more detail. The following is a brief discussion of those CSS functions performed by the staff.

Coordinating Staff Officers

4-72. **Assistant Chief of Staff, G1/AG (S1) Personnel**. The G1/AG (S1) is the principal staff officer for all matters concerning human resources (military and civilian), including personnel readiness, personnel services, personnel support, and headquarters management. The G1/AG (S1) also serves as the senior adjutant general officer in the force. A personnel officer is located at every echelon from battalion through corps.

4-73. **Assistant Chief of Staff, G4/(S4) Logistics.** The G4 (S4) is the principal staff office for coordinating the integration of supply, maintenance, transportation, and services for the command. The G4 (S4) is the link between the support unit and commander and the rest of the staff. The G4 (S4) assists the support unit commander in maintaining logistics visibility with the commander and the rest of the staff. A logistics officer is located at every echelon of command from battalion through corps.

Special Staff Officers

4-74. Every staff has special staff officers who are responsible for CSS functions.

4-75. **Resource Manager or Comptroller.** The resource manager or comptroller is responsible for budget preparation and resource management analysis and implementation. Resource managers or comptrollers are normally located at corps and division levels. During operations, comptroller functions are normally performed by the ARFOR. However, specific comptroller functions may occur at corps and division level.

4-76. **Finance Officer.** The finance officer is responsible for coordinating and providing finance services to the command. The finance officer is also the finance unit commander.

4-77. **Surgeon.** The surgeon is responsible for coordinating health assets and operations within the command. A surgeon is authorized on all staffs from battalion through corps. The surgeon may or may not be a medical unit commander.

4-78. **Veterinary Officer.** The veterinary officer is responsible for coordinating assets and activities concerning veterinary service within the command. A veterinary corps officer is authorized at corps level.

4-79. **Explosive Ordnance Disposal (EOD) Officer.** The EOD officer is responsible for coordinating the detection, identification, recovery, evaluation, rendering safe, and final disposal of explosive ordnance. An EOD officer is authorized at corps and division levels. He normally serves as the EOD group, battalion, or company commander.

Personal Staff Officers

4-80. Personal staff officers work under the immediate control of the commander and have direct access to him. The commander establishes guidelines or gives specific guidance when the personal staff officer should inform, or coordinate with, the chief of staff or other members of the staff.

4-81. Most personal staff officers also perform duties as special staff officers working with a coordinating staff officer. They do this case-by-case, depending on the guidance of the commander or the nature of the task. Personal staff officers may also work under the supervision of the chief of staff (executive officer below division level).

4-82. **Chaplain (Coordinating Staff Responsibility, ACofS, G1/AG (S1), when required).** The chaplain is responsible for coordinating the religious assets and operations within the command. The chaplain is a confidential advisor to the commander for religious matters. A chaplain is located at every echelon of command from battalion through corps.

4-83. **Staff Judge Advocate (SJA) (Coordinating Staff Responsibility, ACofS, G1/AG (S1), when required).** The SJA is the commander's personal legal advisor on all matters affecting the morale, good order, and discipline of the command. The SJA provides legal support to the members of the command and community. A SJA is located at corps, division, and major support command levels. A legal support element, including at least a judge advocate, deploys in direct support of each brigade-level task force.

CORPS SUPPORT COMMAND

4-84. As the logistics support command assigned to the corps, the COSCOM executes an extensive portion of the corps CSS plan. The COSCOM provides logistics support to the corps and other units, services, or multinational partners as directed. It coordinates logistics elements to support corps forces and, when required, coordinates with joint, multinational and interagency forces/agencies. It organizes different types of logistics units into support packages to meet the mission requirements of supported forces. (See FM 4-93.4.) Depending on mission, enemy, troops, terrain and weather, time, civilian considerations (METT-TC), the COSCOM units perform the following missions.

Supply Support

4-85. In general, COSCOM units provide DS and GS supply support to nondivision units. They provide GS supplies to the divisions, separate brigades, and armored cavalry regiments (ACRs).

Field Services Support

4-86. The COSCOM provides mortuary affairs support; shower, laundry, and clothing repair support; and tactical post exchange, with or without AAFES augmentation.

Maintenance Support

4-87. The COSCOM maintenance support mission includes maintenance management; DS maintenance and aviation intermediate maintenance (AVIM) to nondivisional units; reinforcing DS maintenance and AVIM to the

divisions, separate brigades, and ACRs; missile/rocket maintenance; and calibration support.

Transportation Support

4-88. The COSCOM corps-wide transportation support functions consist of movement control; mode operations; cargo transfer operations; terminal operations (to include water terminals when augmented by EAC); and aerial delivery support.

Explosive Ordnance Disposal

4-89. EOD companies provide support to corps. These companies are normally collocated with a CSB. The companies provide GS to the corps on an area basis and can be DS to a specific maneuver unit, normally a division.

4-90. The COSCOM provides both area and corps-wide support. Area support is the most efficient and affordable way to provide support. The COSCOM corps support groups (CSGs) have an area support mission. For CSGs, area support means the location of the units requiring support determine DS supply and maintenance relationships. CSG subordinate DS units provide support on an area basis to units located in, or passing through, their AO. The CSG's support operations section maintains support operations overlays depicting support locations and times of operations. FM 54-30 covers CSGs in detail.

4-91. Functional battalions that provide corps-wide support and multifunctional corps support battalions to provide area support are assigned to the rear CSG of the COSCOM. These functional battalions include the following:

- Transportation battalions provide intracorps and intercorps transportation support, to include heavy equipment transport.
- The petroleum supply battalion, ammunition battalion, and supply and services (S&S) battalion provide Classes III and V, and general supplies respectively on a corps-wide basis. They supply the bulk distribution systems that support divisions, separate brigades, and ACRs.
- The S&S battalion also provides aerial delivery; mortuary affairs; and shower, laundry, clothing exchange support on a corps-wide basis.
- The AVIM battalion provides corps-wide aircraft maintenance support.

4-92. The normal arrangement for supporting nondivisional units within the division AO is to provide area support from the corps support battalion (CSB) in the division area. In Army of Excellence divisions, forward support battalions (FSBs) and the main support battalion (MSB) can provide some support to nondivisional units operating in the division AO, but only within their limited capability. To provide support to corps forces beyond that capability, the CSB in the division area must reinforce and augment FSBs and the MSB. The forward CSG may also augment or reinforce the MSB to enable it to provide support to corps forces that operate in the division area. Based on coordination between the DISCOM/FSBs support operations staffs and the forward CSG, this CSB may establish forward supply, maintenance,

and service points in the division area. FM 54-30 has information on the CSB.

CORPS MEDICAL COMMAND

4-93. The corps MEDCOM, the major health service support (HSS) command assigned to the corps, in coordination with the COSCOM, executes the HSS portion of the corps CSS plan. The MEDCOM provides HSS to corps forces and to other units, services, or multinational forces as directed. It coordinates the requirements for medical elements to support corps forces or operations. It task-organizes different types of medical units into support packages to meet the mission requirements of the supported forces. (See FM 4-02.)

4-94. The corps MEDCOM provides C2 for the following units:

- Medical brigade, corps.
- Medical logistics battalion.
- Area support dental company.
- Medical company, combat stress control.
- Medical detachment, preventive medicine.
- Evacuation battalion.
- Combat support hospital.
- Minimal care detachment.
- Forward surgical team.
- Medical augmentation teams, various types.
- Area support medical battalion.
- Dental company, area support.
- Veterinary battalion.

4-95. Medical units provide HSS on an area basis to nondivisional units lacking organic assets. The area support medical battalion and its area support medical companies provide this support. The corps area medical support assets reinforce division medical companies that provide echelon HSS.

DIVISION SUPPORT COMMAND

4-96. The DISCOM coordinates and synchronizes logistics and medical requirements and activities (horizontally and vertically) inside and outside the division. The DISCOM commander directs the flow of support before, during, and after operations.

Division Support Battalion

4-97. In the Force XXI division, the division support battalion (DSB) replaces AOE MSB. The DSB provides HSS (including preventive medicine, combat operational stress control [COSC], and optometry support) on an area support basis to division rear area troops; transportation support to the entire division; and DS supply and maintenance support to the division headquarters. It also provides support to the DSB itself, DISCOM headquarters, division artillery (DIVARTY) headquarters, multiple launch

rocket system (MLRS) battalion, air defense artillery (ADA) battalion, military intelligence (MI) battalion, signal battalion, and military police (MP) company. Like the AOE MSB, the DSB also provides Class III (bulk) reinforcing and resupply support to the forward support battalions (FSBs). Unlike the AOE MSB, the DSB does not provide support to the FSBs for other classes of supply. FM 4-93.53 contains a detailed discussion of the digitized DSB, and FM 63-21 has details on the AOE MSB.

Forward Support Battalion

4-98. The multifunctional FSB provides direct support to brigade-level combat teams. The FSB may function in a highly dispersed manner, with some FSB elements close to the maneuver unit and others near the brigade rear area. The AOE FSB has medical, maintenance, and supply companies. The FSB provides direct support to the maneuver brigade and area support within its capability to other units in the brigade area. It has no forward support companies; the maneuver battalions have CSS assets to provide unit-level support. FM 63-20 has details on the AOE FSB organization, capabilities, and techniques.

4-99. In the Force XXI division, the FSB staff uses an array of digital information systems and other technological innovations to enhance support. The FSB provides logistics support and ties together the entire spectrum of supplies and services for the maneuver brigade. CSS assets for maneuver units have been consolidated in the new FSB design. This new FSB, with centralized CSS, enables CSS commanders to task-organize CSS assets to support the brigade commander's intent. The Force XXI FSB contains forward support companies (FSCs), a headquarters and distribution company, a brigade support company (BSC), and forward support medical company (FSMC). The FSC provides multifunctional support directly to a maneuver battalion task force. The BSC provides DS supply and maintenance support to the artillery battalion, and organizational and DS to the engineer battalion, brigade HHC, and the brigade reconnaissance troop. It also provides limited reinforcing support to the FSCs. The FSMC provides Level I and II HSS (preventive medicine, combat operational stress control, far-forward medical treatment, basic laboratory/radiology services, patient-holding, evacuation, and health service logistics) for elements within the supported brigade AO. The medical company can also be augmented with a forward surgical team (FST) or air ambulance assets. Corps maintenance support teams may augment the FSB to provide back-up support capability forward. FM 4-93.53 contains details on the FSB.

Division Aviation Support Battalion

4-100. The division aviation support battalion (DASB) provides DS to the aviation brigade and the division cavalry squadron. It provides, or coordinates, provision of all classes of supply and maintenance. The DASB can function in a dispersed manner to support the cavalry squadron or attack battalion when they are operating forward. The DASB may attach aviation and ground maintenance teams and fueling assets forward to augment the FSBs, which then provide area support to the division cavalry. The DASB does not have any HSS capabilities. Based on METT-TC, the DSB or FSB medical company provides medical support to the DASB, aviation brigade,

and division cavalry squadron. The DASB contains a headquarters and supply company, a ground maintenance company, and an aviation intermediate maintenance company. FM 4-93.55 contains details on the DASB of the Force XXI division, and FM 63-23 has information on the AOE DASB.

Light Division DISCOM

4-101. The structure and mission of the DISCOM in the light divisions are similar to those of the AOE heavy division DISCOM. However, they support the distinct requirements of each division. For example, the airborne division has a quartermaster airdrop equipment support company and a light and a heavy maintenance company in the MSB; the air assault division has an aviation maintenance battalion. The light infantry DISCOM is an austere organization that relies on augmentation elements, corps plugs, and other EAD support. FM 63-2-1 discusses these organizations and their associated doctrine.

SEPARATE BRIGADE/ACR SUPPORT BATTALION/SQUADRON

4-102. The support battalion/squadron is the DS logistics and HSS operator in the brigade/ACR. The battalion/squadron provides supply, maintenance, motor transport, and medical support. When augmented, it also provides field services. The support battalion elements have the same deployment capability as the rest of the brigade. The support battalion missions require the capability to support incrementally and be highly versatile and mobile.

4-103. The support battalion/squadron supports a particular brigade/ACR. Generally, all of the separate brigades require the same CSS. The support battalions all have maintenance, supply and transportation, and medical companies. However, like companies such as supply and transportation (S&T) companies/troops of the various separate brigades and ACR are not identical.

4-104. The logistics structure of the separate brigade/ACR support squadron links to a COSCOM. The direct linkage between the separate brigade support battalion/squadron and the COSCOM generally remains in effect, even when the separate brigade belongs to a division. The division does not have the resources to support another brigade. When the brigade attaches to a division, the DISCOM coordinates the logistics effort for the entire division. The support battalion/squadron sends status reports to the DISCOM to keep the DISCOM informed of the CSS situation. Because attaching the separate brigade to a division is not permanent, CSS arrangements facilitate eventually detaching the brigade from the division.

STRYKER BRIGADE COMBAT TEAM SUPPORT BATTALION

4-105. The Stryker brigade combat team (SBCT) is a full spectrum, combat force. It has utility in all operational environments against all projected future threats. However, it is designed and optimized primarily for employment in small-scale contingency operations in complex and urban operation, confronting low- and midrange threats that may employ both conventional and asymmetric capabilities. This brigade has an organic brigade support battalion (BSB) that provides direct support to the brigade.

The commander consolidates logistics functions under the C2 of the BSB headquarters. The BSB performs distribution-based, centralized support in accordance with Force XXI concepts, although the distribution capability is limited. Its effectiveness depends on employing the latest advances in CSS C2, enhanced CSS situational understanding, and exploiting available resources through joint, multinational, host-nation, or contract sources. The small size of the battalion significantly minimizes the CSS footprint in the SBCT AO, but also requires support from other organizations/sources for sustained operations. The BSB support operations section integrates into BSB operations the activities of the CSS assets required to support brigade augmentation slices. If the augmentation slice is large enough, a corps support battalion may have to deploy to provide the required C2.

4-106. The support provided by the BSB is austere; it does not provide the same level of support that FSBs provide to divisional maneuver brigades. The BSB has a headquarters and distribution company, a brigade support medical company (BSMC), and a forward maintenance company that rely on CSS reach operations, prepositioned stocks, augmentation, contracted, and joint and multinational support to meet the needs of the brigade. The BSB has limited capability to maintain stocks for brigade elements. Maximum use is made of contracted, host nation, joint, and intratheater lift capabilities (such as locally available commercial trucks and military cargo aircraft). The BSB distribution manager synchronizes delivery schedules with brigade units to minimize the offload/upload time. With Force XXI battle command brigade and below (FBCB2), CSSCS, and the movement tracking system (MTS) control station to manage long-haul sustainment, the distribution manager can give specific coordinating instructions to vehicle operators without having to rely on manned control points. When published, FM 4-93.7 and other associated doctrine will detail CSS for this brigade.

4-107. The need to augment the BSB to sustain the force after the initial stages of employment in extended operations has been a key tenet of the concept of support. The combat service support company (CSSC) provides reinforcing and complementary capabilities in the form of direct support CSS. A reinforcing capability adds quantity or capacity to a previously existing capability. Adding heavy expanded mobility tactical truck-load handling system (HEMTT-LHS) to an already existing transportation platoon is an example. A complementary capability adds a capability not previously existing within an organization. For example, adding cooks to the SBCT is augmenting the BSB. The capabilities provided by the CSSC are general supply support, limited distribution support, organizational and direct support maintenance (field maintenance), and field feeding support.

SPECIAL OPERATIONS SUPPORT COMMAND (AIRBORNE)

4-108. The Special Operations Support Command (Airborne) (SOSCOM) is a major subordinate unit of the U.S. Army Special Operations Command. The SOSCOM is a brigade-size unit organized into a command group, headquarters and headquarters company (HHC), MMC, five forward-deployed special operations theater support elements (SOTSEs), a special operations support battalion (airborne), and a special operations signal battalion (airborne). SOSCOM provides limited direct CSS and combat signal

support to ARSOF. FM 3-05.103 covers CSS for ARSOF. The SOSCOM is a versatile organization with multiple support missions:

- To plan, coordinate, and provide CSS and HSS to ARSOF across the full spectrum of conflict, in two theaters simultaneously.
- To plan, coordinate, and provide operational and tactical communications for joint special operations task force commanders in two theaters simultaneously.
- To provide signal force packages to support ARSOF, as directed/available.

4-109. The SOSCOM provides modular support packages to any ARSOF deployment. Modular design enables supporting units to tailor packages that meet mission requirements. These modules provide specific capabilities that most completely support deploying force. Additionally, groups of modules are echeloned and phased into theater as the mission expands or focus changes. These modules are configured into two echelons: an initial deployment package (IDP) and a follow-on package (FOP). The SOSCOM cannot provide all the necessary CSS to deploying ARSOF; they require augmentation from theater assets.

Chapter 5

Orchestrating the CSS Effort

Combat service support (CSS), like the other battlefield operating systems, is the commander's business. The purpose of Army CSS is to generate Army combat power, extend operational reach, and sustain the force. Achieving this purpose requires commanders at all levels to orchestrate effective CSS to Army forces by planning, preparing, executing and assessing CSS operations. CSS involves working with operations planners to determine requirements, acquire resources and distribute them. This is not a one-time event; support personnel continually integrate activities with operations staffs to adapt plans and activities to meet the changing needs of the commander. This chapter discusses CSS command and control (C2), the planning of CSS, preparation activities, considerations for the acquisition of resources, and distribution. It also includes an overview of CSS information systems and how civilian personnel and contractor support are integrated into the CSS effort to supplement the activities of CSS units.

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CSS COMMAND AND CONTROL

5-1. Command and control is the exercise of authority and direction, by a properly designated commander, over assigned and attached forces in the accomplishment of the mission. C2 functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission (FM 3-0). CSS command and control has two components: the commander and the C2 system.

CSS COMMANDER

5-2. The CSS commander is responsible for planning, preparing, executing, and assessing the CSS mission in coordination and in conjunction with the combatant commander's operations plan (OPLAN)/operations order (OPORD). Like the combat commander, the CSS commander must execute

the leadership aspects of visualizing, describing, and directing CSS operations (see FM 3-0).

Visualize

5-3. Upon receipt of a mission, CSS commanders conduct a mission analysis to develop their initial vision, which they continually confirm or modify. To visualize the desired outcome, CSS commanders must clearly understand the mission, enemy, troops, terrain and weather, time, civilian considerations (METT-TC) in the battlespace:

- What is the mission?
- What are the enemy's capabilities and likely actions?
- What are the characteristics of the AO?
- Do weather and terrain favor friendly or enemy actions?
- How much time is available?
- What CSS factors are most important?
- What role does civil considerations play?

This framing of the battlespace takes place during mission analysis (see FM 101-5) and continues with battle tracking during execution of the combat operation. This facilitates posturing for the most effective and efficient method of providing uninterrupted sustainment and building of combat power.

Describe

5-4. Unless subordinate commanders and staffs understand the commander's visualization, there is no unifying design. The commander must communicate his visualization by describing it in doctrinal terms. Commanders describe their visualization through the commander's intent, planning guidance, and commander's critical information requirements (CCIR), using terms suited to the nature of the mission and their experience. Commanders may also describe their visualizations graphically using doctrinal graphics for easier communication. Describing is not a one-time event. As the commander confirms or modifies his visualization, he continues to describe his visualization to his staff and subordinates so they may better support his decisionmaking. Better effort in describing leads to better comprehension by subordinates of the context of his decision. It also enables better decisions on subordinates part when exercising individual initiative.

Direct

5-5. CSS forces do not respond to a decision until directed to do so. To effect execution or adjustment decisions, the commander must direct the action. The normal means for directing changes in action during execution is the fragmentary order (FRAGO). Subordinate CSS forces then perform their own decisionmaking and direct actions by their forces. After the commander makes an execution or adjustment decision, the staff must synchronize the operation. This involves synchronizing the operation in time, space and purpose across all battlefield operating systems (BOS) to seize, retain, or exploit the initiative. The BOS is the physical means (soldiers, organizations, and equipment) to accomplish the mission. The BOS are intelligence, maneuver,

fire support, air defense, mobility/countermobility/survivability, CSS, and C2. FM 7-15 will provide details on the BOS.

5-6. Technology, the fluid nature of operations, and the volume of information increase the importance of commanders being able to visualize and describe operations. Modern information systems give the C2 system the capability to automate production of orders and associated graphics for dissemination, especially for execution decisions that use data already stored in a common database.

CSS COMMAND AND CONTROL SYSTEM

5-7. *The C2 system is the arrangement of personnel, information management, procedures, and equipment and facilities essential to the commander to plan, prepare for, execute, and assess operations* (FM 6-0). A commander cannot exercise C2 alone except in the simplest and smallest of units. Even at the lowest levels, a commander needs support to exercise C2 effectively.

Personnel

5-8. The C2 system begins with people. Since combat involves soldiers, no technology can reduce the importance of the human dimension; the commander must base his exercise of C2 on human characteristics rather than on equipment and procedures. Trained C2 personnel are key to effective C2 systems; the best technology cannot support C2 without them.

Information Management

5-9. Information management (IM) is the provision of relevant information to the right person at the right time in a usable form to facilitate situational understanding and decisionmaking. It uses procedures and information systems to collect, process, store, display, and disseminate information. It consists of relevant information and information systems. The computers (hardware and software) and communications directly involved in C2 constitute the information system.

Procedures

5-10. Procedures are standard and detailed sequences of activities to accomplish tasks. They govern actions within the C2 system to exercise C2 effectively and efficiently. Adhering to procedures minimizes confusion, misunderstanding, and hesitance as commanders rapidly shift forces to meet operational contingencies.

Equipment and Facilities

5-11. Finally, the equipment and facilities element provides sustainment and a work environment for the other elements of the C2 system.

5-12. As the Army moves toward more digitization in the C2 system, the most important aspect of digital capabilities centers on the combined suite of information technologies within the information system. The manner in which these technologies combine accelerates decisionmaking and makes it more accurate and reliable. Information systems reduce human labor and organize information into a usable form. Used correctly, these capabilities should allow commanders and staffs to spend more time and energy on the art and human dimensions of C2.

ARMY BATTLE COMMAND SYSTEM

5-13. The Army battle command system (ABCS) is the Army's C2 information system. ABCS comprises seven separate systems to support key C2 functions of maneuver, fire support, air defense, intelligence, air support, battle command, and CSS. While each C2 system provides detailed support of its BOS to the other ABCS systems, it also receives relevant information from the other C2 systems to provide the commander with a COP of the battlefield. ABCS allow commanders to provide information to subordinates to guide the exercise of disciplined initiative within the commander's intent. This information provides subordinates with a common operational picture (COP) to facilitate their own situational understanding and conveys their superior commander's perspective. Subordinates can visualize intuitively the effects of possible decisions on the rest of the higher commander's operation and accept or mitigate the costs of their decision. This situational understanding provides a context for subordinates to use when assessing information obtained at their level within which to exercise initiative consistent with their superior commander's intent. As subordinates act on their decisions, ABCS allows them to pass information about that decision to their commander. The higher commander can monitor the subordinate's action and, with his staff, resynchronize operations rapidly with ABCS after a subordinate exercises individual initiative.

Combat Service Support Control System

5-14. Combat service support control system (CSSCS) is the CSS node of the ABCS. It is an automated CSS C2 tool for the commander. CSSCS provides information collection and processing capabilities that support maneuver sustainment operations. CSSCS maintains the maneuver sustainment status of all assigned units, tracks the CSS commander's sustainment posture, and meets the combat commander's requirements for CSS information that affect the command's combat power. When the commander and staff combine the sustainment information from CSSCS with the information from other ABCS systems, the synergy of information produces the COP of the battlefield in near real-time; this COP enables the commander to make sound decisions.

5-15. CSSCS maintains a database of personnel, military specialties, equipment, ammunition, blood, repair parts, and other supply items. The commander identifies items within CSSCS he considers critical to the operation and forms a commander's tracked item list (CTIL). The CTIL forms the basis of CSSCS common information tracking and reporting from the company to theater level.

Force XXI Battle Command, Brigade and Below System

5-16. Force XXI battle command, brigade and below system (FBCB2) is a digitized battle command information system that provides on-the-move battle command information to tactical combat, combat support, and CSS commanders. FBCB2 is a key component of the ABCS and integrates with ABCS at the brigade and below level. It also interfaces with CSSCS. The CSS functions of FBCB2 include logistics situation reports, personnel situation reports, call for support, and logistics task order and task management.

CSS PLANNING

5-17. CSS is vital to executing operations successfully. CSS planning, preparation, execution, and assessment must be versatile; they complement combat plans and operations, thus enhancing the ability of the supported commander to accomplish his mission. Commanders must anticipate their unit mission requirements and provide responsive support. They assess what resources and capabilities are available in theater and tailor follow-on forces accordingly. They ensure deploying/deployed units are sustainable in the theater of operations until establishing lines of communication (LOC) or providing other support from within the area of operations (AO) (for example, through contracted support or host nation support [HNS]).

5-18. The combatant commander bases his CSS plan on the overall campaign plan. As he develops his strategic concept of operations, he concurrently develops, in coordination with his Army service component command (ASCC) and other service component commanders, a concept of support. They and their staffs consider the many support factors that affect the ability of forces to conduct operations. At operational level, CSS can be a dominant factor in determining the nature and tempo of operations.

5-19. In conducting (planning, preparing, executing, and assessing) operations, the ASCC commander's focus is on generating combat power by moving forces and materiel into the theater as well as on sustaining the forces there. ASCC commander's, in concert with their geographic combatant commander's guidance, are responsible for identifying ARFOR CSS requirements, coordinating resource distribution from the strategic base or local sources, allocating necessary CSS capabilities, and establishing CSS C2 relationships within the theater.

5-20. CSS planning should be centralized, comprehensive, tailorable, flexible, and continuous. Many of the factors planners consider are embedded in the discussions throughout this manual. Among other things, planners consider using Army prepositioned stocks (APS), in the theater or afloat, thereby reducing transportation requirements and providing earlier force closure for operations. If appropriate, they also consider joint, contracting, HNS, and multinational military sources. CSS planning—

- Identifies significant time-phased materiel requirements, facilities, and other resources necessary to support the operation.
- Identifies the capabilities, vulnerabilities, and limitations of the aerial ports of debarkation (APODs), aerial ports of embarkation (APOEs), seaports of debarkation (SPODs), seaports of embarkation (SPOEs), and their reception and clearance capabilities.
- Identifies support methods and procedures required to meet the needs of the commander.
- Identifies vulnerabilities of certain types of systems and forces, including vulnerability to weapons of mass destruction.
- Provides coordinating and controlling onward movement of arriving forces and materiel.
- Includes reasonably assured joint, contracting, HNS, and multinational military sources.

- Includes coordinating with national providers to identify sustainment capabilities to fill materiel requirements.

5-21. Using planning guidelines, planning factors, and established doctrine, CSS planners determine the quantities of supplies and services needed to support an operation. Before deployment begins, planners identify LOC capable of accommodating the types of aircraft and ships needed. Some commodities (such as fuel and ammunition) require special facilities and cannot be off-loaded everywhere without significant disruption of port activities.

ARMY PREPOSITIONED STOCKS

5-22. *Army prepositioned stocks* are supplies located at or near the point of planned use or at other designated locations to reduce reaction time and to ensure resupply (FM 100-17-2). These reserves are intended to provide support essential to sustain operations until resupply can be expected. APS remains set at the minimum level needed to sustain and equip the approved forces as outlined in the defense planning guidance. In case of a major theater war, APS is released as directed by the Chairman, Joint Chiefs of Staff, or the Chief of Staff, Army. Headquarters, Department of the Army approves releasing APS to support a small-scale contingency (SSC). The FM 3-35-series manuals provide detailed discussions on APS. There are four categories of APS.

Prepositioned Sets

5-23. Unit sets consist of prepositioned organizational equipment (end items, supplies, and secondary items) stored in unit configurations to reduce force deployment response time. Equipment is configured into brigade sets, division units, and corps/echelon above corps (EAC) units. Materiel is positioned ashore and afloat to meet the Army's global prepositioning strategy requirements of more than one contingency in more than one theater of operations.

Army Operational Project Stocks

5-24. Operational project stocks are materiel above normal table of organization and equipment (TOE), table of distribution and allowances (TDA), and common table of allowance (CTA) authorizations, tailored to key strategic capabilities essential to the Army ability to execute force projection. They authorize supplies and equipment above normal modified TOE (MTOE) authorizations to support one or more Army operation, plan, or contingency. They are primarily positioned in continental United States (CONUS), with tailored portions or packages prepositioned overseas and afloat.

War Reserve Sustainment Stocks

5-25. War reserve stocks are acquired in peacetime to meet increased wartime requirements. They consist of major and secondary materiel aligned and designated to satisfy the Army wartime sustainment requirements. They provide minimum essential support to operations and post-mobilization training beyond the capabilities of peacetime stocks, industry, and HNS. Sustainment stocks are prepositioned in or near a theater of operations to last until resupply at wartime rates or emergency rates are established.

War Reserve Stocks for Allies

5-26. War reserve stocks for allies (WRSA) is an Office of the Secretary of Defense (OSD)–directed program that ensures U.S. preparedness to assist designated allies in case of war. The United States owns and finances WRSA assets, and prepositions them in the appropriate theater. The United States positions APSs as follows:

- APS-1 (CONUS)—Operational project stocks and war reserve sustainment stocks.
- APS-2 (Europe)—Prepositioned sets, operational project stocks, and limited war reserve sustainment stocks.
- APS-3 (Army prepositioned afloat)—Prepositioned sets, operational project stocks, and war reserve sustainment stocks.
- APS-4 (Pacific)—Prepositioned sets, operational project stocks, war reserve sustainment stocks, and war reserve stocks for Allies-Korea (WRSA-K).
- APS-5 (Southwest Asia [SWA])—Prepositioned sets, operational project stocks, and war reserve sustainment stocks.

5-27. Land-based APS in Korea, Europe, or Southwest Asia allows the early deployment of a heavy brigade to those locations. These prepositioned sets of equipment are essential to the timely support of the U.S. National military strategy in the areas of U.S. National interest and treaty obligations. Fixed land-based sites store Army prepositioned sets of combat, combat support (CS), and CSS equipment; Army operational projects stocks (such as, chemical defense equipment, cold weather clothing, and petroleum distribution equipment); and sustainment stocks. Land-based sets can support a theater lodgment to allow the off-load of Army prepositioned afloat equipment, and can be shipped to support any other theater worldwide. FM 100-17-2 has more details on APS.

5-28. Prepositioning stocks provides the capability to rapidly resupply forces until sea lines of communication (SLOC) are established. Stocks are prepositioned in potential theaters. Alternatives are prepositioning stocks afloat or at an intermediate staging base (ISB), or assembling stocks in tailored packages for deployment with projected forces. In areas of potential operations with limited port facilities and requirements for SLOC, prepositioning port construction equipment and materiel is highly desirable.

5-29. The Automated Battlebook System (ABS) contains details on each APS program. G3 planners and unit movement officers use ABS to identify equipment in the categories *to accompany troops* (TAT) and *not authorized for prepositioning* (NAP). ABS also provides a consolidated list of all APS stockpile inventories. ABS supports deployment planning by providing the deploying unit with a contingency-updated database for all APS equipment and selected supplies in prepositioned locations. USAMC's Field Support Command (formally the Army War Reserve Support Command) updates the ABS continuously from the Army War Reserve Deployment System (AWRDS) database and, on request, provides units with a CD-ROM database. Forces Command (FORSCOM) is the proponent for ABS and can provide a mobile training team to units on request.

5-30. Army prepositioned afloat (APA) is the expanded reserve of equipment for an armored brigade, theater-opening CS/CSS units, port-opening capabilities, and sustainment stocks aboard forward-deployed prepositioned afloat ships. APA operations are predicated on the concept of airlifting an Army heavy brigade with logistics support elements into a theater to link up with its equipment and supplies positioned aboard APA ships and, subsequently, to conduct combat operations. See FM 100-17-1 for details.

HOST-NATION SUPPORT AGREEMENTS

5-31. Potential HNS agreements should address labor support arrangements for port and terminal operations, using available transportation assets in country, using bulk petroleum distribution and storage facilities, possible supply of Class III (bulk) and Class IV items, and developing and using field services. The United States should initiate and continually evaluate agreements with multinational partners for improvement. They should be specifically worded to enable CSS planners to adjust for specified requirements. Additionally, the commander should assess the risk associated with using HNS, considering force protection and operational requirements. FM 100-8 discusses more on this topic.

Note: If a command plans to use HNS, a primary objective is to ensure that the internal support of the nation providing the support is not disrupted.

CONTAINERIZATION

5-32. Containerization significantly improves the delivery times of supplies and other selected cargo to the AO by reducing handling, shipload, and discharge time. *Containerization* is the use of containers to unitize cargo for transportation, supply, and storage. Containerization incorporates supply, security, packaging, storage, and transportation into a distribution system from source to user. *Unitized* cargo or load is a single item or a number of items packaged, packed, or arranged in a specified manner that can be handled as a unit. Unitization may be accomplished by placing the item or items in a container or banding them securely together (JP 4-01.7). However, effectively using the system requires advance planning to ensure that necessary materials handling equipment (MHE) and container-handling equipment (CHE) are available. Throughput of containerized materiel requires the right MHE/CHE at the receiving end. Planners must consider using existing technologies to enhance visibility of location and content of containers. JP 4-01.7 details container doctrine.

FORCE PROTECTION

5-33. *Force protection* consists of those actions taken to prevent or mitigate hostile actions against DOD personnel (to include family members), resources, facilities, and critical information. These actions conserve the force fighting potential so it can be applied at the decisive time and place and incorporates the coordinated and synchronized offensive and defensive measures to enable the effective employment of the joint force while degrading opportunities for the enemy. Force protection does not include actions to defeat the enemy or protect against accidents, weather, or disease (JP 3-0). Force

protection at all levels minimizes losses to hostile action. Skillful and aggressive counterintelligence and threat assessments decrease the vulnerability of friendly forces. Effective operations security (OPSEC) keeps adversaries from identifying and exploiting essential elements friendly information. (See FM 100-6.) Properly dispersing CSS assets helps reduce losses from enemy fires and terrorist action. CSS commanders use camouflage discipline, local security, and field fortifications to reduce losses due to enemy actions. Protecting electronic links and nodes, to include combat troops with electronic devices, is vital to protecting information, information systems, and soldiers.

LOGISTICS PREPARATION OF THE THEATER

5-34. Logistics preparation of the theater (LPT) is a key conceptual tool available to personnel in building a flexible strategic/operational support plan. ***Logistics preparation of the theater*** **consists of the actions taken by combat service support personnel at all echelons to optimize means (force structure, resources, and strategic lift) of supporting the joint force commander's plan**. These actions include identifying and preparing ISBs and forward operating bases; selecting and improving LOC; projecting and preparing forward CSS bases; and forecasting and building operational stock assets forward and afloat. They focus on identifying the resources currently available in the theater for use by friendly forces and ensuring access to those resources. A detailed estimate of requirements, tempered with logistics preparation of the theater, allows support personnel to advise the JTF/ASCC/ARFOR commander of the most effective method of providing adequate, responsive support while minimizing the CSS footprint.

5-35. More often than not, identifying and preparing an initial lodgment or support base has a major influence on the course of a campaign. Lodgments should expand to allow easy access to strategic sealift and airlift, offer adequate space for storage, facilitate transshipment of supplies, and be accessible to multiple LOC. Thus, forces often establish lodgments near key seaports and airports in the theater. Logistics-over-the-shore (LOTS) operations may augment undeveloped or damaged facilities or provide ports where none exist. Conducting LOTS operations from anchorages becomes more important if the enemy has the capability to deliver long-range, highly destructive fires. Split-based operations and modular operations are often required while establishing an initial lodgment.

5-36. Seldom does an initial lodgment or support base contain the ideal mix of desired characteristics. The ASCC commander, in concert with the JFC, makes difficult choices when organizing support for the operation. One of the most difficult is whether to stockpile supplies forward in the theater, or rely on time-definite delivery from CONUS or from an ISB. Stockpiling places supplies in relatively close proximity to units but may place a burden on the theater support structure in terms of having to move, protect, and handle large quantities of support resources on a repetitive basis. On the other hand, while responsive distribution reduces this burden significantly, it is highly dependent on the availability and responsiveness of limited airlift assets to deliver critical supplies in a timely manner to ensure that fighting forces are able to sustain the desired tempo. The commander weighs the risks and benefits of both of these options then decides which can best fulfill the support re-

quirements. Depending on the METT-TC factors, he may transition from one option to the other, or adopt a combination of both.

5-37. Selecting and improving LOC are essential aspects of maintaining uninterrupted CSS throughout an operation. The operational commander must understand the relationship between stockage, time, LOC, and combat power. Time spent in deliberate preparation (projecting and preparing an ISB and forward support bases, and positioning resources in them) can result in shorter LOC and greater operational capability in the future. This was the case in Operation Desert Shield and Operation Desert Storm, where Army forces positioned bases forward as part of the U.S. Central Command's strategic concentration to support future operations. On the other hand, the age-old problem of overextended LOC and supply shortages can have a detrimental impact on a large force trying to conduct offensive operations. Conducting nonlinear operations also greatly complicates the requirement to ensure LOC security. Operations and CSS planners must take great care in planning LOC security in any nonlinear operation.

RELEVANT INFORMATION

5-38. *Relevant information* is all information of importance to commanders and staffs in the exercise of command and control (FM 3-0). Relevant information provides the answers commanders and staffs need to conduct operations successfully, that is, all elements necessary to address the factors of METT-TC. Once CSS planners know a contingency country or geographic region, they begin to build a CSS relevant information database. They develop this CSS relevant information in close coordination with the intelligence and operations community's intelligence preparation of the battlefield effort. When completed, they can use the information in the database to develop a comprehensive plan for LPT. The relative priority of this effort depends on the concept of operations, along with other command priorities. Because it is a complex and time-consuming function, CSS planners cannot afford to wait until deployment begins to start the LPT. Anticipation by CSS planners at the National and combatant command levels can preclude inserting soldiers into a completely "cold" base.

5-39. Planning must provide for the timely arrival of CSS assets balanced according to the mission. Strategic lift assets are extremely limited, and commanders cannot afford to squander even one sortie on movement of unnecessary supplies, equipment, or personnel. A well-thought-out LPT plan, along with the time required for proper execution, allows better use of scarce strategic lift capability. A detailed LPT plan covers the following areas.

Geography

5-40. Planners collect information on climate, terrain, and endemic diseases in the AO to determine when and what types of equipment are needed. For example, water information determines the need for such things as early deployment of well-digging assets and water production and distribution units.

Supplies

5-41. Planners collect information on supply items that are readily available in the AO and can support U.S. forces. Subsistence items, bulk petroleum,

and barrier materials are the most common. Planners must answer several questions, such as:

- Can any of these items be purchased locally?
- What supply systems are the Allies/coalition partners using? Are they compatible?
- Are major equipment items compatible?
- Does the host nation (HN) have repair parts that support current U.S. systems?

Answers to these types of questions assist in determining if HNS negotiations are feasible, if not already in place.

Facilities

5-42. Planners collect information on the availability of such things as warehousing, cold-storage facilities, production and manufacturing plants, reservoirs, administrative facilities, hospitals, sanitation capabilities, and hotels. Availability of such facilities could reduce the requirement for deployment. For example, force provider can house approximately 3,300 personnel. (See chapter 6.) However, if space is available in a complex of hotels with the requisite support in the required location, deploying the force provider, with its significant strategic lift requirements, could be eliminated or deferred.

Transportation

5-43. Planners collect information on such things as road and rail nets, truck availability, bridges, ports, cargo handlers, petroleum pipelines, MHE, traffic flow, choke points, and control problems.

Maintenance

5-44. Planners examine the multinational partners' armed forces and answer such questions as—

- Can they supplement the Army capability?
- Does a commonality exist in such things as equipment and repair parts?
- Does the host nation have adequate machine works for possible fabrication of repair parts?
- Are there theater support contract maintenance capabilities available?

General Skills

5-45. Planners collect information on the general population of the AO. They get answers to such questions as:

- Is English commonly spoken?
- Are interpreters available?
- Will a general labor pool be available?
- What skills are available (drivers, clerks, MHE operators, food service personnel, guards, mechanics, and longshoremen available)?

5-46. Collectors routinely provide an abundance of information on targeted theaters or likely contingency areas. Also, agencies can assist CSS personnel

in building the information file. The following sources of information are only a few; this list is not all-inclusive.

Department of State

5-47. Department of State embassy staffs routinely do country studies. They also produce information on foreign countries, including unclassified pamphlets. These pamphlets focus on political and economic issues, not military or CSS matters.

Intelligence Preparation of the Battlefield Data

5-48. The weather and terrain databases in the IPB, with its overlays, provide current information for preselecting LOC and sites for CSS facilities. The IPB event analysis matrix and template can determine the need for route improvements and bridge reinforcements. FM 34-130 has more details.

Special Operations Forces, to Include Civil Affairs Units

5-49. Whether in country or targeted on a specific country, SOF can provide a wealth of CSS information. They include functional specialists who focus on particular areas (such as civilian supply, public health, public safety, and transportation). Civil affairs (CA) units also can provide vital assistance when coordinating theater contract support and CUL support to NGOs.

Culturegrams

5-50. Culturegrams are a series of unclassified pamphlets published by Brigham Young University that provide general/social information on specific countries. Though not focused on governmental or military interests, they provide a variety of useful information that can be used by deploying forces.

Army Country Profiles

5-51. Army country profiles (ACPs) are produced by the Army Intelligence Threat Analysis Center. ACPs are classified country profiles providing information on logistics, military capabilities, intelligence and security, medical intelligence, and military geography. They include photos, maps, and charts.

Country Contingency Support Studies

5-52. Country contingency support studies are produced by the Defense Intelligence Agency (DIA). These classified documents contain extensive information on railways, highways, bridges, and tunnels within a given country.

5-53. Other assets or tools the CSS planner may want to consider as the LPT plan is developed include—

- Army prepositioned stocks.
- Use of containerization to limit handling.
- HNS agreements.
- ISSAs and ACSAs.
- Prearranged contracts to provide support.

5-54. The CSS planner must not underestimate the time and resources required for these actions. The LPT is a living document that is in a continual state of review, refinement, and use. Forces should use it as the basis for negotiations, preparing the TPFDD, and the Total Army analysis process.

NEGOTIATIONS

5-55. The LPT should be the basis for negotiating HNS and theater support contracting agreements. Considerations may include prepositioning of supplies and equipment, civilian support contracts, OCONUS training programs, and humanitarian and civic assistance programs designed to enhance the development and cooperative solidarity of the host nation, and provide infrastructure compensation should deployment of forces to the target country be required.

TIME-PHASED FORCE AND DEPLOYMENT DATA

5-56. The LPT should be synchronized on a regular basis with the TPFDD to ensure that only the CSS capabilities that cannot be met with assurance from another source are phased into the AO. This synchronization takes place, at a minimum, each time the commander updates the LPT to ensure that only the minimum necessary strategic lift is committed to CSS assets.

5-57. The ASCC commander identifies the number of Army units, including CS and CSS organizations, required to support the combatant commander's campaign plan. This force tailoring becomes the basis for resourcing decisions concerning the various force compositions active component, U.S. Army Reserve, Army National Guard, and stationing plans. (FM 3-0 discusses force tailoring.) A current, well-developed LPT enables the ASCC commander to make sound force tailoring and resourcing decisions.

ACQUISITION OF RESOURCES

5-58. The LPT ties support requirements and acquisition support together at the operational level. The LPT process ensures CSS personnel have considered all possible sources of support. The LPT provides the details in the CSS reach consideration of such sources as joint and multinational capabilities, HNS, and contractors. It also considers the link to the support capabilities available in the sustainment base.

5-59. The acquisition of resources refers to the activity at all levels to gain access to the support resources identified in the requirements determination aspect of planning. The process of acquiring resources is closely related to force tailoring in two ways: the commander aims to attain the resources identified during the planning process, and barriers to acquisition may influence support requirements. The acquisition of CSS resources is also associated with distribution. What is acquired, and where and how it is acquired, may depend on distribution capabilities. At all levels, CSS personnel are aware of and exploit all possible sources of support.

5-60. Acquisition of resources to support military operations involves such varied activities as—

- Contracting materiel and services.
- Negotiating ISSAs and ACSAs at the National level.
- Arranging LOGCAP and HNS agreements.
- Utilizing private voluntary and nongovernmental organizations.
- Recruiting military and civilian personnel.
- Conducting mobilization activities.

5-61. Planners must understand the availability of support capabilities from all possible sources to acquire them efficiently. They need to understand the requirements and assets available in all theaters, as identified in LPTs, to ensure arrangements are in place to acquire additional required resources.

5-62. In many operations, the primary source of supplies and other resources is from the sustainment base, as coordinated through the support managers at the operational level. Other sources may include other services or multinational partners and contractors (as covered in paragraph 5-86). Tactical-level CSS may include limited support from local purchase sources and short-term local support agreements with collocated joint or multinational partners. Cross-leveling assets are also part of determining what resources are available to meet the needs of the supported force.

DISTRIBUTION

5-63. *Distribution* is the process of synchronizing all elements of the CSS system to deliver the right things to the right place at the right time to support the commander. The distribution system is a complex of networks tailored to meet the requirements of the force across the range of operations. These networks are overlaid on existing infrastructure that the host-nation and military, civilian, and multinational forces participating in the same operation must share. Combinations of U.S. military, host nation, multinational, and contractor organizations operate the nodes and modes that distribute the forces and sustainment resources. These organizations collect and report data to a network of operational and CSS headquarters responsible for processing the data into information and issuing instructions to the node and mode operators. This process enables the JFC and subordinate ARFOR commander to carry out CSS effectively and efficiently.

5-64. Army distribution planning focuses on providing a versatile, continuous flow of personnel, materiel, and services to support the operational requirements of the ARFOR. CSS planners must consider the impact, constraints, and AO of each of the distribution functions, systems, and information systems required to sustain the flow of resources. The distribution management plans must focus on supporting operations across full spectrum operations within a joint and often multinational and interagency operational environment. Understanding the JFC's concept of operations and early involvement by the CSS staffs and planners at all levels are essential to ensure responsive CSS. Distribution planning must incorporate strategic, operational, and tactical deployment and sustainment requirements while balancing the theater distribution capabilities and resources available to the JFC and service component commanders.

5-65. Detailed planning for distribution operations is a key part of the environment of the distribution manager. Commanders, support operations elements, and control centers must plan far enough ahead to influence the flow within the strategic segment of the distribution pipeline. Success requires periodic monitoring of resource and movement transactions, knowledge of trends and performance, and knowledge of the commander's operational priorities. Planning makes future operations easier by permitting subsequent, rapid, and coordinated action by the staff and by other elements of the com-

mand. It also keeps the command in a better position to respond to rapidly changing situations. Adequate, practical planning is essential to the success of distribution.

5-66. Figure 5-1 depicts the interrelationship of the distribution plan with the LPT and the service support plan, with its associated annexes and appendices. At the strategic and operational levels, the OPLAN/OPORD provides operational mission information essential to developing the LPT. The LPT provides the data required to prepare the logistics estimate. This estimate draws conclusions and makes recommendations concerning the feasibility of various courses of action (COAs), and the effects of each COA on CSS operations. Once the commander selects a COA, the CSS planner uses the logistics estimate to develop the logistics portion of the service support plan along with the distribution plan to the OPLAN/OPORD.

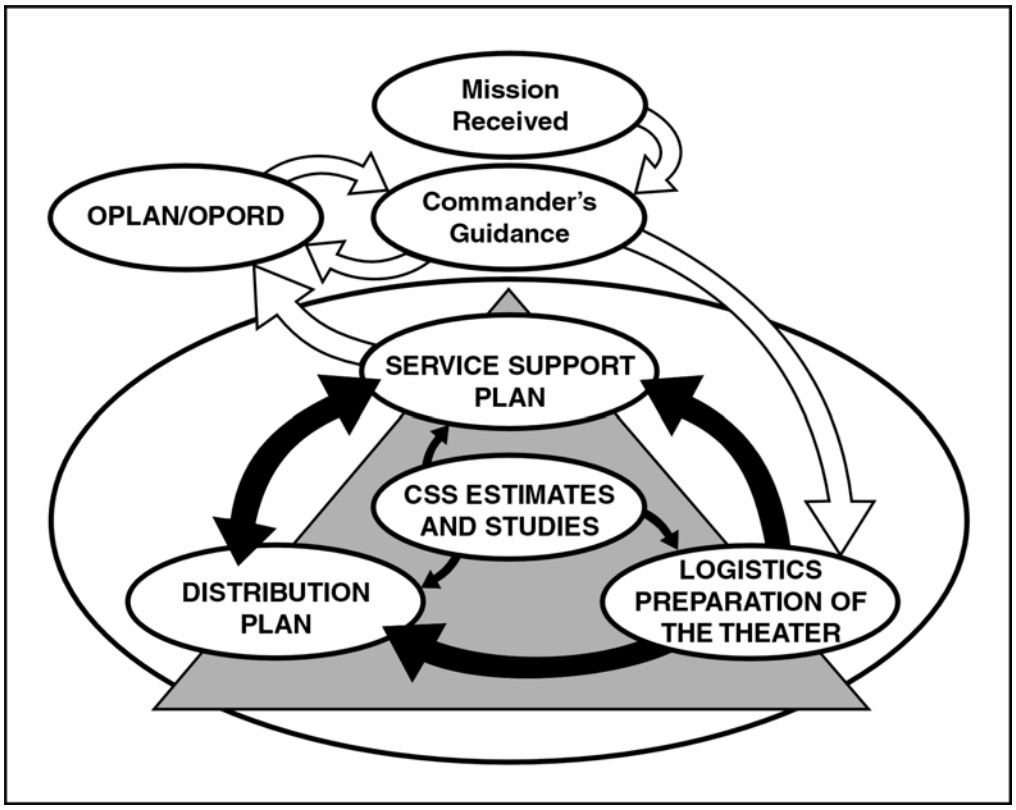

Figure 5-1. Inter-relationship of the Distribution Plan with the LPT and the Service Support Plan.

5-67. The LPT, service support plan, and distribution plan are living documents within the CSS planning triad that are changed, refined, and updated as a result of continuing estimates and studies.

5-68. The distribution pipeline is a channel through which the DOD conducts distribution operations. The pipeline consists of a complex framework of integrated national/theater-level physical and resource networks linked by in-

formation systems. Figure 5-2 shows the end-to-end flow of resources from supplier to consumer.

5-69. The supported combatant commander's perspective of the distribution pipeline includes two portions: the strategic portion and the theater portion.

5-70. The strategic portion has two distinct functional areas performed by DLA and other strategic providers and by U.S. Transportation Command (USTRANSCOM). DLA, respective service strategic-level CSS activities (such as USAMC and USAMMA), and installations provide maintenance, preparation for movement of units and equipment, and materiel support.

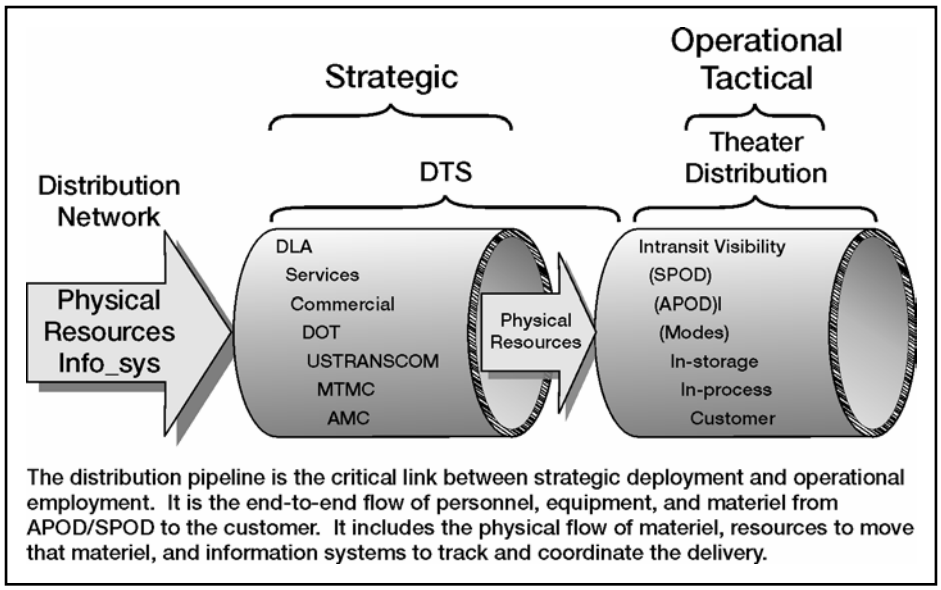

Figure 5-2. The Distribution Pipeline.

5-71. The second functional area relates to strategic lift and in-transit visibility. USTRANSCOM and its subordinate transportation component commands using the Defense Transportation System (DTS), are the key organizations in this area. The DTS is the portion of the nation's transportation infrastructure that supports DOD common-user transportation needs across the range of military operations. USTRANSCOM has developed a single database to provide in-transit visibility to all DOD activities. This database is the Global Transportation Network (GTN) and contains all DTS-related transactions and movement status.

THEATER DISTRIBUTION

5-72. The theater portion of distribution is the responsibility of the geographic combatant commander, but a subordinate JTF normally executes this responsibility. Theater distribution occurs in the distribution pipeline extending from the port of debarkation (POD) to the user. Distribution resources within the theater are finite, and regardless of the commodity distributed or the operational phase, the distribution system competes for resources. The

theater distribution manager must possess total visibility over all distribution capabilities, service requirements, and common-item supply resources flow within the theater distribution system. This maximizes distribution flexibility and combines the overall system capacity. JP 4-01.4, which is currently under development, will be the joint reference for theater distribution.

5-73. The individual subordinate JFC is responsible for managing an effective distribution network. Many options are available to meet a JFC's requirements. His choice depends on the type and size of the operation and the campaign objectives. He may direct subordinate service components to manage and operate their own distribution systems. He may establish a logistics readiness center (LRC) and/or a series of joint boards and management centers at the combatant command and/or subordinate JTF levels. These joint activities establish policies and set priorities ensuring the flow of resources to support the joint/multinational campaign. FM 100-10.1 has more information.

5-74. Theater distribution synchronizes improvements in distribution activities; such, as movement control, mode operations, materiel management, supply and service support, and associated technology. The result is increased speed within an effective theater distribution system. CSS personnel integrate the current strategic, operational, and tactical level of distribution into a seamless joint continuum.

5-75. Theater distribution planning, preparation, execution, and assessment considerations are functions of visibility, management, and transportation support. Logistics planners consider theater distribution in every aspect of operational planning throughout the processes of mobilization, deployment, employment, sustainment, and redeployment. The critical link between strategic deployment and operational employment is the seamless flow of personnel, equipment, and materiel from off-load at POD through employment of reassembled, mission capable forces in the operational area. Figure 5-3 depicts the link between the strategic and theater pipelines.

5-76. Throughout joint operations, the combatant commander continually matures the joint distribution system capability, and controls the flow of units and materiel within the theater to support the mission. The combatant commander and staffs manage and coordinate critical distribution resources and assets among the ASCC and other service components.

5-77. The combatant commander manages the theater piece of the distribution pipeline that comprises all the networks through which materiel and units flow before reaching their final destination. Theater distribution is accomplished from the PODs or other in-theater locations to the customers. It includes the physical flow of materiel and movement of forces, and associated information. An effective communications infrastructure needs to be in place to achieve the goals of theater distribution at the combatant command level. Similarly, the ASCC and other service components are responsible for upgrading their internal networks and identifying funding, placing required infrastructure, and placing their own distribution networks from the component to the tactical level. Additionally, each service component is responsible for upgrades that may be required to conduct theater distribution in accordance with, and in support of, the concept of operations for each theater. It is

critical that the capabilities for theater operations be interoperable, flexible, responsive, disciplined, survivable, and sustainable. The geographic combatant commander designs theater distribution information to provide the visibility he requires.

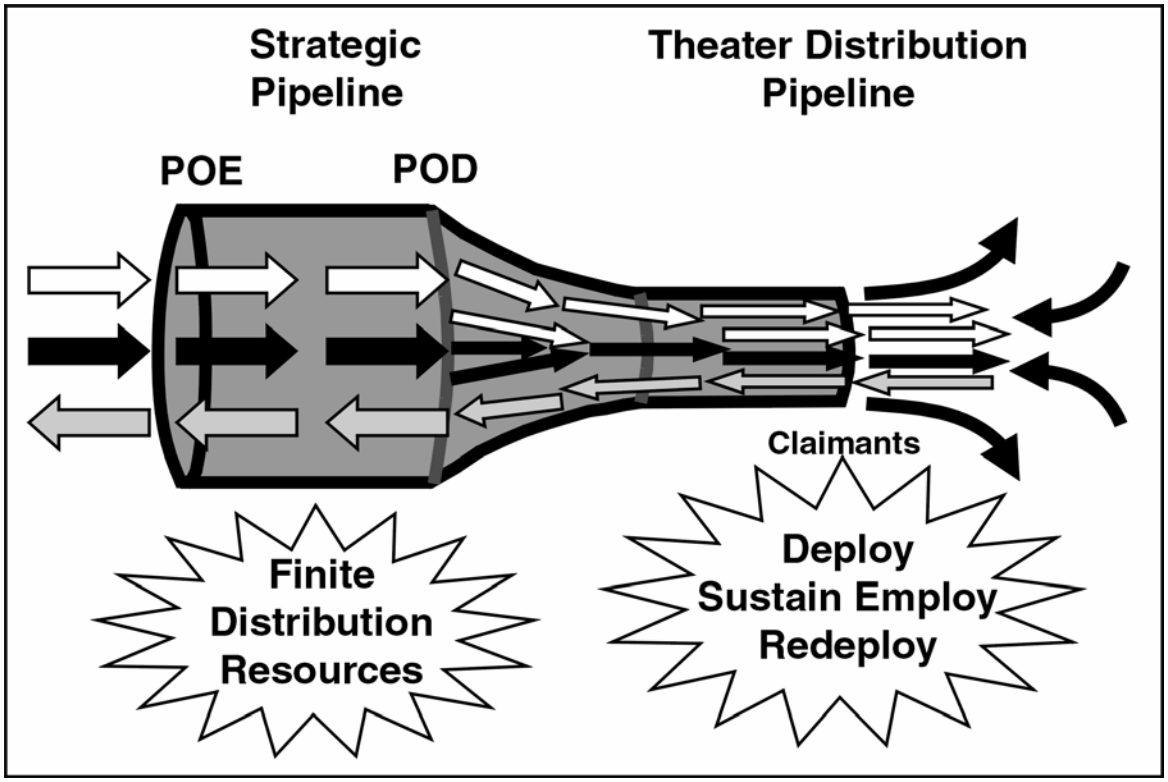

Figure 5-3. Distribution Operations.

5-78. Joint information systems are essential to theater distribution. To ensure success, commanders and staffs must have the ability to communicate among themselves and with other services and forces. This capability is made possible through links between the global combat control system (GCCS) and the global combat control system—Army (GCCS-A). GCCS-A links the Army's operational and tactical command and control systems to the strategic level—GCCS. GCCS-A is a component of the ABCS. ABCS is comprised of eight separate systems to support key command and control functions of maneuver, fire support, air defense, intelligence, air support, battle command, and CSS. While each command and control system provides detailed support of its battlefield functional area to the other ABCS systems, it also receives the relevant information from the other command and control systems to provide the commander with a common operational picture of the battlefield. At the strategic level, the CSSCS is the CSS component of ABCS. CSSCS provides a concise picture of unit maneuver sustainment requirements and support capabilities by collecting, processing, and displaying information on key items of supply, services, and personnel that the commander deems crucial to the

success of the operation. CSSCS does not duplicate STAMIS functions. The management of all items within a class of supply or support function remains a STAMIS function. Other emerging systems are GCSS, GCSS-A, transportation coordinators automated information for movement system II (TC-AIMS II). These systems are discussed later in this chapter.

5-79. Staffs must quickly and accurately distribute information to elements within the distribution system. Some examples of the communications systems to accomplish this are area common user system (ACUS), warfighter information network-tactical (WIN-T), and garrison communications.

THE ARMY ROLE

5-80. Ongoing developments in CSS activities support the Army role in theater distribution as it moves to distribution-based CSS. These include establishing distribution management centers/elements (DMC/E), developments in information systems, advancements in configured loads, emphasis on maximizing throughput, and enhancing capabilities to operate intermodal terminals.

Distribution Management

5-81. To facilitate distribution management, the Army is creating distribution DMC/Es within theater, corps, and division support commands. For Army forces, the key link to the theater system is the TSC DMC. It develops the ASCC's piece of the distribution plan in coordination with the ASCC G4. It also exercises staff supervision of Army EAC materiel managers and movement controllers. Using liaison elements in the DMCs is a critical factor in ensuring that the ASCC's piece of the theater distribution system is as responsive and efficient as possible. To facilitate distribution management operations, other CSS commands/units routinely provide liaison elements to the DMC to ensure that the support their organizations are responsible for is fully synchronized into the overall distribution system for all supplies and services. FM 4-93.4 describes the full role of the TSC DMC. Some key functions are—

- **Maintain visibility of locations of support activities and customers**. STAMIS can provide some of this information. However, current systems are not programmed to provide it. Systems under development will provide this information much more effectively. Until GCSS-A and the movement tracking system (MTS) are in place, the DMC gets much of its information from information systems such as CSSCS or from nonautomated reports.
- **Maintain information on support relationships**. If directed by the ASCC/ARFOR G4, the TSC DMC can provide support relationship information directly to the combatant command/JTF J4 staff.
- **Effect cross leveling**. The DMC currently can obtain on-hand and due-in status to support cross-leveling through the Standard Army Retail Supply System–Objective (SARSS-O), Standard Army Ammunition System–Modified (SAAS-MOD), and the Army Medical Management Information System (TAMMIS). If no assets are readily available from the wholesale system, the DMC inquires into asset tracking services (joint total asset visibility [JTAV], Army total asset visibility

[ATAV], GTN) to find a match for high-priority requirements from inbound materiel. For Army materiel, the DMC instructs movement controllers to divert shipments or redistribute assets to the appropriate SSA. For non-Army owned materiel, the DMC coordinates with the applicable lead service or joint board/staff to affect cross-leveling. The TSC DMC coordinates with COSCOM and DISCOM DMCs to synchronize cross-leveling assets across all Army echelons, as necessary.

5-82. Loads configured by Army and other elements also enhance the efficiency of the joint distribution system.

5-83. Theater and corps hubs provide the basis for the theater distribution pipeline. Hubs receive and stage all supplies, personnel, and units moving into the theater and prepare them for onward movement to their final destination. FM 100-10.1 lays out the flow of supplies and services through the theater hub, from reception in the theater hub to delivery at DS activities in the combat zone. Within the distribution hub at each echelon, the Army establishes one or more intermodal terminals for cargo. These terminals segregate, consolidate, manifest, and stage cargo for delivery. They use cross-dock operations to segregate and ship cargo to satellite nodes in the system. More details on nodes in the distribution system, as well as other information on the Army's role in theater distribution are in FM 100-10.1.

Information Systems to Support Distribution

5-84. Information technology improvements are revolutionizing CSS. Distribution managers require timely and accurate TAV information to manage the distribution pipeline efficiently and effectively to build and sustain combat power. This includes information about warfighter requirements, tactical operations and the overall situational awareness from the ABCS (such as CSSCS) and the on-hand, in-transit and in-maintenance TAV information. The ability to receive the logistics portion of the COP in the form of TAV enables CSS operations to build and sustain combat power efficiently and effectively for the warfighter. This section discusses the integrated role of information systems in the distribution system. The functional chapters of this manual and/or proponent doctrinal manuals address the specific functional capabilities of these information systems.

5-85. TAV has three primary components: asset visibility, in-transit visibility, and in-maintenance visibility. The Army is developing a variety of information systems to better support total asset visibility. GCSS-A and the Standard Installation/Division Personnel System (SIDPERS) capture asset visibility of personnel and materiel. TC-AIMS II, and MTS provide in-transit visibility of personnel and materiel. These information systems have an integrated suite of radio frequency (RF) technology. Together, these systems provide the total asset visibility capability to support CSS operations. These capabilities are critical in executing distribution operations. CSS personnel supporting distribution operations and equipped with these information systems support the force commander with greater responsiveness, anticipation, and agility from a smaller CSS footprint. Visibility of all unit equipment, personnel, and supplies enable CSS operations to leverage limited CSS capabilities to support Army forces.

- Asset visibility involves the ability to see what is on-hand and on-order. In-theater asset visibility begins at the SSA for cargo and at replacement centers for personnel. The SSA and DMC track cargo receipt, storage, and issue functions using GCSS-A and radio frequency data collection (RFDC). Information from RF tags required for receipt, storage, and issue processing passes to the GCSS-A management module. The replacement centers and DMC track personnel using SIDPERS and smart cards. Information from smart cards for personnel processing passes to the GCSS-A management module.
- In-transit visibility is the ability to see what is moving in the distribution pipeline. In-theater in-transit visibility begins at the POD during RSO&I. Reception at the POD involves receiving strategic lift manifest information of unit equipment, personnel, and sustainment cargo—the source data for in-theater total asset visibility. USTRANSCOM information systems, worldwide port system (WPS), and the Global Air Transportation and Execution System (GATES) process receipt of unit equipment, personnel, and sustainment cargo from strategic lift vessels. This information is forwarded to the GTN. Information from WPS and GATES passes to the Army theater-level information system—TC-AIMS II (when fielded). Unit equipment and sustainment cargo is tracked using RF tags attached to equipment, containers, and pallets in the port marshalling area. Information from RF tags passes through TC-AIMS II to the GCSS-A management module onward movement in the AO from port marshalling/staging areas and personnel-holding areas is supported by the MTS at the platform level. This provides modal visibility for moving cargo. The TC-AIMS II provides nodal visibility of moving cargo. Transportation control and movement document (TCMD) information moves from the RF-tagged, MTS-equipped distribution platform up to the GCSS-A management module via the TC-AIMS II system. Critical nodes along the distribution pipeline will be equipped with the TC-AIMS II to move TCMD information from the RF tags to the GCSS-A management module.
- In-maintenance, visibility refers to the ability to see what is being repaired. In-maintenance, visibility begins with current shop status of equipment at direct support maintenance locations in the AO. Maintenance status information passes through GCSS-A to the GCSS management module. RF data collection bar code scanners are receipts of parts for maintenance operations. Future uses of RF technology include tracking internal maintenance shop workload and equipment history.

CIVILIAN PERSONNEL

5-86. Army CSS units normally provide the backbone of support to Army forces in full spectrum operations. However, CSS commanders and staffs also integrate the efforts of DA civilians and contractors. Civilian personnel provide essential CSS for military operations in peacetime as well as during operations.

5-87. Identifying requirements for civilian personnel (governmental or nongovernmental agency civilians and contractors) and identifying qualified personnel to fill those requirements are essential when planning for operations. Appropriate proponents must ensure that civilians are incorporated into deliberate planning so they are trained and ready in a timely manner. Four reasons for employing civilians are that they—

- Complement military capabilities, thus freeing soldiers for other duties as assigned.
- May be employed without a mobilization to perform functions that may otherwise require an AC or RC unit to perform.
- Have technical skills that are not available in the uniformed components.
- May be required in place of military support personnel/units to meet military personnel force caps.

DA CIVILIANS

5-88. Fifteen hundred DA civilians in more than 100 different occupational specialties deployed from commands throughout the world to Southwest Asia during Operation Desert Shield and Operation Desert Storm. In future operations, DA civilians will continue to play an important role in Army operations, fulfilling critical functions on the battlefield. The functional proponent for Army personnel support to DA civilians (appropriated and nonappropriated fund [NAF] employees) is Headquarters, Department of the Army, G1. Contracting activities and contracting officers provide contractual oversight for contract civilians. The Army and Air Force Exchange Service (AAFES) performs NAF civilian personnel management for AAFES personnel.

5-89. Civilian personnel who provide essential CS and CSS roles in a theater are a key part of the Army. For example, civilian members of the logistics support element (LSE) provide national-level supply, maintenance, and technical assistance; AAFES deploys civilians to run exchange systems for everyday necessities. This civilian workforce includes CONUS expansion and OCONUS requirements to support military operations.

CONTRACTORS

5-90. Contracted support is an effective force multiplier. It can bridge gaps before military support resources arrive and when host-nation support is not available. It also augments existing support capabilities. Theater support contracts may provide effective support thus allowing the combatant commander to better operate within the limits of strategic lift or military force caps realities, particularly in stability operations and support operations.

5-91. The type and quantity of support a contractor provides is similar to that provided by a military support unit, when considered from a customer perspective. However, commanders and staffs must remain aware of some fundamental differences. For example—

- Contractors perform only the tasks specified in the contract. Other duties as assigned does not apply in a contract environment, thus reducing the flexibility of support.

- Contractors and their employees are not combatants, but rather civilians accompanying the force. This status must not be jeopardized. They cannot man the security perimeter, possibly increasing force protection requirements when compared to using military CSS capabilities.
- Contractor status in a combat environment as civilians accompanying the force is clearly defined in the Hague and Geneva Conventions and other international agreements. If captured, they are entitled to prisoner of war status.
- Contractor activities are managed through the command's contracting structure, not the operational chain of command. Commanders do not have command of contractor employees; contractor personnel are not government employees. Only contractors manage and supervise their employees. Commanders manage contractors through the contracting officer and contracting officer's representative (COR) in accordance with the terms and conditions of the contract.

Types of Contractors

5-92. There are three types of contractors. They are characterized by the general type of support provided and by the source of their contract authority.

5-93. **Theater Support Contractors**. Theater support contractors support deployed operational forces under prearranged contracts, or contracts awarded from the AO, by contracting officers serving under the direct contracting authority of the theater principal assistant responsible for contracting (PARC). Theater support contractors provide goods, services, and minor construction, usually from the local vendor base, to meet the immediate needs of operational commanders.

5-94. **External Support Contractors**. External support contractors provide for deployed forces support, separate and distinct from either theater support or system contractors. They may be associated with prearranged contracts or contracts awarded during the contingency. Contracting officers who award and administer external support contracts retain distinct contracting authority to organizations other than the theater PARC. USAMC, for example, provides commercial depot support through contracts by its commodity commands. Other organizations provide external support contracts. For example, the LOGCAP program office administers its prearranged umbrella contract, commonly referred to as LOGCAP, and USTRANSCOM provides the Civil Reserve Air Fleet (CRAF) and commercial sealift supporting the theater. In addition, the U.S. Army Corps of Engineers (USACE) procures leased real property and real estate.

5-95. **System Contractors**. System contractors support deployed forces under prearranged contracts awarded by program executive officers (PEOs), program managers (PMs), and the USAMC to provide specific support to materiel systems throughout their life cycles, during both peacetime and contingency operations. These systems include, but are not limited to, vehicles, weapon systems, aircraft, and information systems infrastructure and equipment. Contracting officers working for the PMs and USAMC subordi-

nate commands administer their system contractor functions and operations via their contracts.

Contractable Functions on the Battlefield

5-96. Depending on the situation and associated risks, a contractor may augment or provide a variety of support functions on the battlefield. All Army functions, other than those inherently governmental in nature (armed combat, command and control of U.S. military and/or civilian personnel, and government contracting) or functions covered by HNS agreement may be suitable for contractor support.

5-97. **Supply and Field Services**. Contractors can provide the full range of supply and field services, including item management, stockage, and delivery of all classes of supply. Contractor support may also provide field services (such as, laundry, shower, clothing exchange and repair, water purification, waste disposal, portable latrine support, and mortuary affairs), within specific parameters.

5-98. **Transportation Support**. Contracts may support all modes of transportation at the strategic, operational, and tactical levels. Transportation is required everywhere within the theater, from the POD into the combat zone. Contractor support may include all mode and terminal operation functions.

5-99. **Maintenance Support**. Because of the increasing sophistication of equipment and weapon systems, they are a prime area for contractor support. Development and production contractors provide follow-on maintenance and technical support to the systems they have developed and built. This support includes sustainment maintenance on specified equipment and weapon systems and subsystems and associated software, and extends over the entire life cycle of the system, in peace and war. Contractors (other than system contractors) may also be involved in routine maintenance, repair, rebuild, and overhaul programs for equipment that is not the responsibility of a system contractor.

5-100. **Medical/Dental**. Contractors can support health care for contingency operations. An assessment of the capabilities and standards of care provided by the host-nation medical treatment facilities determines the extent of HSS capabilities required to support military operations.

5-101. **General Labor**. Under the staff responsibility of the G1/S1, unskilled labor may be contracted on a daily basis. This satisfies government labor needs that do not require military skills or a skilled contractor workforce.

DA Civilian and Contractor Risk Assessment

5-102. Properly evaluating the use of DA civilians and contractor support to a military operation requires a risk assessment. (FM 100-14 contains risk management doctrine.) There are two aspects of risk assessment related to the use of DA civilians and contractors. The first focuses on the threat to the contractor employees' physical safety. As part of his campaign plan, the JFC plans for contractors on the battlefield and establishes guidelines/restrictions on location of these personnel within the AO. With use of contractors in high-risk situations, contract solicitations must clearly identify the services needed and the conditions under which they will be performed. When con-

tractors are willing to perform under dangerous conditions, the degree of risk involved substantially influences the cost of a contract. The second aspect of risk assessment focuses on the impact of DA civilian and contractor support on mission accomplishment (or, more importantly, the potential for mission failure if civilian employees cannot or will not perform functions due to the level of hostilities). In some situations, the risk or cost of using DA civilians and contractors may not warrant their use in certain operations, locations, or functions. For more detailed information on contractor support to military operations, consult JP 4-0, FM 100-10-2, and FM 3-100.21.

Chapter 6

Supply and Field Services

Supply and services consist of wide-ranging functions that extend from determining requirements at the strategic level to delivering items and services to the user at the tactical level. Supply involves acquiring, managing, receiving, storing, and issuing all classes of supply except class VIII. Field services involve feeding, clothing, and providing personnel services to soldiers. It consists of clothing exchange, laundry and shower support, textile repair, mortuary affairs, preparation for aerial delivery, food services, billeting, and sanitation.

THE SUPPLY SYSTEM

6-1. The supply system spans all levels of war. The following is a discussion of the considerations at each level.

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Field Services 6-9

STRATEGIC CONSIDERATIONS

6-2. At the strategic level, supply activity focuses on determining realistic, supportable resource requirements; acquiring, packaging, managing, and positioning supplies; and coordinating moving materiel into the theater base and staging areas. Effective supply and field services planning and execution supports strategic and operational commanders in planning campaigns and, subsequently, ensuring operational and tactical commanders are able to execute their warfighting mission with confidence that the combat service support (CSS) community can support them.

6-3. Strategic planners determine requirements to support the force based on the National Security Strategy (NSS), the National Military Strategy (NMS), the missions the Army can expect to receive to achieve strategic end states, and theater strategies and campaign plans. They consider all potential sources of supplies to reduce the deployment requirements to support Army operations. Sources include host nation support, contracting, and joint and multinational forces. Commodity centers assigned to U.S. Army Materiel Command (USAMC),U.S. Army Medical Materiel Agency (USAMMA), Defense Logistics Agency (DLA), Defense Commissary Agency, and other defense agencies manage supply operations at the strategic level with the assistance of the Army service component command (ASCC) in accordance with the combatant commander's directives and priorities.

6-4. Critical considerations include determining stockpiling requirements and supply production capabilities. CSS personnel preposition supplies in overseas regions (primarily where forward-presence forces locate) for initial

support. They preposition certain critical supplies as well as unit equipment afloat to provide flexible support to forward-presence, reinforcing, or contingency forces. Some supplies are stored in continental United States (CONUS) military stockpiles. Other supplies, such as construction materiel, are routinely available directly from the Army's economic base, contractor support, or local purchase in theater; the CONUS military system does not stockpile such supplies.

6-5. Centralized management of Army prepositioned stock (APS) enhances responsiveness. USAMC and the Office of the Surgeon General are the Army's managers of these stocks. The system provides central management oversight and the ability to posture stocks rapidly to respond to contingency requirements. FM 100-17-1 and FM 100-17-2 discuss APS.

6-6. Strategic supply activities work closely with USTRANSCOM and its component commands. They synchronize their efforts with the combatant command's Joint Operations Planning and Execution System (JOPES) developed movement program to get supplies to the theater. They ensure that required supplies have unit line number designations and that supplies move from stockpiles or other sources to the theater to meet the priorities of the combatant commander. Although containers are the preferred method of shipment, much of the cargo flies on 463L pallets from CONUS. When required to minimize handling in the theater, depots use and package supplies received from CONUS military stockpiles and the industrial base and offer them to the transportation component command for movement. If a container contains multiple consignees, packaging maintains consignee integrity. A copy of the documentation accompanies the container. Total asset visibility provides an automated capability to track both the container and its contents.

OPERATIONAL CONSIDERATIONS

6-7. Supply at the operational level involves requisitioning or acquiring, receipt, storage, protection, maintenance, distribution, and salvage of supplies. Supply planners and managers must understand the joint task force (JTF)/ASCC/ARFOR commander's priorities and the requirements for supporting campaigns and major operations. Requirements include considering the needs of joint and multinational forces.

6-8. Supplies are throughput whenever possible from the port of debarkation (POD) or local sources to the appropriate supply support activity (SSA) or receiving unit. Multiple consignee cargo comes to a supply activity for sorting before transshipment to the appropriate SSA or receiving unit.

6-9. The supply system depends on an efficient and effective materiel management system. Materiel management centers (MMCs) and materiel managers with distribution management centers (DMCs) must know the prioritized requirements of the force and the status of available resources. They manage distribution in coordination with movement control elements that know the capabilities of the transportation system to move required supplies. This management requires an effective automated supply system and extensive coordination. Materiel managers link to strategic and tactical supply and transportation elements to provide total asset visibility.

TACTICAL CONSIDERATIONS

6-10. Tactical-level supply focuses on readiness and supports the commander's ability to fight battles and engagements or achieve his stability or support mission. CSS planners work with supporting commanders and materiel managers to ensure required supplies are available when and where the user needs them. Units carry a basic load of supplies with them to support their operations until the system can resupply them. When time and mission constraints require, a push system provides supplies. Under this type of system, planners estimate the supply requirements and arrange to have supplies delivered to supported elements. As the theater matures and stocks become readily available, supply elements convert by commodity to a "pull" system. Requests generated by supported elements are the basis of a "pull" system. FM 10-1 discusses planning considerations and request procedures.

6-11. Both operational and tactical supply systems include SSAs operated by GS and DS supply units. These units establish SSAs from the COMMZ as far forward as the brigade support area. On a temporary basis, DS elements may operate even further forward at forward logistics bases to reduce the distances users have to travel to receive support. The support structure at each command level from separate brigade/division up also includes a materiel management organization to manage supply and maintenance operations.

6-12. Improved information systems allow management elements to perform split-based operations from CONUS or forward-presence locations while critical capabilities required in theater deploy early in an operation. For example, part of the corps MMC (CMMC) may remain at its home station while force-projection cells (the forward CMMC) deploy to the AO with the force they support. The rear CMMC continues to support the stay-behind force while concurrently interfacing with the deployed cells to provide the required support forward. This split-based capability ensures only required elements deploy. This eliminates unnecessary forces in theater with related CSS demands. It also minimizes strategic lift requirements.

6-13. Under a pull supply system, a using unit submits a request to its supporting DS supply element. If stocks are available, the direct support (DS) element fills the request and notifies the materiel manager, who initiates replenishment. If it cannot fill the request, the supply unit passes it to the materiel manager. In that case, the manager directs issue from general support (GS) stocks to the DS unit or passes the requisition to the appropriate MMC or commodity center to meet the requirement.

6-14. Retrograde of materiel usually involves supplies and repairable equipment. Repairable items are generally in maintenance facilities and returned to supply channels when restored to serviceable condition. Salvage items are unserviceable and uneconomically repairable. They are evacuated through the supply system, destroyed, or demilitarized based on theater policy and commodity center instructions. FM 10-1 has more details.

CLASSES OF SUPPLY

6-15. In addition to the general considerations guiding all supply operations, there are specific considerations for each commodity. This chapter addresses the considerations that apply to most classes of supply. Chapter 8 covers

Class V and Class IX. Chapter 9 covers Class VIII. JP 4-07 addresses Class X. FM 100-10.1 explains the flow of each class of supply. Table 6-1 defines the ten classes of supply and the miscellaneous category.

Table 6-1. Classes of Supply

Class	*Supplies*
I	Subsistence, gratuitous health and comfort items.
II	Clothing, individual equipment, tentage, organizational tool sets and kits, hand tools, unclassified maps, administrative and housekeeping supplies and equipment.
III	Petroleum, fuels, lubricants, hydraulic and insulating oils, preservatives, liquids and gases, bulk chemical products, coolants, deicer and antifreeze compounds, components, and additives of petroleum and chemical products, and coal.
IV	Construction materials, including installed equipment, and all fortification and barrier materials.
V	Ammunition of all types, bombs, explosives, mines, fuzes, detonators, pyrotechnics, missiles, rockets, propellants, and associated items.
VI	Personal demand items (such as health and hygiene products, soaps and toothpaste, writing material, snack food, beverages, cigarettes, batteries, and cameras—nonmilitary sales items).
VII	Major end items such as launchers, tanks, mobile machine shops, and vehicles.
VIII	Medical materiel including repair parts peculiar to medical equipment.
IX	Repair parts and components to include kits, assemblies, and subassemblies (repairable or non-repairable) required for maintenance support of all equipment.
X	Material to support nonmilitary programs such as agriculture and economic development (not included in Classes I through IX).
Miscellaneous	Water, salvage, and captured material.

CLASS I

6-16. Class I supply directly links to the field service of food preparation. During the initial phase of a conflict, the Class I distribution system pushes rations—typically meals ready-to-eat (MREs)—and, when cooks become available, the unitized group heat and serve rations. Personnel strength, unit locations, type of operations, and feeding capabilities determine the quantities and types of rations ordered and pushed forward. As the AO stabilizes, the Class I distribution system converts to a pull system with limited enhancements (salad, fresh fruit, and pouch bread). The distribution system throughputs rations as far forward as possible. For legacy forces (Army of Excellence [AOE] and Force XXI) there is typically a ration break point within the brigade. For the Stryker brigades, rations are assembled

into multiday configured loads and distributed to the primary field kitchens within the brigade.

6-17. Introducing A-rations involves significant logistics expansion. They require refrigerated storage and distribution equipment. They also require potable ice for unit storage of items and chilling beverages. FM 10-23 discusses these considerations as well as garbage disposal.

6-18. Health and comfort packages (HCPs) (formerly referred to as ration supplement sundry packages) are Class I supply items managed by the Defense Supply Center, Philadelphia. They have a national stock number and are issued through the standard supply system, without cost to soldiers, early in a force-projection operation. They contain items such as disposable razors, toothbrushes, toothpaste, and other personal care items. The Class I system provides HCP until AAFES tactical field exchanges are operational and providing Class VI support.

6-19. The U.S. Army Support Activity, an element of USAMC, forecasts Army needs for semi-perishable subsistence, computes Class I Army prepositioned stocks requirements, and approves requisitions (except during contingency operations) for operational rations. The Defense Support Center, Philadelphia, an element of DLA, procures, inspects, stores, and distributes Class I supplies. It provides various rations including individual (operational) rations and unitized group rations (UGRs). There are two types of UGRs: the UGR-Heat and Serve (UGR-H&S), which requires no refrigeration support, and UGR-A, which contains semi-perishable and perishable components and requires refrigeration support. The depot boxes and palletizes all UGR in unit increments to meet deployed force needs. The UGR modules require separate issue of milk, which is a mandatory supplement. In addition, the system also provides menu enhancements (such as cereal, salads, and fruit) separately. The UGR-A rations also require an issue of one box per module containing the perishable entrée and other perishable components.

6-20. The operational level of Class I supply includes a theater food advisor. He plans food service operations to ensure both facilities and personnel are adequate to receive, store, and issue Class I supplies. Materiel managers at operational and tactical levels manage Class I supplies. For legacy forces, perishable subsistence platoons convert to subsistence platoons and work in conjunction with the distribution company and GS supply companies at corps and EAC levels. Teams from the platoons may operate at DS ration points. They will be operational control (OPCON) to the DS supply unit commander in such cases. For Stryker brigades the subsistence platoons assemble the multiday configured loads for ultimate distribution to field kitchens.

CLASS II

6-21. Class II supplies include a variety of supplies and equipment from clothing and individual equipment to tools and unclassified maps. In most cases, Class II consumption is predictable. Demand history, with anticipated fluctuations, can provide accurate forecasting of needs. Divisions carry limited stock of Class II; such items are bulky and impede mobility. Division supply elements normally carry only critical items. Such items may include chemical defense equipment, helmets, and mechanics' tools. Clothing supply creates a special challenge due to its excessive transportation and storage

requirements. It requires intensive management to ensure an even and uninterrupted flow.

6-22. Distribution plans for protective clothing and equipment also consider the threat and the service life of protective over-garments and filters.

CLASS III

6-23. Today's Army consumes large quantities of petroleum products to support operations and will continue to do so into the near future. Its ability to move and fight depends on its supply of fuel. There are two categories of Class III supplies: bulk fuel and packaged petroleum products.

Bulk Fuel

6-24. During peacetime, each service is responsible for planning and preparing for bulk petroleum support to its own forces. This includes managing war reserve and peacetime operating stocks. It also includes operating bulk storage, handling, and distribution facilities. Each service computes its requirements and submits them to the Defense Energy Support Center for supply and acquisition action.

6-25. During war (or in specified military operations other than war), the Army is responsible for the inland distribution of bulk fuels. This includes distributing bulk fuels to the Air Force and Marines. This inland distribution responsibility requires the Army to provide the necessary force structure to construct, operate, and maintain overland petroleum pipelines and to distribute bulk fuels via non-pipeline means. (However, the Air Force and Marines remain responsible for the retail distribution of bulk fuels to their units.) Inherent in this responsibility is the requirement to manage the distribution of bulk fuels within the theater.

6-26. In an effort to obtain the optimum fuel distribution system, the services continue to reduce the number of bulk fuel products distributed by the military logistics system. The goal is to have one fuel in the theater. In addition, the services use standardized fueling procedures and organizations, when possible, and ensure interoperability of fuel containers and handling equipment.

6-27. Forces obtain bulk fuel locally within the theater, when possible. Tanker ships bring in supplies not available in the theater. In developed theaters, marine petroleum terminals receive and transfer bulk fuel by pipeline to tank farms. Army assets may have to renovate the existing system or supplement it with hose lines and collapsible tanks. Pipelines and hose lines extend as far forward as practical to reduce transportation requirements. Other means of bulk delivery (such as barges, rail tank cars, tankers, and aircraft) supplement the system.

6-28. Units pass forecasted requirements up S4/G4 channels to materiel managers who manage distribution in coordination with movement control and GS supply elements. Tankers, rail tank cars, and hose lines move bulk fuels from GS to DS supply elements. Deliveries bypass intermediate storage locations when possible. Bulk transporters normally move fuel from the DS level to using units. Using units maintain a prescribed load of fuel to allow them to operate until the system can resupply them. They use organic equipment to receive the product and refuel their vehicles and aircraft. A key exception to this is refuel-on-the-move operations. Though these operations

may use unit assets, typically they involve using equipment of supporting fuel units. The purpose is to ensure topping off unit vehicles and bulk fuel assets before arriving in the tactical assembly area. Details are in FM 10-67-1.

6-29. Limited availability may require fuel allocations. Logistics staff officers recommend allocations based on priorities provided by operations planners. They pass approved allocations to materiel managers.

6-30. Undeveloped theaters receive bulk supplies from the Navy offshore petroleum discharge system in over-the-beach operations. Hose lines move fuel to collapsible storage tanks. In emergencies, U.S. Air Force aircraft may resupply ground forces. As in a developed theater, the system uses pipelines and hose lines as much as possible to move bulk fuel forward; rail, motor, air, and water transportation assets supplement the pipeline and hose line system.

Packaged Petroleum Products

6-31. Packaged products include lubricants, greases, hydraulic fluids, compressed gasses, and specialty items that are stored, transported, and issued in containers with a capacity of 55 gallons or less. (Normally, this category does not include fuels.) Managers use the distribution concept associated with Class II supplies to manage packaged petroleum products. These products require intensive management due to quality surveillance needs and criticality to combat effectiveness.

CLASS IV

6-32. Class IV items consist of fortification, barrier, and construction materials. Units use barrier and fortification materials to prepare fighting and protective positions as well as field fortifications. Engineers use Class IV materials to prepare fortifications beyond the capabilities of units. They also use them for such functions as—

- Upgrading, maintaining, or building roads, bridges, and bypasses.
- Repairing airfields or building expedient airstrips and landing zones.
- Assembling rafts or bridges for river crossings.
- Upgrading, repairing, or building facilities to support the CSS effort or to enhance the infrastructure of the host nation as part of a stability operation or support operation.

6-33. Most materials are standard items used by both the military and civilian sectors. When possible, forces obtain them locally. Otherwise, forces request, manage, and distribute items using standard supply procedures. Because of their bulk and weight, transportation units throughput them as far forward as possible to avoid overburdening the limited transportation assets of using units and to minimize handling.

CLASS VI

6-34. Class VI supplies are AAFES items for sale to troops and authorized individuals. Class VI supplies may be available through local procurement, through transfer from theater stocks, or through requisitioning from the AAFES in CONUS. Available shipping space dictates Class VI supply to the

theater. Class VI supply responsibilities differ significantly from other classes of supply.

6-35. Command logisticians include Class VI in operations plans. Soldiers deploy with limited quantities of health and comfort items to meet initial personal requirements. AAFES provides Class VI support beyond issuing HCPs to meet the theater commander's needs. Command logisticians can limit or expand Class VI basic HCP items to include food and beverages and entertainment items. The availability of Class VI is a morale multiplier.

6-36. AAFES has responsibility for worldwide planning and monitoring of all tactical field exchanges (TFE). AAFES-Europe plans and monitors tactical operations within the NATO area while AAFES-Pacific is responsible for the Pacific area. HQ AAFES is responsible for all other regions. AAFES determines requirements; procures, stores, and distributes supplies; operates resale facilities; designates the parent exchange; and determines whether an operation requires an operational site general manager. AAFES support is tailored to meet the theater commander's needs.

6-37. General planning guidance for Class VI support is in AAFES Regulation 8-4. Specific guidance on operating a TFE is in AAFES Procedures 8-6.

CLASS VII

6-38. Class VII supplies consist of major end items such as launchers, tanks, vehicles, and aircraft. A major end item is a final combination of end products that is ready to use. Command channels usually control Class VII items due to their importance to combat readiness and their high costs. If not, the supporting materiel manager controls them. Each echelon intensely manages the requisitioning, distribution, maintenance, and disposal of these items to ensure visibility and operational readiness.

6-39. Forces report losses of major items through both supply and command channels. Replacing losses requires careful coordination and management. Managers at each command level work to maximize the number of operational weapon systems. Replacement requires coordination among materiel managers, Class VII supply units, transporters, maintenance elements, and personnel managers.

6-40. Supply units at the operational level process weapon systems arriving in theater from storage or transport configuration and make them ready to issue. They install all ancillary equipment and ensure that basic issue items are on board, and fuel equipment. Weapon systems stored in APS must be at a low level of preservation so supply elements can make them ready for issue within a few hours, not the several days required to process from level A storage.

WATER

6-41. Normally, units receive potable water by supply point distribution with only limited unit distribution. Water elements set up water points as close to the using units as practical, given the location of a water source. In the Stryker brigade combat team, water is distributed to the unit level through the use of the load handling system, water tank-rack, referred to as the

"Hippo." Water purification is discussed later in this chapter under field services.

6-42. The DISCOM operates the water points in the division area. In most areas of the world, the division is self-sufficient in water. In arid regions and unusual circumstances, the division support units require additional water storage and distribution capability. Under these conditions, the division receives water as outlined in this chapter under water purification. Separate brigades and ACR have organic water production capability. Force XXI divisions have water teams, organic to the DISCOM, that can be used to augment division brigades operating in isolated locations.

6-43. Echelons above division (EAD) supply companies provide water to nondivisional customers on an area basis. They operate supply points at approved water sources. In most areas of the world, these DS units are capable of meeting the water purification and distribution needs of all nondivisional customers. CSS planners may augment Army forces with EAD water production capabilities, when they are operating without division support. Like division elements, they require augmentation under arid or special conditions. During the deployment phase of an operation, the DLA provides bottled water until the reverse osmosis purification unit (ROPU) is established and during the redeployment phase while the ROPU is disestablished. FM 10-52-1 provides more detail on water operations and equipment.

FIELD SERVICES

6-44. The Army no longer classifies field services as either primary or secondary. Instead, all field services receive the same basic priority. The commander decides which are most important. The ASCC influences priorities through the time-phased force and deployment data. For example, laundry and shower units may be top priority in desert operations, while preparing loads for aerial delivery may be more important in mountain operations. During stability operations or support operations, the priority depends on the support requirements. In some circumstances, field service units or activities may be the only support provided.

LOCATIONS AND SOURCES

6-45. Quartermaster corps personnel in a variety of units perform field service functions. During combat operations, military personnel provide most of the field service support in forward areas, with HNS and contractors providing a limited amount. Conversely, HNS and contractors provide much of the support in rear areas. During stability or support operations, field service support at all levels may come from a variety of sources. LOGCAP, discussed in chapter 5, is one potential source of field service support in all operations.

FOOD PREPARATION

6-46. Food preparation is a basic unit function performed by unit food service personnel. It is one of the most important factors in soldier health, morale, and welfare. Virtually every type of unit in the force structure, divisional and nondivisional, has some organic food service personnel. These personnel support the unit food service program, as directed by the commander.

6-47. The field feeding system assumes theater-wide use of the MRE for the first several days following deployment. The theater then begins to transition to prepared group feeding rations. The theater initially transitions from the MREs to UGRs. Then, as the operational situation permits, logisticians attempt to introduce the A-ration (fresh foods) into theater. This requires extensive logistics expansion, since it requires refrigerated storage and distribution equipment and a capability to make or acquire ice for unit storage. The feeding standard is to provide soldiers at all echelons three quality meals per day. The meals fed depend on the prevailing conditions. Disposing of garbage is important to avoid leaving signature trails and maintain field sanitation standards. See FM 10-1 for more details.

6-48. The bakery function, previously classified as a field service, is now an integral portion of field feeding. Bread is no longer produced in the AO, except in the field feeding system or through contractor support. Normal Class I supply channels handle pouched bread. The bakery function is no longer a stand-alone field service.

WATER PURIFICATION

6-49. Water is an essential commodity. It is necessary for sanitation, food preparation, construction, and decontamination. Support activities (such as helicopter maintenance and operation of medical facilities) consume large volumes of water. Water is critical to the individual soldier. Classification of the water function is somewhat different from other commodities; it is both a field service and a supply function. Water purification is a field service. Quartermaster supply units normally perform purification in conjunction with storage and distribution of potable water—a supply function. GS and DS water units do not store or distribute non-potable water. Therefore, non-potable water requirements (for example, water for construction, laundry, and showers) are the responsibility of the user.

6-50. Water supply units perform routine testing. However, monitoring water quality is primarily the responsibility of the preventive medicine personnel of the medical command or corps. The command surgeon performs tests associated with water source approval, monitors potable water, and interprets the water testing results. Each service provides its own water resource support. However, the Army or another service, as directed by the JFC, provides support beyond a service capability in a joint operation. AR 700-136 details the responsibilities of Army elements for water support.

6-51. Engineers play a major role in providing water to Army forces. The engineers, through the Topographical Engineering Center, develop and maintain an automated database for rapidly retrieving water source-related data. The engineers are also responsible for finding subsurface water; drilling wells, and constructing (including doing major repair and maintenance) permanent and semipermanent water facilities. In addition, they assist water units with site preparation, when required.

6-52. The quantity of water required depends on the regional climate and the type and scope of operations. Temperate, tropic, and arctic environments normally have enough fresh surface and subsurface water sources to meet raw water requirements for the force. In arid regions, providing water takes on significantly greater dimensions. Soldiers must drink more water. Water

requirements are significantly greater in rear areas, where there is heavy demand for water for washing aircraft and vehicles, medical treatment, laundry and shower facilities, and construction projects. Planners may easily underestimate water requirements for enemy prisoners of war. They must consider the potential absence of water capability in enemy units and the requirement for on-site sanitation, shower, delousing, and medical support for in-coming prisoners. Since water is a critical commodity in arid regions, managers must strictly control its use. Commanders set up a priority and allocation system.

6-53. Because of the scarcity of potable water in some contingency areas, water support equipment is prepositioned afloat. This allows for initial support to a contingency force. Additional water equipment is available in CONUS depots to sustain operations. Most of this equipment is packaged for tactical transportability. Its configuration allows for throughput to the user with minimal handling in the AO.

6-54. In non-arid regions, DS supply units in the DISCOM and at EAD provide water purification and water supply support on an area basis. During the early stages of a contingency operation, the DISCOM may provide water for nondivisional units until additional logistics units arrive.

6-55. In arid regions where sufficient water sources are not available, EAD units establish GS water systems. GS water purification elements supplement the capabilities of the DS elements. GS water supply companies set up and operate bulk storage and distribution facilities or terminals. Tactical water distribution teams can be assigned to water supply companies to augment capabilities for distribution via hose line. These GS water supply companies distribute potable water to DS supply units for nondivisional customers and to the divisions. Hose lines, pipelines, or trucks move potable water to forward areas. Truck companies augmented with semitrailer-mounted fabric tanks (SMFT) provide line-haul of water at the tactical level.

MORTUARY AFFAIRS

6-56. The Mortuary Affairs Program is a broadly based military program to provide for the necessary care and disposition of deceased personnel. The program can have a direct and sudden impact on the morale of soldiers and the American public.

6-57. Each service has the responsibility for returning remains and personal effects to CONUS. The Army is designated as the executive agent for the Joint Mortuary Affairs Program. It maintains a Central Joint Mortuary Affairs Office (CJMAO) and provides general support to other services when their requirements exceed their capabilities. The Mortuary Affairs Program is divided into three subprograms:

- The current death program operates around the world in peacetime and outside of AOs during military operations. It may also continue in AOs depending on the CSS and tactical situation. It provides mortuary supplies and associated services for permanently disposing remains and personal effects of persons for whom the Army is or becomes responsible.
- The Graves Registration Program provides search, recovery, initial identification, and temporary burial of deceased personnel in tempo-

rary burial sites. Temporary burials are a last resort, and the geographic combatant commander must authorize them. It also provides for the care and maintenance of burial sites and for the handling and disposing of personal effects.

- The concurrent return program is a combination of the current death and Graves Registration Programs. This program provides the search, recovery, and evacuation of remains to collection points and further evacuation to a mortuary. It provides for identification and preparation of remains in a mortuary and shipment to a final destination, as directed by the next of kin.

6-58. The joint staff provides general guidance and policy to the combatant commands and military departments within the DOD. Within DA, the G1 has overall responsibility for the Mortuary Affairs Program and manages peacetime operations. The G4 is responsible for field operations during time of war. The U.S. Army Training and Doctrine Command develops the standardized training and doctrine for the military services. The combatant commander develops implementation plans based on the joint staff policy and doctrine. At the combatant command level, a Joint Mortuary Affairs Office provides the commander with guidance, coordination capability, and the staff supervision for all mortuary affairs.

6-59. All commanders are responsible for the search, recovery, tentative identification, care, and evacuation of remains to the nearest collection point or mortuary. Each division has a small mortuary affairs element (two to three personnel) organic to the DISCOM. They train division personnel to perform initial search, recovery, identification, and evacuation of human remains and personal effects. During hostilities, the mortuary affairs personnel organic to the division operate collection points. This procedure continues until the division receives additional mortuary affairs personnel or a mortuary affairs unit. A mortuary affairs unit assigned to the corps support command supports nondivisional units on an area basis. This unit operates collection points throughout the corps, division, and brigade areas. These points receive remains from units, assist and conduct search and recovery operations, and arrange for the evacuation of remains to a mortuary or temporary burial site.

6-60. Mortuary affairs units operate theater collection points, evacuation points, and personal effects depots. Mortuary affairs personnel initially process remains in theater. Then, they arrange to evacuate remains and personal effects, usually by air, to a CONUS POD mortuary. CONUS POD mortuaries positively identify the remains and prepare them for release, in accordance with the desires of the next of kin. Recent wars and military operations other than war (MOOTW) have shown this procedure is quite effective.

6-61. When directed by the combatant commander, mortuary affairs units establish cemeteries and provide for temporary interment of remains. Mortuary affairs units may also operate in-theater mortuaries, but they require personnel and equipment augmentation or host nation support for identifying remains and embalming.

6-62. To further the national policy of returning all U.S. service personnel who die in any theater of operation to the next of kin, new decontamination

procedures are under development. Plans call for establishing a task-organized mortuary affairs decontamination collection point. Personnel will set up and operate a point near areas that have a large number of contaminated remains. For other cases, collection point teams may decontaminate remains. JP 4-06 and FM 10-64 have more information on decontamination of remains and mortuary affairs in general.

AERIAL DELIVERY

6-63. Supporting aerial delivery equipment and systems includes parachute packing, air item maintenance, and rigging of supplies and equipment. This function supports both airborne insertions and airdrop/airland resupply. Airborne insertions involve the delivery of an airborne fighting force and its supplies and equipment to an objective area, by parachute. FM 10-500-1 covers airborne insertions in detail. Airdrop resupply operations apply to all Army forces. The airdrop function supports the movement of personnel, equipment, and supplies. It is a vital link in the distribution system; it provides the capability of supplying the force even when land lines of communication (LOC) have been disrupted and adds flexibility to the distribution system.

6-64. USAMC manages most airdrop equipment and systems (ADES) at the strategic level. It maintains the national inventory control point (NICP) and national maintenance point for ADES. At the operational level, there are two types of airdrop support units. A heavy airdrop supply company provides reinforcing support to corps-level airdrop supply companies. In addition, an airdrop equipment repair and supply company provides supply and maintenance support to airdrop supply companies in the corps (other than the airborne corps) and at EAC.

6-65. A light airdrop supply company provides airdrop/airland resupply support to the corps. In addition, it provides personnel parachute support to units such as long range surveillance units. If the corps cannot support an airdrop request, it passes the request to the airdrop supply company at EAC. Most of the supplies used for rigging by the airdrop supply company come directly from the strategic level, bypassing the airdrop equipment repair and supply company at EAC. The EAC ADES repair and supply company provides ADES maintenance support for the corps light airdrop supply company. The airborne corps has an organic airdrop capability. If it cannot meet the airdrop resupply requirement, it forwards the requirement to the supporting airdrop unit at EAC.

6-66. Airdrop resupply support must be flexible. Certain contingencies may require airdrop resupply support from the beginning of hostilities. However, the requisite airdrop support structure is not likely to be in place due to deployment priorities. In such cases, the operational-level commander should consider having a portion of the supporting airdrop supply company deploy to the depot responsible for supply support to the contingency area. If forces require airdrop resupply before deploying the airdrop support units to the theater, the unit may rig supplies for airdrop at the depot. Forces then fly supplies directly to the airdrop location. This requires adaptation of the request procedures outlined in FM 10-500-1.

LAUNDRY, SHOWER, AND CLOTHING AND LIGHT TEXTILE REPAIR

6-67. Clean, serviceable clothing and showers are essential for hygiene and morale purposes. During peacetime, fixed facilities or field expedient methods normally provide shower, laundry, and clothing repair for short-duration exercises. During operations, they are provided as far forward as the brigade area. The goal is to provide soldiers with one shower and up to 15 pounds of laundered clothing each week. Soldiers receive their own clothing from a tactical laundry within 24 hours. Responsibilities at the strategic level are those involving provisioning. For information on clothing replacement, see Class II under supply.

6-68. Forces receive support from a combination of units, HNS, and contractors. In low levels of hostilities, HNS and contractors may provide much of this support. LOGCAP offers considerable capability during the early deployment stages.

6-69. A field service company provides direct support at the tactical level. The company has the modular capability of sending small teams as far forward as desired by the supported commander. The unit provides one shower for each soldier each week. Other sources (such as field expediency methods, small-unit shower equipment, HNS, or contract services) could be used to increase showers from one to two per soldier per week.

6-70. The laundry and shower function does not include laundry decontamination support. Detailed troop decontamination of chemical and biological agents does not require showers. Radiation decontamination, however, may require showers. If soldiers use chemical defense equipment against fallout, they do not need showers. If they do not use this equipment, contamination lodges in soldiers' hair and on their skin; only showers can remove the contamination. Planners must ensure controlling the contaminated runoff from these showers. FM 3-11 has decontamination procedures. The new chemical protective clothing keeps its protective qualities after laundering. Once exposed to contamination, it must be disposed of under theater policies.

FORCE PROVIDER

6-71. The Army's *Force Provider* is a modular system, principally designed to provide the front-line soldier with a brief respite from the rigors of a combat environment. Each of 36 modules provides life support for up to 550 soldiers. It includes environmentally controlled billeting; modern containerized latrines, showers and laundry; an all electric kitchen; and space for MWR activities. Additionally, the module infrastructure incorporates a complete water distribution/disposal system and power grid. Six modules can provide contiguous support to a brigade-sized force. The cadre for operating Force Provider modules consists of one Force Provider company, which has six platoons that operate one module each, and five reserve companies that require significant augmentation to effectively operate up to six modules each. A LOGCAP contractor can set up and operate these modules.

Chapter 7

Transportation Support

Army transportation plays a key role in ensuring that Army and joint forces can execute global force projection and sustain forces in operations. Supporting the JFC and the Defense transportation system (DTS), Army transportation is essential to effective and efficient force generation and sustainment.

Army transportation operates as a partner in the DTS to deploy, sustain, and redeploy forces in all military operations. Transportation provides vital support to the Army and joint forces across the strategic, operational, and tactical levels of war. It is a seamless system that unites the levels of war with synchronized movement control, terminal operations, and mode operations. Army transportation incorporates military, commercial, and host nation capabilities. It involves the total Army (active and Reserve Components). More detailed information on Army transportation is in the FM 4-01-series of manuals.

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STRATEGIC TRANSPORTATION

7-1. At the strategic level, the U.S. Transportation Command (USTRANSCOM) provides air, land, and sea transportation and common-user port management at seaports of embarkation (SPOEs) as well as seaports of debarkation (SPODs). USTRANSCOM controls strategic movements through its transportation component commands (TCC), Military Traffic Management Command (MTMC), Air Mobility Command (AMC), and Military Sealift Command (MSC).

7-2. MTMC is a major command of the U.S. Army and transportation TCC of USTRANSCOM. MTMC's mission is to provide global surface transportation to meet national security objectives, in peace and war, by being the continental United States (CONUS) land transportation manager and providing worldwide common-user ocean terminal services to deploy, employ, sustain, and redeploy U.S. forces. MTMC handles peacetime and war time responsibilities through its single port manager role for all common-user SPOEs and SPODs, responsive planning, crisis response actions, traffic management, terminal operations, global intermodal management, and provision of in-

transit visibility, information management, and deployability transportation engineering.

7-3. The AMC is a major command of the U.S. Air Force and a TCC of USTRANSCOM. AMC provides common-user airlift, air refueling, and strategic aeromedical evacuation transportation services to deploy, employ, sustain, and redeploy U.S. forces on a global basis.

7-4. The MSC is a major command of the U.S. Navy and a TCC of USTRANSCOM. MSC provides government-owned and government-chartered sealift transportation services to deploy, employ, sustain, and redeploy U.S. forces on a global basis.

7-5. USTRANSCOM schedules strategic deployment according to the supported commander's priorities. The time-phased force deployment data (TPFDD) is the commander's expression of his priorities. Both MTMC and USAMC generate port call messages based on the TPFDD. These messages specify when units and equipment must be at a POE. Port call messages set in motion the movement from the installation or depot. The Army service component command (ASCC) commander ensures units and equipment arrive at the POE as directed.

7-6. In CONUS, installation transportation offices (ITOs), with movement officers at each echelon, coordinate movement to the POE. The defense movement coordinator in each state movement control center plans and routes CONUS surface movements, in accordance with port calls issued by MTMC. Outside CONUS, the ASCC has movement control units that perform functions similar to the ITO. Deployable movement control units and personnel organic to Army units at operational and tactical levels of war also play an active role in preparing their forces for deployment. However, their focus is on early deployment to develop the operational- and tactical-level theater transportation capability.

7-7. Strategic transportation also includes redeployment through movements back to home station. In CONUS, it may include transportation associated with demobilization. The FM 3-35-series manuals has additional information on force projection.

OPERATIONAL AND TACTICAL TRANSPORTATION

7-8. The variety and complexity of military operations require the Army to establish a transportation system that is expandable and tailorable. The objective is to select and tailor required transportation capabilities at the operational and tactical levels to achieve total integration of the system. These capabilities include movement control, terminal operations, and mode operations. At the theater strategic and operational levels, sufficient force structure deploys early to conduct reception, staging, and onward movements, which includes opening ports, establishing inland LOC, and providing C2 for movements. An important facet of building combat power during the reception, staging, and onward movement phase of the operation is receiving the force and sustainment supplies at the POE. This same transportation force structure is required to redeploy the force when operations conclude. Ports, terminals, and inland LOC are critical nodes in the distribution system. At

the theater strategic and operational levels, transportation supports the reception of units, personnel, supplies, and equipment at PODs and provides for their movement as far forward as required.

7-9. Theater transportation requirements largely depend on mission, enemy, troops, terrain and weather, time, civilian considerations (METT-TC). The logistics preparation of the theater discussed in chapter 5 is essential in determining requirements. Additionally, the Army provides transportation support to other services and multinational partners when directed by the combatant commander or JFC. Establishing communications links to other than Army forces is a challenge; however, transportation planners must integrate all requirements and support considerations into movement plans and programs. At the tactical level, transportation weights the battle through the same functions as at the operational level. However, the commander directs force structure and focus to forward support.

MOVEMENT CONTROL

7-10. Movement control is the linchpin of the transportation system. Movement control units and staffs plan, route, schedule, and control common user assets, and maintain in-transit visibility (ITV) of personnel, units, equipment, and supplies moving over lines of communication. They are the using unit point of contact for transportation support. Units request transportation assets from the servicing movement control team (MCT) in their area. The MCT commits (tasks) allocated transportation modes and terminals to provide support in an integrated movement program according to command priorities. Movement control remains responsive to changes in METT-TC, which require adjustments to the plan. A responsive theater distribution system, operating over extended distances, requires centralized control of transportation platforms and synchronized movement management allowing commanders to shift limited transportation resources to move assets forward to influence the tactical situation. Effective movement control requires access to information systems to determine what to move as well as, when, where, and how. It also provides visibility of what is moving, how it is moving, and how well it is moving.

7-11. Transportation staff planners and movement managers at each echelon perform movement control activities. Movement control is integral to distribution management centers/elements (DMC/Es) at each echelon. They coordinate the efforts of the movement control units and the materiel managers. Movement control personnel coordinate routinely with operations planners and other combat service support (CSS) personnel; movement control is tied directly to maneuver as well as distribution. It also relies on support from military police in their mobility support role. All these staffs work together to plan movements. Otherwise, congestion on LOC and at terminals hinders movements and degrades combat effectiveness. The movement control units implement priorities established by the ASCC/ARFOR commander to support the JFC's concept of the operation. Movement control is the information conduit for the theater on personnel, units, and supplies moving from the strategic sustaining base to the AO.

7-12. In addition to synchronizing movements with other Army elements, movement control personnel coordinate movements with other services and countries when operating as part of a joint or multinational force. The JFC may create a fully integrated joint board or center (such as a joint transportation board [JTB] or a joint movement center [JMC]) to exercise directive authority for movement control. The JTB organizations consist of representatives from the service component movement control activities and the U.S. operations directorate (J3) and logistics directorate (J4). The JMC plans future operations and monitors overall theater transportation performance. It performs the planning tasks by continually monitoring the balance between forecasted requirements and current capabilities of all modes. A service movement control organization may create a JMC. It should act as the movement C2 cell for the deployment process of an operation. The Army theater transportation command provides movement controllers that normally form the nucleus of the JMC. Similarly, a multinational force commander may form a multinational movement control agency. JP 4-01.3 discusses joint movement control.

7-13. At the operational level, the senior movement control organization looks forward to activities within the AO, as well as rearward to the sustaining base. This requires communications that connect both systems and decision-makers at the strategic and operational levels to facilitate reception and onward movement. This information exchange is crucial to the supported commander for operations planning. Movement control personnel coordinate with materiel managers for efficient distribution of materiel. They develop movement plans that take into account all movement requirements, the transportation system capabilities, and the commander's priorities. Movement control elements use these factors when tasking transportation units to meet movement requirements. FM 55-10 has more information on movement control.

TERMINAL OPERATIONS

7-14. A terminal operation is the staging, loading, discharge, transfer handling, and documentation of cargo and manifesting of personnel among various transport modes. Terminals are key nodes in the distribution system that supports the commander’s concept of operation. When linked by modes of transport, they define the transportation structure for the operation. Force projection missions require early identification and establishment of terminals. A well-conceived plan assures that terminals can support the deployment, reception, and onward movement of the force and its sustainment. Crucial to executing the operation is assigning the right personnel, cargo, and materiel-handling equipment at each terminal. ITV of materiel moving through the transportation system also provides the joint force commander with information pertaining to location and final destination of all cargo.

7-15. Ocean-water terminals include major port facilities, unimproved port facilities, and bare-beach facilities. Major port facilities are improved networks of cargo-handling facilities, specifically designed for transferring ocean-going freight, vessel-discharge operations, and port clearance. They normally have roll-on/roll-off service and container-handling capability. Unimproved port facilities are not as fully developed as major ports. They may

require support from terminal units and shallow-draft lighterage to discharge vessels. Lack of fixed-terminal facilities at bare-beach locations requires that lighterage deliver cargo across the beach. Ports may be degraded by enemy action such as sinking vessels or damaging cranes or piers. Such activities can quickly turn a major port into the equivalent of an unimproved port.

7-16. MTMC is USTRANSCOM's global single port manager (SPM) for DOD. The SPM integrates the commercial transportation industry, MTMC's commercial business practices, and military force structure. MTMC information systems are linked, through the Worldwide Port System (WPS), to the Global Transportation Network that provides the combatant commanders visibility over ocean cargo. Theater execution of SPM duties in support of a major theater war (MTW) will be the responsibility of a deployed MTMC transportation group. As the theater SPM, a MTMC transportation group is responsible for pre-deployment planning on water terminal issues to include coordinating JLOTS operations, facilitating contingency water terminal expansion and, where available, arranging for contract stevedore and related terminal services. A combination of commercial contract, military units, and/or HNS could perform actual stevedoring operations based on the situation. SPM provides for transitioning terminal units to a commercial contract as early as the situation permits. Accomplishing this (LOGCAP, third country contractor, or host nation) is situation dependent. Normally, during small-scale contingencies, single port manager (SPM) responsibilities remain the same; however, the size of the MTMC SPM team will be METT-TC driven.

7-17. Terminal/cargo transfer operations at APODs and SPODs provide the initial visibility and movement of items as they enter the AO. Critical to reception is executing the port clearance program. This program schedules transportation assets for onward movements based on anticipated arrival dates. The program identifies available port capacities, capabilities, and workloads at various modes and segments of the transportation network.

7-18. Army transportation units establish inland terminals where required, throughout the theater to transship, load, and unload cargo. They operate motor transport terminals and trailer transfer points at both ends, and at intermediate points along line-haul routes. These terminals link local-haul and line-haul service and assist in changing the carrier or transportation mode, when required. Army units and host nation assets also operate terminals at both ends, and at intermediate points along rail lines.

7-19. Forces establish an intermodal terminal early in the AO to provide cargo transfer and mode operations functions. As the scope of the operation enlarges, the commander adds additional sections/companies to meet the demand flow. While the operations may differ slightly, the essential units and command and control structure of the hub remain constant. Cargo transfer operations at the intermodal terminal assist in the throughput of supplies and materiel, configure multiple consignee shipments into single consignee shipments, and process frustrated cargo. In a mature theater, contracted U.S. or host nation civilians may perform intermodal terminal functions.

7-20. In addition to intermodal terminals, Army cargo transfer units perform transfer functions at intermediate transfer points on inland waterway systems. Army cargo transfer units clear Army cargo and personnel from air

terminals served by the AMC or from theater airlift aircraft. They may also provide such assistance at forward landing fields that are not regularly scheduled stops for theater airlift aircraft. FM 55-17 has more information on terminal operations.

MODE OPERATIONS

7-21. The Army can move personnel, cargo, and equipment by motor, rail, air, and water with organic, host nation, or contract assets. While each situation may not be conducive to using a particular mode, the Army must prepare to operate, or supervise, the operation of all these modes of transport. Mode platforms include trucks, trains, containers, flatracks, watercraft, aircraft and commercial delivery, when permitted by METT-TC. Mode operations include intratheater air (C-130 and CH-47); local and linehaul motor transport; heavy equipment transport; and rail, coastal and inland waterway transport. Mode operations and movement control elements working together match up the correct asset capability, cargo characteristics, and required delivery time.

7-22. Movement control sections coordinate the transportation assets. Air-asset requests are normally coordinated through the S3/G3 channels to the Air Force and Army aviation units. Watercraft and other lighters are tasked in coordination with movement control element and liaison personnel from the watercraft/lighter provider. The source provider may be the U.S. Army, U.S. Navy, multinational forces, host nation military, or commercial watercraft/lighters. The size and mix of transportation units depend on the size and scope of the operation and the terrain and facilities available.

MOTOR

7-23. Tactical vehicles are the backbone of the support structure. They are mobile, flexible, and reliable. The motor transportation unit and equipment mix for an operation depend on METT-TC. Planning factors include the planned flow of personnel and materiel and the availability and quality of the road networks. Motor transport provides the connecting links between the PODs and the receiving units. The right tactical trucks, in the right place, at the right time are essential to the success of any military operation.

7-24. Each echelon centrally controls common-user motor transport assets to respond to the commander's priorities and weight the CSS effort. At division level, the DISCOM provides motor transport support under control of the movement control officer. At corps and above, motor transport units provide support on an area basis and respond to taskings of the movement control teams in the area. Host nation or multinational force support elements may augment the Army capability.

7-25. Whether at the operational or tactical level, motor transport units provide a general support role within a specified area or along specific routes. Placement should ensure efficient, responsive support, convenient to major customers and distribution operations. Motor transport units can expect to move frequently in response to changes in requirements. FM 55-10 has detailed information on motor transport units and operations.

RAIL

7-26. Rail is potentially the most efficient method of hauling large tonnages of materiel by ground transportation; the Army normally depends on the host nation to provide this mode of transportation. The Army has limited railway operating, construction, and repair capability. These Army assets augment host nation support or provide those capabilities in theaters where host nation support is not available, or is not capable or reliable. Rail operations are limited to existing rail networks. Information on rail transport units and operations is in FM 55-20.

AIR

7-27. Air is the most flexible transportation mode. While wide-ranging CSS needs within a theater require U.S. Air Force and Army airlift assets to support forces, commanders normally employ Army aviation in a combat support role. However, the ALOC becomes increasingly important as the intensity, depth, and duration of operations increase. Airlift relieves forces from total dependence on ground lines of communication that can become congested or interdicted. It also allows rapid support to the force with minimum regard to terrain peculiarities. It makes possible rapid resupply of critical items over extended distances directly to or near forward units. Therefore, commanders should allocate Army aviation assets for transportation use when required. Air Force and Army airlift assets provide airlift within a theater. Army cargo and utility helicopters provide support at the operational and tactical levels through movement control channels in response to mission requirements and the commander's priorities. Likewise, the U.S. Air Force provides theater airlift support to all services within a theater through a process of allocating sorties on a routine basis or providing immediate support to operational requirements. While airlift is the preferred method of delivery, airdrop is a field service that can provide flexibility to the transportation system by extending ALOC.

WATER

7-28. Army watercraft is an essential component of theater transportation. They provide efficient transportation to relieve other lines of communication. They may augment capabilities of other modes when integrated with appropriate terminal operations. Army watercraft move materiel and equipment along inland waterways, along theater coastlines, and within water terminals. Their primary role is to support cargo discharge and onward movement from the SPOD to inland terminals or to retrograde from inland terminals. Army watercrafts have a role in joint operations along with Navy and Marine Corps lighterage, or in conjunction with HNS assets.

7-29. Watercraft perform docking and undocking services for oceangoing transport vessels. Terminal commanders may also employ watercraft in utility missions. These may include patrolling, ship-to-shore transport of personnel, harbormaster duties, and command and control functions.

7-30. Watercraft are integral to port-opening capabilities, whether employed at fixed terminals or for bare-beach operations (such as logistics-over-the-shore [LOTS]). They must deploy into the theater before the first ocean transport vessel arrives. The watercraft fleet consists of logistics support ves-

sels (LSVs), medium and heavy landing craft, and a variety of specialized vessels, causeways, barges, and equipment. Army watercraft are assigned to watercraft companies and detachments, which operate in transportation terminal battalions. FM 55-80 has details on Army watercraft units and operations.

INFORMATION SYSTEMS

7-31. This discussion covers only those transportation systems essential to transportation operations in a theater of operations. Technology allows the transportation system to better manage cargo and transportation assets.

TRANSPORTATION COORDINATORS' AUTOMATED INFORMATION FOR MOVEMENT SYSTEM II

7-32. Transportation coordinators' automated information for movement system II (TC-AIMS II) is a joint system that combines and integrates the functionality of—

- Cargo management operations system (CMOS).
- Transportation coordinator-automated command and control information system (TC-ACCIS).
- Department of the Army movement management system-revised (DAMMS-R).
- U.S. Marine Corps (USMC) Marine air-ground task force deployment support system (MDSS).
- USMC TC-AIMS information systems.

TC-AIMS II will bring these legacy systems into one single information system used by all the services. It furnishes unit movement officers and transportation organizations at all levels with standardized policies, procedures, and formats to produce and execute a variety of required tasks:

Installation Transportation Office(r)

7-33. TC-AIMS II will be used by the installation transportation office (ITO) to support day-to-day installation-level transportation operations. It provides the functionality essential for moving all inbound and outbound cargo and personnel. TC-AIMS II facilitates the movement of units deploying from home station, the daily non-unit transportation-related activities for outbound shipments, and the deploying of units back to home station. TC-AIMS II also provides accurate shipment location information by employing automatic identification technology devices to create, collect, and transmit movement data.

Unit Movement Officer

7-34. The unit move module of TC-AIMS II has four basic functional areas.

- It stores unit personnel and equipment information.
- It maintains deployment information, and plans and schedules deployments.
- It manipulates/updates information for convoys, rail, and air load planning, and personnel manifesting. Other transportation systems share unit movement information.

- It allows units to update their operational equipment list (OEL) and unit deployment list (UDL) and electronically send the updates through the chain of command to the ITO.

Battalion S3/S4

7-35. TC-AIMS II supports unit deployments/movements to exercise sites, and the functions of convoy planning and transportation requirements estimating. The battalion operations, plans and training staff (S3), and the logistics staff (S4) prepare a deployment schedule of events/flow table to use as a management tool.

Deployment Manager

7-36. TC-AIMS II provides deployment managers with a system that supports their information needs to successfully deploy a combat-ready force on time.

Motor Transport Operator

7-37. The system supports day-to-day fleet management missions. Integrated with the MTS and AIT equipment, TC-AIMS II effectively manages the tactical-wheeled fleet.

Movement Control Team

7-38. TC-AIMS II, integrated with MTS and AIT equipment, allows MCTs to manage dozens or hundreds of movements each day/shift and meet the customer's transportation needs in a deployed theater.

Movement Control Headquarters

7-39. TC-AIMS II provides the information tool to conduct transportation planning, manage transportation assets, and synchronize transportation operations within the theater.

Cargo Transfer Operator

7-40. The system will be the primary mission support tool when integrated with MTS and AIT equipment. It allows the cargo documentation elements to expedite the transshipment operations for both unit equipment and sustainment cargo within a theater.

GLOBAL TRANSPORTATION NETWORK

7-41. GTN is an information system used for collecting transportation information from selected systems. It provides automated support for planning, providing, and controlling common-user airlift, surface, and terminal services to deploying forces. It provides the user with the ability to track the status, identity, and location of units, non-unit cargo and passengers, medical patients, and personal property from origin to destination. GTN also—

- Provides ITV information about units, forces, passengers, cargo, patients, schedules, and actual movements.
- Displays current operational asset information and provides transportation intelligence information on airfields, seaports, and transportation networks using graphics and imagery.

- Provides future operations information and models to support transportation planning and courses of action.
- Provides efficient routing for patient movement and provides ITV of individual patients.
- Interfaces with the consolidated aerial port system II (CAPS II), CONUS freight management system (CFMS), CMOS, Defense automatic addressing system (DAAS), Defense transportation tracking system (DTTS), global command and control system (GCCS), JOPES, Global Decision Support System (GDSS), Mechanized Export Traffic System (METS), Passenger Reservation and Manifesting System (PRAMS), TC-ACCIS, TC-AIMS II, and WPS.

MOVEMENT TRACKING SYSTEM

7-42. The movement tracking system (MTS) provides the capability to identify position, track progress, and communicate with the operators of tactical wheeled vehicles. With positioning and communication satellites, transportation movement control and mode operators can locate and communicate with tactical wheeled vehicle (TWV) anywhere.

7-43. The MTS is a satellite-based tracking/communication system consisting of a mobile unit mounted in the vehicle and a base unit controlled/monitored by movement elements control and mode operators. The MTS includes—

- Global positioning system capability.
- Capability to send messages between base and mobile units.
- Capability to locate/track a vehicle position on a map background using personal computer-based software.

7-44. These capabilities provide the communications and tracking necessary for all tactical wheeled vehicles to complete and survive distribution missions on the digitized battlefield. MTS provides real-time, in-transit visibility of vehicles and cargo within a theater. It also redirects cargo and units based on changes to battlefield requirements and tactical unit relocations. It provides an embedded movement control capability that improves trafficability on main supply routes (MSRs) and reduces the potential for fratricide. As a key CSS enabler, MTS is essential to providing in-transit visibility for distribution and velocity management at DMCs.

RADIO FREQUENCY IDENTIFICATION

7-45. Radio frequency identification (RFID) uses radio wave transmission and reception to identify, locate, and track objects. Information is stored on a radio frequency (RF) tag with media storage capability similar to a computer floppy disk. Antennas, commonly called interrogators, read and pass information contained on the RF tag attached to vehicles, containers, or pallets. This information passes to a central database. Units attach a RF tag to all major shipments in theater. RF interrogators are located at key transportation nodes to provide visibility of the shipments en route to final destination. MTS integrates RFID technology to provide total visibility of in-transit cargo.

WORLDWIDE PORT SYSTEM

7-46. The Worldwide Port System (WPS) is the primary source system for ITV and total asset visibility of surface cargo movement in the DTS. WPS provides timely and accurate information to the supporting and supported combatant commands through the GTN. Upgrades to WPS include a shipload-planning module capable of concurrent planning for multiship operations.

Chapter 8

Ordnance Support

Success on today's battlefield demands that forces maintain, recover, repair, or replace equipment as quickly as possible. Good maintenance practices, forward positioning of maintenance units, effective repair parts and equipment replacement systems, and clear priorities for recovery and repair are vital. Likewise, sound theater policies on repair and evacuation and sufficient sustainment repair and replacement facilities greatly contribute to battlefield success. This chapter covers the entire spectrum of ordnance support. It includes maintenance, explosive ordnance disposal (EOD), and ammunition support.

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MAINTENANCE SUPPORT ACROSS THE LEVELS OF WAR

8-1. Maintenance support includes activities at all levels of war. The following is a brief discussion of each level of war.

STRATEGIC SUPPORT

8-2. The strategic base is the backbone of the National maintenance program and the sustainment maintenance system. At this level, maintenance supports the supply system by repairing or overhauling components or end items not available or too costly to procure. Maintenance management concentrates on identifying the needs of the Army supply system and developing programs to meet them. Strategic support also includes maintaining prepositioned equipment.

OPERATIONAL SUPPORT

8-3. The goal of the overall maintenance plan is to support the operations plans and objectives of the commander. Its primary purpose is to provide field maintenance, and maximize the number of operational combat systems available to support the tactical battle. Commanders tailor and position maintenance units in the theater to best support this goal. The maintenance-supply interface at the operational level is the fusion point between the field and sustainment maintenance management echelons. Maintenance managers in operational headquarters support the tactical battle by ensuring that the maintenance system supports campaigns and sustains theater forces. Through the judicious use of maintenance assets and review of

serviceable backhaul from direct support (DS) units, the commander can overcome shortages in the supply system or support unexpected requirements by pushing maintenance capabilities farther forward on the battlefield.

8-4. The operational support plan ties tactical unit requirements together with the capabilities of the strategic base. The maintenance system drives and supports the supply system. DS (field) maintenance units meet tactical requirements through close support, while general support (GS) (sustainment) maintenance units/activities alleviate maintenance and supply shortfalls. Surge maintenance capabilities from all sources, including the industrial base, meet unexpected demands.

TACTICAL SUPPORT

8-5. The nature of the modern battlefield demands that the maintenance system repair equipment quickly and at, or as near as possible to, the point of failure or damage. This requirement implies a forward thrust of maintenance into division and brigade areas. There the battle is more violent and the damage greater. Maintenance assets move as far forward as the tactical situation permits to repair inoperable and damaged equipment and to return it to the battle as quickly as possible.

8-6. The structure of maintenance units includes highly mobile maintenance support teams (MSTs). MSTs provide support forward on the battlefield as directed by the DS (field) maintenance company commander and maintenance control officer. They send people; parts; test, measurement, and diagnostic equipment (TMDE); and tools to forward areas, as required, and redistribute assets when no longer needed.

8-7. Battle damage assessment and repair (BDAR) may be critical at this level. BDAR is the procedure used to return disabled equipment rapidly to the battle by expeditiously fixing, bypassing, or jury-rigging components. It restores the minimum essential combat capabilities necessary to support a specific combat mission or to enable the equipment to self-recover. Crews, unit maintenance teams, MSTs, and recovery teams perform BDAR.

MAINTENANCE PRINCIPLES

8-8. Maintenance is central to any mission operational success. A viable maintenance system is agile and synchronized to the combat scheme of fire and maneuver. It anticipates force requirements. A commander who has 65 percent of his tanks operational may wisely delay an attack if he can realistically expect the repair process to have 90 percent ready within 24 hours. Alternatively, he can weight the battle by allocating replacement systems. The guiding maintenance principles are—

- To replace forward and repair rear. Maintenance activities, with a forward focus on system replacement, task and use the distribution and evacuation channels to push components and end items to the sustainment level for repair.
- To anticipate maintenance requirements. To maximize the number of combat systems available, maintenance leaders and managers anticipate the requirements for support by using on-board sensors integrated into equipment design and linked by a distributive communi-

cation system. The diagnostic data helps anticipate future reliability and provide maintenance managers the ability to preposition repair parts and maintenance personnel.

8-9. Maintenance is a combat multiplier. When opposing forces have relative parity in numbers and quality of equipment, the force that combines skillful use of equipment with an effective maintenance system has a decided advantage. That force has an initial advantage if it enters battle with equipment that is operational and likely to remain operational. It has a subsequent advantage if it can quickly return damaged and disabled equipment to the battle. Securing this advantage is the purpose of a maintenance system.

8-10. Elements at all levels work together to ensure attaining the strategic goals and objectives. They must have the proper personnel, equipment, tools, and replacement parts. Personnel must be well trained in maintenance theory and maintenance principles of all systems and capable of diagnosing and correcting faults. Additionally, they must have immediate access to high-usage repair parts.

8-11. The type and location of maintenance units that best support the commander's requirements are a prime concern of the theater logistician. A viable maintenance system complements the capabilities of the supply system. When equipment is in short supply or otherwise unavailable to support requirements, commanders use the maintenance system to offset the shortfall. As equipment becomes more technically complicated, it is easier to meet surge requirements by redirecting the maintenance effort than by influencing the supply effort. Therefore, the job of maintenance managers at all levels is to ensure the proper mix (type and location) of maintenance units that best supports the tactical and operational commanders' requirements. In addition, early arrival of essential maintenance capabilities is important in force projection operations to ensure deployed and prepositioned equipment is operational.

MAINTENANCE SYSTEM

8-12. The current Army maintenance program is a flexible, four-level system. The levels are operator/unit, DS, GS, and depot. Each level has certain capabilities based on the skills of the assigned personnel and the availability of tools and test equipment. Force XXI and Stryker brigade employ new maintenance concepts that consolidate levels of maintenance. The thrust of this redesign effort is to position the Army to adopt a two-level maintenance system. In the new system, unit and DS maintenance comprise the first of the two maintenance echelons known as field maintenance. Field maintenance focuses on repairing and returning major end items and components for immediate use by the supported force. The second maintenance echelon is sustainment maintenance. Sustainment maintenance includes GS and depot levels. Sustainment maintenance focuses on repairing major end items and components to support the supply system. (Army aviation maintenance, discussed in paragraph 8-31, has three levels.) When properly integrated, the levels serve as a logistics multiplier, adding an extra dimension to the commander's plan.

8-13. The various management functions required result in classifying maintenance management into two echelons: field and sustainment. Field maintenance managers at corps and lower echelons support commanders by managing operations to enhance equipment readiness. Field maintenance managers maximize combat readiness by coordinating repairs as far forward as possible for quick return into the battle. National sustainment maintenance managers at corps and above focus on repairing components for the supply system and rebuilding end items.

8-14. Sustainment and field maintenance managers coordinate maintenance operations among the various activities. National strategic maintenance managers coordinate sustainment operations in the industrial base, depot activities, and the theater through establishing specialized repair/forward repair activities. U.S. Army Materiel Command (USAMC) is designated as the national maintenance manager (NMM). Field maintenance managers focus on operator/crew, unit, and DS (field) maintenance operations.

8-15. Field maintenance managers assigned to support battalions provide maintenance support to brigade-size units. National sustainment maintenance managers may be assigned to theater and corps support commands. Managers use their maintenance knowledge and experience, along with aid from their management interfaces and combat service support (CSS) information systems, to determine potential and developing maintenance problems and supply shortfalls. Their continuous review aids in developing courses of action, facilitating avoidance or resolution.

8-16. The materiel management center (MMC) is the maintenance manager for deployed Army forces. It is the link between the deployed forces and the support base. The MMC maintains a close working relationship with the logistics support element (LSE). The NMM through the LSE directs the theater-level GS (sustainment) maintenance mission. In addition, these activities may support equipment of other services or multinational forces. The commander of the LSE maintains a coordination relationship with USAMC and other organizations providing assets to the LSE. The NMM distributes the total national maintenance workload across all sustainment maintenance providers, based on the overall national needs. This coordination ensures receiving timely support from the theater or continental United States (CONUS) base maintenance operations.

MAINTENANCE SUPPORT LEVELS

8-17. There are two basic levels of maintenance support: field maintenance and sustainment maintenance.

Field Maintenance Support

8-18. Field maintenance support includes operator/unit, DS, and component repair capability designed to repair components and end items for customer units versus the supply system. The multicapable maintainer will be the cornerstone of field maintenance support. This individual performs both unit and DS tasks to improve system readiness and reduce repair cycle time.

Operator/Unit Maintenance

8-19. Preventive maintenance checks and services (PMCS) initiate most maintenance actions. PMCS is the care, servicing, inspection, detection, and correction of minor faults before these faults cause serious damage, failure, or injury. Command emphasis is vital to ensure an effective PMCS program. This program requires trained operator/crews and routine supervisory and implementing procedures. Ineffective command emphasis can lead to cursory PMCS programs that fail to correct deteriorating effects before they adversely affect readiness and combat capability, and unnecessarily burden technical maintenance systems.

8-20. Unit maintenance efforts concentrate on returning equipment to the user quickly enough to influence the outcome of a given task or mission. The operator or crew identifies malfunctions using on-board sensors and visual inspections. Personnel make quick repairs by using on-board spares and tools to perform on system maintenance.

8-21. Most Army of Excellence (AOE) and Force XXI units, organizations, and activities have organic unit maintenance personnel to perform unit maintenance on equipment assigned to, or used by, them to accomplish their missions. Some Force XXI maneuver units receive maintenance support from support companies tailored for their unique mission requirements. Mobility considerations and time available for repairs are the critical factors that limit the organizational maintenance capability.

Direct Support Maintenance

8-22. DS (field) maintenance organizations consist of a base maintenance company augmented with commodity-specific modules that allow tailored support for supported units. The composition of the supported units determines the type and number of teams assigned or attached to the base company. These teams directly support units on an area basis or dedicated basis. Those that support units on a dedicated basis accompany the supported unit as it moves around the AO. They receive repair parts and backup maintenance support through the nearest DS (field) maintenance company.

8-23. DS (field) maintenance units and maintenance teams expected to operate in forward areas must be as mobile as the supported customer. Maintainers in these units focus on repair by replacement. If these units cannot repair equipment due to lack of time, or specialized tools, and/or test equipment, supporting teams from a higher maintenance echelon repair the equipment on site or evacuate it. As with unit maintenance elements, maintainers in DS (field) maintenance units may repair selected components to eliminate higher echelon backlogs and maintain technical skills when mission, enemy, troops, terrain and weather, time, civilian considerations (METT-TC) permits.

Sustainment Maintenance Support

8-24. Sustainment maintenance support includes maintenance performed by depots, directorate of logistics (DOL) assets, special repair activities (SRAs), and forward repair activities (FRAs). There are also a limited number of specialized GS units that provide missile and signal-unique support.

8-25. GS and depot repair activities locate where they can best support the theater operations plan. They support the theater supply system through table of organization and equipment (TOE)/table of distribution and allowances (TDA) units, host nation support, and contracted personnel. These activities generally move into available fixed or semi-fixed facilities in the theater. They remain there for the duration of operations. While they are able to displace forward, it is a very time-consuming, labor- and equipment-intensive process. However, they can deploy platoons, sections, or teams as far forward as required to support the tactical situation. When deployed forward, the elements are attached to the nearest maintenance company, and all requirements pass through that headquarters.

General Support Maintenance

8-26. The primary mission of GS repair activities is repairing components to support the supply system. Managers set priorities on anticipated consumption rates of components. Sustainment maintenance managers determine consumption rates. GS maintenance activities, placed in a theater, perform component repair when no other assets are available or when the supply pipeline is insufficiently viable to accept the disruption in operations. GS maintenance activities also serve as training bases to develop specialized maintainers.

Depot Maintenance

8-27. Depot maintenance supports the strategic level of war. USAMC depots or activities, contractors, and host nation support personnel perform this level of maintenance to support the supply system. Normally, elements perform depot maintenance where it is most appropriate to support the force. This may be in CONUS, in the AO, at an ISB, or in a third country. Production-line operations characterize this support. Such operations support the national maintenance program (NMP) and the overall DA inventory management program. They are an alternative or supplement to new procurement as a source of serviceable assets to meet DA materiel requirements.

8-28. Headquarters, Department of the Army approves and USAMC controls programs for depot maintenance. Army arsenals and depot maintenance facilities execute some approved programs. In other cases, the depot maintenance and interservicing (DMI) program plays an important role in depot maintenance. The DMI program's main goal is the efficient and effective use of depots by using the depot source of repair (DSOR) decision process. The DSOR decision process is a mandatory milestone in the integrated logistics system (ILS) planning and an integral part of maintenance planning. The DSOR process normally results in agreements with the other military services. Agreements with other military services and contractual arrangements with commercial firms carry out some depot maintenance programs. Strategic planners schedule repair programs to meet the needs of the supply system and the reparable exchange program. They also consider availability of repair parts and other maintenance resources.

8-29. When an LSE deploys to a theater, it may act as the command and control element for theater-level sustainment maintenance activities. As discussed in chapter 4, the LSE is a flexible organization. Theater needs and

shortfalls in the supply system dictate its capabilities and organization. The LSE may include theater GS maintenance companies FRAs, and SRAs operating within the theater. FRAs are maintenance activities designed to provide limited depot repair support to the theater. SRAs repair components and return them to the supply system or supported customers. SRAs have special tools and test equipment to repair/test components whose associated maintenance requires a high degree of training or specialized TMDE. FRAs and SRAs may employ military personnel, civilians, contractors, or a mixture of all three. These units normally operate from fixed or semi-fixed facilities in the corps rear, theater base, or the CONUS support base.

SPECIFIC MAINTENANCE CONSIDERATIONS

8-30. Several types of equipment have special maintenance considerations associated with them. The following is a discussion of maintenance of aviation, watercraft, signal, and information systems. It also covers maintenance in an NBC environment.

Aviation Maintenance

8-31. The objective of Army aviation maintenance is to ensure maximum availability of fully mission-capable aircraft to the commander. Aviation maintenance elements accomplish this by performing maintenance on all aviation items, including avionics and weapon systems, as far forward as possible.

8-32. The aircraft maintenance system consists of three levels: aviation unit maintenance (AVUM), aviation intermediate maintenance (AVIM), and depot maintenance.

8-33. The aircraft crew chiefs and AVUM unit comprise the first line of aircraft maintenance. AVUM units are organic to aviation battalions and squadrons. They provide support as far forward as possible. Forward support teams perform on-aircraft maintenance tasks that require minimal aircraft downtime. AVUM elements also perform more extensive recurring scheduled maintenance tasks in rear areas. AVUM tasks include replacing components; performing minor repairs; making adjustments; and cleaning, lubricating, and servicing the aircraft.

8-34. The AVIM, or second-level maintenance element provides one-stop intermediate maintenance support and backup AVUM support. It performs on-aircraft system repair and off-aircraft subsystems repair. AVIM units also provide aviation repair parts to supported units. AVIM tasks normally require more time, more complex tools and test equipment, and higher skilled personnel than the AVUM element has available.

8-35. Depot maintenance is the third level of maintenance. Depot maintenance includes very detailed and time-consuming functions. It requires sophisticated equipment and special tools, special facilities, and maintenance skills. Typical depot tasks include aircraft overhaul, major repair, conversion or modifications, special manufacturing, analytical testing, and painting. FM 3-04.500 has details on aviation maintenance.

Army Watercraft Maintenance

8-36. Maintaining watercraft used in Army water terminal operations poses problems and requires arrangements that are somewhat different from those for other types of equipment. Supporting maintenance facilities for watercraft must locate at or near the water's edge. Rather than echeloning these facilities along the forward axis of a theater as in other systems, they generally spread out laterally along the theater's rear boundary. Except for some inland waterway systems, their orientation is toward the rear. Watercraft units typically get support from civilian shipyards either in theater or in other countries. Also, given the Military Sealift Command's worldwide access to ship/watercraft repair capabilities, it may be efficient to use that network as well as current Army procedures for repairing Army watercraft.

Signal-Peculiar Equipment Maintenance

8-37. Maintenance for signal units has unique characteristics. Companies of a signal battalion may operate far from division or corps maintenance units. However, they must maintain exceptionally high levels of readiness. Combat electronic warfare intelligence battalions have highly complex, low-density equipment. In such exceptional cases, the battalions rely on—

- An organic maintenance capability to perform diagnostics and minor repairs.
- On-board spares.
- Forward deployment of MSTs from rear areas by surface or air transportation.

Support to Information Systems

8-38. The Army is rapidly transforming into a highly lethal, technologically advanced fighting force through digitization of its information systems. This transformation to a digital, information-based Army requires a substantial investment in information systems. Thousands of computers are currently being developed, tested, and fielded to enable this transformation. These systems will link commanders and leaders at every level and provide a near real-time common operational picture (COP) of the battlefield. This COP permits commanders to make timely decisions based on accurate information to better control forces, synchronize battlefield operating systems, and achieve decisive victories with minimal casualties.

8-39. Information system support presents a unique challenge for the Army of the 21st century. The spiral development and streamlined acquisition of computer hardware and software have rapidly exceeded the Army's ability to logistically support these systems. The increased involvement of contractor support on the battlefield further complicates this challenge. Unique, stovepipe systems support many information systems today, particularly command and control devices. These stovepipes often involve a mix of military, DA civilian, and contractor personnel for both maintenance and supply support.

Maintenance in an NBC Environment

8-40. Logisticians avoid operating in a chemically contaminated environment, when METT-TC permits. Reduction in manual dexterity and effects of petroleum product spills on protective overgarments particularly degrades maintenance operations. Rather than conduct operations in a contaminated area, CSS units displace at the earliest opportunity, decontaminate their equipment, and resume support operations.

8-41. Avoiding contamination of equipment is easier than decontaminating it. Decontamination is time-consuming and may corrode and damage some types of equipment. When possible, maintenance activities should occupy protected areas like underground garages or concrete buildings to provide overhead cover from liquid chemical agents and shielding from radioactive contamination. Using units decontaminate their own equipment within their capabilities. Equipment turned over to maintenance personnel must be as free of contamination as the using unit can make it. Using units must establish standing operating procedures (SOPs) for recovery, handling, and decontamination of their own equipment.

8-42. When using unit personnel are not able to decontaminate equipment, they should mark the equipment with the type and the date/time of contamination. If feasible, they should identify the specific areas of equipment contamination to alert maintenance personnel of the danger. They should also segregate contaminated materiel. When using units cannot decontaminate damaged or inoperable equipment that is critical to the battle, materiel managers should consider equipment replacement.

REPAIR PARTS SUPPORT

8-43. Class IX items (repair parts) consist of any part, subassembly, assembly, or component required for installation in maintaining an end item, subassembly, or component. They support maintenance and repair functions performed throughout the Army on all materiel except medical materiel. They range from small items of common hardware to large, complex line replaceable units.

8-44. Managing repair parts is proportional to the contribution they make to the operational readiness of the end items they support. The type and quantity of stocked items directly relate to readiness requirements. The following paragraphs discuss responsibilities at the strategic, operational, and tactical levels of CSS.

8-45. Managing repair parts at the national strategic level normally depends on the general classification of the item rather than its end item use. In these instances, requisitions to support a unit maintenance mission go to more than one national inventory control point (NICP) or commodity command. When the end item is a major system (for example, an M1A1 tank), a program manager ensures that the CSS for that end item is effective and efficient. Therefore, units experiencing problems have a single point of contact to handle their concerns. At the national level, supply requirements may drive the NICP manager to use, through the NMM, sustainment maintenance to repair unserviceable assets to support supply requirements.

8-46. The operational level of supply focuses on providing repair parts and a level of stockage for items not sent to the theater by aerial lines of communication (ALOC). Easing these supply requirements are serviceable assets generated by the sustainment maintenance of line replaceable units. These items become theater-generated assets that can offset a requirement to provide support from the strategic level of supply.

8-47. Repair parts at the tactical level support unit and DS (field) maintenance missions. Organizations can stock a limited number of items on the prescribed load list (PLL) to support their maintenance mission. Normally, the number of lines is restricted to 150; however, they should be demand supported and combat essential. The commander has some latitude to accommodate expected requirements and for other justifiable reasons. Mobility of PLL items is also a consideration. The PLL should be 100 percent mobile on unit transportation. Unique maintenance elements that support strategic signal, air traffic control, and missile systems maintain authorized stockage list (ASL) items for their supported customer units.

8-48. GS maintenance units maintain shop stocks to support authorized maintenance tasks. They requisition replenishment stocks through their supporting MMCs and do not maintain ASLs. This does not apply to AVIM units.

8-49. The commander who owns unserviceable equipment decides whether to perform cannibalization or controlled exchange. Cannibalization is the authorized removal, under specific conditions, of serviceable and unserviceable repair parts, components, and assemblies from unserviceable, uneconomically reparable, or excess end-items authorized for local disposal. Controlled exchange is removing serviceable parts, components, assemblies and subassemblies from unserviceable, economically repairable equipment for immediate use in restoring a like item of equipment to a combat mission-capable condition. Commanders may use supervised battlefield cannibalization and controlled exchange when parts are not available from the supply system.

8-50. Commanders as close to the site of damaged equipment as possible make cannibalization and exchange decisions consistent with Army regulations and major command (MACOM) policies. They base their decisions on guidelines established at higher headquarters. Cannibalization is a major source of critical repair parts in a combat environment. Maintainers use it aggressively according to the command's established policy.

EXPLOSIVE ORDNANCE DISPOSAL

8-51. The mission of EOD is to support U.S. security operations across full spectrum operations by reducing or eliminating the hazards of explosive ordnance that threaten personnel, operations, installations, or materiel. EOD elements participate in security and advisory assistance, antiterrorism, counterdrug operations, training, ordnance disposal, arms control, treaty verification, and support to domestic civil authorities, and other stability operations and support operations. Many of their tasks are routinely performed in CONUS and include the following:

- Providing EOD support to the U.S. Secret Service (USSS) and other Federal agencies for Presidential and very important person protection.
- Advising and assisting the civil authorities in removing military ordnance that threatens public safety.
- Examining, identifying, and reporting new and unusual explosive ordnance for technical intelligence purposes.
- Supporting nuclear and chemical weapons shipments.
- Conducting range clearances. EOD supports range clearance operations by disposing of unexploded ordnance (UXO) on impact areas.
- Destroying ammunition (see FM 9-15).
- Neutralizing government-owned ordnance shipments (see FM 9-15).
- Responding to improvised explosive devices (IEDs).
- Advising on mines and minefield clearance. Mines and minefields are not specifically an EOD matter. EOD personnel give technical advice and assistance when asked and when priorities allow. Large-scale minefield breaching is an engineer mission.
- Supporting the clean-up of UXO from formerly used defense sites and active installations.
- Providing instruction to host or allied nation military or civilian EOD personnel on UXO hazards and disposal techniques.

8-52. During war, preserving the commander's combat power becomes more challenging for EOD because of the increasingly complex and lethal battlefield. EOD integration into staff planning must be sufficiently explicit to provide for battle synchronization, yet flexible enough to respond to change or to capitalize on fleeting opportunities. EOD missions include—

- Detecting UXO hazards.
- Identifying unexploded U.S. and foreign ordnance.
- Rendering safe UXO.
- Recovering UXO for technical intelligence exploitation.
- Disposing of UXO.
- Advising commanders on UXO hazards and protective measures.

8-53. EOD provides the force-projection Army with rapidly deployable support for eliminating UXO from any operational environment. EOD serves as a combat force multiplier by neutralizing UXO that is restricting freedom of movement and denying access to supplies, facilities, and other critical assets. For detailed information on EOD support, see FM 9-15.

CONTROL PROCEDURES

8-54. The limited EOD assets available to the commander are force multipliers that far exceed their actual numbers. For that reason, EOD operations must be controlled in a manner that has the greatest impact on supporting the commander's mission. Centralized control and decentralized control are the two methods of controlling the operations of EOD units.

Centralized Control

8-55. Centralized EOD control relies on good communications and a complete and accurate evaluation of the threat to the war effort. Once an EOD battalion receives a request for EOD support (relayed through the TSC or corps command post from the requesting unit operations channels), the EOD battalion assigns the incident to an EOD company. The EOD company then dispatches an EOD response team to handle the incident.

Decentralized Control

8-56. Decentralized EOD control occurs most often in peacetime operations. A unit needing EOD support requests that support directly through operational channels. The EOD company receives the request, notifies the EOD battalion, and dispatches a response team. Decentralized control works well in peacetime or when there is no requirement for a massive response by a large number of EOD assets to a major incident (such as a large-scale attack with denial-type munitions on a key facility).

COMMUNICATIONS IN EOD

8-57. EOD units need a wide range of communications to accomplish their mission. Long-range communications are required among the deployed teams, the companies, the EOD battalions, and the EOD group. EOD units link to the area communications network through the mobile subscriber equipment (MSE). In addition, EOD response teams and units require a data processing capability for electronic transmission of record traffic. When operating at an incident site, EOD response teams need secure short-range, wireless inter-team communications for coordinating team activities and safety. The response teams dispatched on the battlefield require a position navigation device with digital data capability for precise location determination.

EOD ORGANIZATIONS

8-58. A range of EOD organizations allow for mission flexibility. The types of EOD units available to support operations include the following.

EOD Response Team

8-59. A two- (light) or three-person (heavy) response team organic to an EOD company normally provides basic EOD support. The team may function independently of the parent company for an extended period. Several light teams can work together on large, multi-UXO incidents or other high-priority incidents. If required, a response team may be collocated with a unit other than its parent company for rations, quarters, and other logistical support. However, command and control remain with the parent company. A responding EOD team may need added support (such as engineers or medical) to reduce potential and/or actual hazards.

EOD Company

8-60. The EOD company provides command and control for its organic EOD response teams. The mission of EOD companies is to provide EOD support to corps and ARFOR/TSC units. In the TSC, they provide DS by covering the

ASG AO and all units within it. Any EOD companies not DS to the ASG are in GS to the TSC.

8-61. In the corps, the COSCOM commander positions the EOD companies throughout the CSG AO; they are normally collocated with a CSB. Command and control remains with the parent EOD battalion. EOD companies provide GS to the corps on an area basis and can be DS for a specific maneuver unit, normally a division or task force equivalent element.

8-62. Because of limited personnel and equipment assigned to an EOD company, the company depends on the unit to which it is attached or supporting for rations and other administrative and logistical support. The EOD company is 100 percent mobile. EOD companies have a limited number of personnel available for base security and other details.

EOD Company (CONUS-Based)

8-63. The CONUS support EOD company provides command and control for its organic EOD response teams. Its mission is to reduce or eliminate the hazards of munitions and explosive devices throughout the continental United States. This company provides EOD service on an area basis for a maximum routine incident response capability of 120 incidents per day (based on 12 teams). It may also respond to civilian requests for EOD support and assist public safety and law enforcement agencies in handling improvised explosive devices (IED) and terrorist threats. The CONUS-based EOD company may provide support to other Federal intelligence agencies, as outlined in directives, and support installations by clearing ranges and destroying unserviceable ammunition.

EOD Battalion

8-64. An EOD battalion provides command and control for three to ten EOD companies. A battalion with eight EOD companies is allocated to a TSC. A corps is allocated one EOD battalion with ten subordinate EOD companies. The EOD battalion has a limited number of personnel and equipment. Therefore, it is dependent on the unit to which it is assigned or attached for rations and other administrative and logistical support. The EOD battalion is 100 percent mobile.

Ordnance Group (EOD)

8-65. The ordnance group (EOD) has two major functions: theater EOD planning and EOD command and control. This group is composed of two to six EOD battalions. The EOD group is 50 percent mobile.

User Level Support

8-66. Any unit can report an EOD incident through operational or command channels to a central operations center. The center operations officer, with the assistance of the EOD staff officer, sets the priority of EOD incidents. Priority coincides with the threat posed by the incident. Incidents are coordinated, based on the operational mode used, through the EOD battalion or company for assigning an EOD response team. Lastly, the EOD response team dispatches to the scene.

AMMUNITION

8-67. Munitions are a dominant factor in determining the outcome of offensive, defensive, and often stability operations. Munitions provide the means to defeat and destroy the enemy. Due to limited quantities of modern munitions and weapon systems, commanders must manage munitions to ensure availability and enhance combat readiness. Most major military operations are joint and multinational and based on unexpected contingencies. These operations require the munitions logistics system to be modular, tailorable, and easily deployed. Ammunition units deploy based on operational needs and are essential to moving Class V.

8-68. Planning logistics munitions support must be coordinated and synchronized across the levels of war. The mission at every level of war is to ensure munitions arrive in the right quantities and proper types at the decisive time and place. Having munitions in the right quantity, type, and place enhances the Army's ability to engage the enemy decisively and sustain the operations culminating with the successful accomplishments of objectives.

THE AMMUNITION SYSTEM

8-69. The ammunition logistics system provides to the force the right type and quantity of ammunition in any contingency. The challenge is to move required amounts of ammunition into a theater from the CONUS sustaining base and other prepositioned sources in a timely manner to support an operation. The system must be flexible enough to meet changing ammunition requirements in simultaneous operations around the world. The objective of the system is to provide configured Class V support forward to the force as economically and responsively as possible to minimize handling or reconfiguring; quickly adapt to changes in potential threat; introduce new/improved weapons and ammunition; and be more responsive in getting the product to the forces. The unique characteristics of ammunition complicate the system. These factors include its size, weight, and hazardous nature. It requires special handling, storage, accountability, surveillance, and security.

8-70. Effective and efficient ammunition support requires integrated information and distribution management at all levels from the combat user to the CONUS sustainment base. Ammunition managers manage ammunition in terms of days of supply. The amount of Class V a unit can carry into combat on its weapon systems is measured in terms of combat or turret loads, except for field artillery, where the unit of measure is the battalion load. That is the amount of Class V that an artillery battalion can move uploaded on its weapon systems as well as with all its organic supply vehicles.

8-71. The structure of ammunition units and the munitions support concept evolves to meet changes in combat doctrine. Maneuver-oriented ammunition distribution system (MOADS) doctrine and force structure support a forward-deployed force. In the near future, MOADS will transition to a more flexible distribution system based on the concept of modularity. A munitions structure based on modularity will more effectively meet the needs of a force-

projection Army. Under this concept, units only deploy the number of soldiers and the equipment needed to support the force.

8-72. The advent of modular munitions units has drastically increased the flexibility of the ASCC/ARFOR commander and JFC during operations. Unlike maneuver-oriented ammunition distribution system palletized loading system (MOADS-PLS) units, modular companies and platoons are 100 percent mobile (less munitions stocks). This mobility is particularly important for contingency operations. The ability of a modular platoon to deploy independent of its company headquarters allows the commander to right size his forces for combat and the operations. Although modular platoons and companies are 100 percent mobile, they are not 100 percent sustainable. These units must attach to a higher headquarters (company or battalion) for administrative and logistical support and C2.

AMMUNITION MANAGEMENT

8-73. The management process begins during peacetime planning. Combatant commands, ASCCs, ARFOR, and service/readiness commands determine Class V requirements for possible contingencies. They consider the concepts of operation and task organization including the projected force deployment sequences, the availability of stocks, storage locations, deployability into various theaters, and the responsiveness of the production base to meet shortfalls. It is unlikely that future conflicts will require the massive volumes of stocks needed to support the cold war forces of the 1980s.

8-74. As the force receives these new weapon systems and munitions, there will be an evolving mix of high-low technology munitions, which the logistics system must be able to support. The Class V system must also be capable of supporting joint forces and a variety of multinational forces. Multinational forces may not be able to use efficiencies of U.S. logistics technologies, such as the palletized load system or container/materials-handling equipment. Ammunition planners must integrate these factors into the LPT (discussed in chapter 5). Integral to the LPT and requirements determination process is the planned development of the theater. Modular ammunition units deploy to handle in-coming stocks and support the force as it matures to meet the combatant commanders plan. Initial theater Class V unit requirements may be small. For example, they may include the organic support for an airlifted light brigade, LSE, and a modular platoon to handle initial receipt of prepositioned stocks and support a brigade combat team. The theater, however, requires follow-on ammunition capabilities in proportion to the combat forces deployed. Along with being rapidly deployable, these ammunition units require mobility and the information systems to control operations and provide the critical decision support and management link within the theater and with the CONUS sustaining base.

AMMUNITION SUPPORT ACTIVITIES

8-75. Combat forces initially deploy into theater with their ammunition basic loads. Commanders estimate their Class V needs (required supply rates) in accordance with combat priorities to weight the battle. The ARFOR commander determines the controlled supply rate (CSR) by comparing the total unrestricted ammunition requirements against the total ammunition

assets on hand or due in. Forces receive resupply in the forward areas from tactical ammunition support activities (ASAs).

8-76. The three types of ASAs in the theater are: theater storage areas (TSAs), corps storage areas (CSAs), and ammunition supply points (ASPs). An ammunition transfer point (ATP) is not considered an ASA because of its temporary nature. The ASA mission is to receive, store, issue, and maintain theater conventional ammunition stocks. In addition, ASAs configure ammunition into mission-configured loads (MCLs). Once configured, MCLs ship forward to ATPs for issue to units. When published, FM 4-30 will detail the doctrinal layout of a mature ammunition system in a developed theater.

Theater Storage Area

8-77. The TSA encompasses the storage facilities located in the COMMZ. This is where the bulk of the theater reserve ammunition stocks are located. Modular ammunition companies, with a mixture of heavy- and medium-lift platoons, operate and maintain TSAs. Besides shipping ammunition to CSAs, the TSA provides area ammunition support to units operating in the COMMZ. The ASCC determines the TSA stockage objective. AR 710-2 contains basic days of supply (DOS) policy for Class V. The TSC ammunition group must keep the TSC materiel management center (MMC) informed of storage limitations or shortages in each TSA.

Corps Storage Area

8-78. The CSA is the primary source of high-tonnage ammunition for the division and corps. Modular ammunition companies, with a mixture of heavy- and medium-lift platoons, operate the CSA. The number of units assigned to operate a CSA depends on the corps authorized ammunition stockage level. CSAs receive 50 percent of their ammunition from the POD and 50 percent from the TSA. At a minimum, each corps identifies an ASA to meet these requirements. The COSCOM establishes stockage objectives for the CSA and bases them on projected theater combat rates. Initially, the stockage objective of a CSA should be 10 to 15 days of supply. After the initial combat draw down, the CSA should maintain 7 to 10 days of supply. When a CSA wartime stockage objective exceeds 25,000 short-tons, the commander should establish a second CSA.

Ammunition Supply Point

8-79. ASPs are another source of ammunition for a division. ASPs receive, store, issue, and maintain a one- to three-day supply of ammunition. ASP stockage levels are based on tactical plans, availability of ammunition, and the threat to the resupply operation. ASPs are located in the division rear. Normally, three ASPs support a division and provide manning for the division rear ATP. A modular ammunition company, with one or more medium-lift modular ammunition platoons, normally operates one large ASP behind each brigade. By doctrine, Class V containers go only as far as the CSA.

8-80. ASPs provide 25 percent of each ATP ammunition requirement in the form of MCLs. Besides supporting ATPs, ASPs provide ammunition to units operating in the division rear area. These nondivisional and corps units normally receive support from the closest ASA.

Ammunition Transfer Point

8-81. ATPs are the most mobile and responsive of the munitions supply activities. CSAs and ASPs deliver ammunition to the ATP using corps transportation assets. This ammunition is kept loaded on semitrailers, containerized roll-on/off platforms (CROPs), or PLS flatracks until ATP personnel transload it to using unit vehicles. If the situation demands, personnel can transfer the ammunition immediately to using unit tactical vehicles.

8-82. ATPs are located in each brigade support area (BSA) with an additional one in the division support area (DSA). The mission of each ATP is to provide 100 percent of the ammunition required by all infantry, armor, artillery, combat aviation, combat engineer, and air defense units in its sector. This includes divisional and nondivisional units (such as corps artillery) operating in the brigade area. A division ammunition representative is located at each ATP to control the issue of munitions.

8-83. Each maneuver divisional brigade is supported by a forward support battalion (FSB) that operates an ATP. The ammunition section of the supply company in the FSB operates ATPs. These ATPs provide ammunition support to all units in the brigade support sector and receive mission guidance from the division ammunition officer (DAO). Units arriving at the ATP to pick up munitions drop off empty, or partially empty, PLS flatracks and retrieve fully loaded flatracks. ATP personnel assist units without the PLS to transload munitions. The unit normally issues uploaded flatracks in the same configuration as received.

Chapter 9

Health Service Support

Health service support is a single, integrated system. It consists of all services performed, provided, or arranged to promote, improve, conserve, or restore the mental and physical well-being of personnel in the Army and, as directed, for other services, agencies, and organizations. It is a continuum of care and support from the point of injury or wounding through successive levels to the continental United States (CONUS) base. This system encompasses the ten functional areas of medical treatment: area support, medical evacuation, medical regulating, hospitalization, preventive medicine, health service logistics, dental, veterinary, combat operational stress control services, and medical laboratory support. Health service support involves delineation of support responsibility by geographical area.

HEALTH SERVICE SUPPORT ACROSS THE LEVELS OF WAR

9-1. Health service support (HSS) includes activities across all levels of war. The following are considerations for HSS across the levels of war.

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STRATEGIC HEALTH SERVICE SUPPORT

9-2. Strategic HSS and supporting services include activities under the control of the Department of the Army (DA), Department of Defense (DOD), and Secretary of Defense (SECDEF). These include the U.S. depots, arsenals, data banks, plants, research laboratories, and factories associated with the U.S. Army Medical Materiel and Research Command (USAMRMC) (including the U.S. Army Medical Materiel Agency [USAMMA]), and disease and nonbattle injury (DNBI) surveillance centers (such as the Centers for Health Promotion and Preventive Medicine [USACHPPM]), the DLA, national inventory control point (NICP), military health systems, and Veterans Administration and civilian hospital systems of the National Disaster Medical System (NDMS). Strategic HSS focuses on—

- Supporting force deployment by ensuring soldier medical readiness.
- Medical surveillance and occupational and environmental (OEH) health surveillance.
- Early employment/deployment of preventive medicine (PVNTMED) and veterinary services.

- Medical laboratory services for in-theater confirmatory identification of suspect NBC samples/specimens.
- Mobilizing the industrial base.
- Determining requirements and acquiring medical equipment, supplies, blood, and pharmaceuticals to support force projection.
- Stockpiling and prepositioning medical materiel (prepositioning of medical materiel configured to unit sets and afloat prepositioning).
- Supporting the host nation.
- Medical evacuating, medical regulating, and hospitalization.
- Mobilizing.
- Preserving the force by returning injured soldiers to full health.
- Demobilizing.

OPERATIONAL HEALTH SERVICE SUPPORT

9-3. Operational HSS encompasses all of the medical activities to support the force employed in offensive, defensive, stability, and support operations. Operational HSS focuses on—

- Supporting deployment and reception, staging, onward movement, and integration (RSO&I) operations.
- PVNTMED, veterinary services, and COSC.
- Medical facilities in the theater.
- Managing distribution of medical materiel and blood.
- Supporting forward deployed forces.
- Reconstituting medical units in theater.
- Supporting redeployment operations.

9-4. At the operational level, managers balance current requirements with the need to extend capabilities along the lines of communication (LOC) and build up support services for subsequent major operations.

TACTICAL HEALTH SERVICE SUPPORT

9-5. Tactical planning is proactive rather than reactive. HSS must be thoroughly integrated with tactical plans and orders. Commanders reallocate medical resources as tactical situations change. HSS commanders tailor medical units to adapt to the flow of battle and to meet reinforcement or reconstitution requirements. Elements to reconstitute medical units normally come from the next higher level of HSS. Due to the massive destructive and disabling capabilities of modern conventional and NBC weapons, medical units can anticipate large numbers of casualties in a shorter period. Medical units are flexible. They alter their normal scope of operations to provide the greatest good for the greatest number. However, these mass casualty situations usually exceed the capabilities of local medical units. Key factors for effective mass casualty management are—

- On-site triage.
- Emergency resuscitative care.
- Early surgical intervention.

- Reliable communications.
- Skillful evacuation by air and ground resources.

9-6. Medical personnel may also have to defend themselves and their patients within their limitations. Medical personnel are only authorized the use of small arms for the protection of themselves and the patients in their care. In certain situations, HSS units in rear areas must be able to defend against level I threats and to survive NBC strikes while continuing to support the operation. Medical personnel are not required to perform perimeter defense duties for nonmedical units. Due to the protections afforded medical personnel under the provisions of the Geneva Conventions, medical personnel must be exclusively engaged in their humanitarian duties and can, therefore, only defend medical unit areas.

PRINCIPLES OF HEALTH SERVICE SUPPORT

9-7. Providing HSS is guided by six principles consistent with the principles discussed in JP 4-02:

- Health service support conforms to the tactical commander's operation plan (OPLAN). By taking part in developing the OPLAN, the HSS planner can determine support requirements and plan for the support needed to prevent DNBI and to effectively clear the battlefield of the ill, injured, and wounded.
- Technical *control* and staff supervision of HSS resources must remain with the appropriate command-level surgeon.
- The HSS staff must maintain *continuity* of care since an interruption of treatment may cause an increase in morbidity and mortality. No patient is evacuated farther to the rear than his medical condition or the tactical situation dictate.
- The *proximity* of HSS assets to the supported forces is dictated by the tactical situation (mission, enemy, troops, terrain and weather, time, civilian considerations [METT-TC]).
- The HSS plan must be flexible to enhance the capability of shifting HSS resources to meet changing requirements. Changes in the tactical situation or OPLAN make *flexibility* essential.
- *Mobility* is required to ensure that HSS assets remain close enough to combat operations to support combat forces. The mobility of medical units must be equal to the forces supported.

LEVELS OF MEDICAL CARE

9-8. Health service support is arranged in levels of medical care. They extend rearward throughout the theater to the CONUS support-base. Each level reflects an increase in capability, with the functions of each lower level being within the capabilities of higher level.

LEVEL I

9-9. The first medical care a soldier receives occurs at Level I. It is provided by the trauma specialist/special operations forces combat medics (assisted by self-aid, buddy aid, and combat lifesaver skills, and at the battalion aid

station [BAS] by the physician and physician assistant). This level of care includes immediate lifesaving measures, prevention of DNBI, COSC preventive measures, patient collection, and medical evacuation to supported medical treatment elements.

LEVEL II

9-10. Medical companies and troops of brigades, divisions, separate brigades, armored cavalry regiments, and area support medical battalions (ASMBs) render care at Level II. They examine and evaluate the casualty's wounds and general status to determine treatment and evacuation precedence. This level of care duplicates Level I and expands services available by adding limited dental, laboratory, optometry, preventive medicine, health service logistics, COSC/mental health services, and patient-holding capabilities. When required to provide far-forward surgical intervention, the medical company may be augmented with a forward surgical team (FST) to provide initial wound surgery. The FST is organic to airborne and air assault divisions.

LEVEL III

9-11. Level III is the first level of care with hospital facilities. Within the combat zone, the combat support hospital (CSH) provides resuscitation, initial wound surgery, and postoperative treatment. At the CSH, personnel treat patients for return to duty (RTD) or stabilize patients for continued evacuation. Those patients expected to RTD within the theater evacuation policy are regulated to an echelon above corps (EAC) CSH.

LEVEL IV

9-12. At Level IV, the patient is treated at an EAC CSH. Those patients not expected to RTD within the theater evacuation policy are stabilized and evacuated to a Level V facility.

LEVEL V

9-13. Definitive care to all categories of patients characterizes Level V (primarily CONUS-based) care. The Department of Defense (DOD) and Department of Veteran's Affairs (VA) hospitals provide this care. During mobilization, the National Disaster Medical System (NDMS) may be activated. Under this system, civilian hospitals care for patients beyond the capabilities of the DOD and VA hospitals.

FUNCTIONAL AREAS

9-14. There are ten functional areas within the Army Medical Department (AMEDD). The AMEDD integrates and synchronizes these functional areas, enabling the HSS system to meet the requirements of a force-projection Army.

MEDICAL EVACUATION AND MEDICAL REGULATING

9-15. Medical evacuation is the timely, efficient movement and provision of en route medical care of sick, injured, or ill persons from the battlefield or other locations to medical treatment facilities (MTFs). It is the responsibility

of the gaining level HSS to evacuate or coordinate the evacuation from the lower level. The health care provider attending the patient determines the mode and precedence of evacuation. Air evacuation is the primary means of medical evacuation for urgent and priority casualties. In the combat zone, ground ambulance squads organic to medical sections, platoons, and companies evacuate patients within their AOs. Medical evacuation battalions evacuate patients from Level II MTFs to Level III hospitals. The battalion also evacuates patients laterally from hospital to hospital within the corps area, and from hospitals to U.S. Air Force (USAF) staging areas for evacuation out of the combat zone.

9-16. Strategic evacuation is a function of the USAF aeromedical evacuation system. The theater surgeon recommends a theater evacuation policy through the combatant commander and Joint Chiefs of Staff for approval by the SECDEF. The policy establishes the number of days an injured or ill soldier may remain in the theater to return to duty. Soldiers who will not return to full health within the established time are evacuated to definitive care facilities in CONUS or other designated locations. FM 8-10-6 has more details on evacuation.

9-17. *Medical regulating* is the coordinated movement of patients to MTFs that are best able to provide timely and required care. The corps medical command (MEDCOM), medical brigade medical regulating office (MRO) and, if established, joint patient movement requirements center (JPMRC) provide medical regulating in the combat zone. In the COMMZ, the theater MEDCOM/EAC medical brigade MROs and the theater patient movement requirements center (TPMRC) provide support. The TPMRC provides both intratheater and intertheater medical regulating. For example, if hospitals of other services within the theater have the necessary capabilities, the TPMRC may regulate Army patients to them. It also coordinates intertheater evacuation with the global patient movement requirements center (GPMRC). The TPMRC coordinates patient movement with the USAF aeromedical evacuation control center or, if air evacuation is not available or advisable, with the Military Sealift Command.

HOSPITALIZATION

9-18. Hospitalization, provided by the CSH, is part of the theater-wide system for managing sick, injured, and wounded patients. The CSH capabilities include triage/emergency care, outpatient services, in-patient care, pharmacy, laboratory, blood banking, radiology, physical therapy, medical logistics, emergency/essential dental care, nutrition care, and patient administration services. For more information on theater hospitalization see FM 4-02.10.

9-19. The CSH may be augmented by one or more medical detachments, hospital augmentation teams, or medical teams. These may include—

- Minimal care detachment that is capable of providing minimal/convalescent care, nursing, and rehabilitative services in support of Levels III and IV hospitals.

- Telemedicine detachment that provides telemedicine services and clinical reachback capabilities to support the CSH and other MTFs within the division, corps, and theater.
- Forward surgical team that is available to augment the surgical services of the CSH with general surgery and orthopedic surgery capabilities.
- Head and neck hospital augmentation team that provides special surgical care for ear, nose, and throat surgery, neurosurgery, and eye surgery to support the CSH, plus specialty consultative services, as required.
- Special care hospital augmentation team that provides the additional health care personnel to support other military operations.
- Pathology hospital augmentation team that provides pathology support to the CSH laboratories and specialty consultative services, as required.
- Infectious disease medical team that provides infectious disease investigative services and specialty consultative services, as required.
- Renal hemodialysis medical team that provides renal hemodialysis care for patients with acute renal failure and consultative services on an area basis.

HEALTH SERVICE LOGISTICS

9-20. The health service logistics (HSL) system encompasses planning and executing medical supply operations, medical equipment maintenance and repair, blood storage and distribution, and optical fabrication and repair. It also includes contracting services, medical hazardous waste management and disposal, production and distribution of medical gases, and blood banking services for Army, joint, multinational, and interagency operations. The appropriate command surgeon provides technical guidance. The system is anticipatory, with select units capable of operating in a split-based mode. The theater HSL system consists of the following organizations:

- Medical logistics management center (MLMC).
- HHD, MEDLOG battalion.
- Logistics support company.
- Medical logistics company.
- Blood support detachment (BSD).
- Medical logistics support team (MLST).

9-21. The MLMC is subordinate to the theater MEDCOM or senior medical command and control (C2) headquarters in theater. It is responsible for providing theater-level centralized management of critical Class VIII commodities, patient movement items, and medical maintenance within the theater. The MLMC normally uses split-based operations. During an initial employment into an austere theater, the MLMC base normally remains in the CONUS while deploying a support team into the theater, linking the strategic to the operational level of logistics. The support team also links Class VIII management with the distribution system within the AO by co-locating a distribution section with the support operations section of the TSC

or a COSCOM. When so designated, the MLMC, with the MEDLOG battalion, serves as the single integrated medical logistics manager (SIMLM) for joint operations. It also serves as the medical contracting manager for the theater.

9-22. The MEDLOG battalion is subordinate to the theater MEDCOM or the corps MEDCOM. It is responsible for providing C2 and supervising operations for a variable number of attached MEDLOG companies, logistics support companies, and a BSD. This overall control covers the whole spectrum of MEDLOG and blood management operations

9-23. The logistics support company (subordinate to the MEDLOG battalion) provides medical materiel, medical maintenance and repair, and multi- and single-vision optical lens fabrication and repair to EAC and corps medical units operating in the AO. It also provides backup support to the MEDLOG company. This company forms the MEDLOG base for the AO.

9-24. The MEDLOG company (subordinate to the MEDLOG battalion) provides medical materiel, medical maintenance, and multivision optical lens fabrication and repair to division and corps medical units operating within the division AO. The MEDLOG company has no organic blood support capability. A cell from the BSD collocates to provide blood support to the division. The company is normally under the C2 of the HHD, MEDLOG battalion. The company has the capability for limited self-sustainment during initial operations, meeting the requirement for early entry into the AO or as part of a task organization.

9-25. Blood support is a combination of four systems: medical, technical, operational, and logistics. The management and distribution of all resuscitative fluids (including albumin) is a HSL function. Theater blood support depends on resupply from the CONUS base. Liquid blood products enter the theater through USAF blood transshipment centers for further shipment to Army BSDs. Army hospitals acquire necessary blood products from these BSDs. Blood support for Level II MTFs (including FSTs) consists of a limited number of group-type O liquid red blood cell units. All hospitals have blood-banking capabilities that allow them to store blood products. The combatant command establishes a single blood management program. The program is theater-wide and interfaces with the CONUS blood banking system. The theater and CONUS blood programs are a combined effort (JP 4-02.1). All components within the combatant command maintain blood programs. The Army Blood Program Office (ABPO) interfaces with the area joint blood program office (AJBPO). The AJBPO interfaces with the Armed Services Blood Program Office in CONUS.

9-26. The BSD (subordinate to the MEDLOG battalion) serves as the Army's blood supply unit (BSU). It provides blood collection, manufacturing, storage, and distribution of blood and blood products to division, corps, and EAC medical units, and to other operations (see FM 4-02.1). The detachment provides flexibility to shift personnel assets between collection and distribution missions as required. Blood and blood products are stored and distributed under rigid specification and managed by standard information systems. Air movement is the preferred method for moving blood and blood products. Army blood support in the AO is the responsibility of the

supporting BSD. The BSU collects, manufactures, receives, stores, and distributes blood and blood products on an area basis. The commander of the BSU may also serve as the AJBPO as part of the Theater Joint Blood Program. Primary blood support in the AO during a high tempo operation is based on resupply from the CONUS donor base. Commanders may task the Army BSU to provide blood to other services on an area basis.

9-27. The MLST is a table of distribution and allowances (TDA) organization consisting of MEDLOG personnel (military, DA civilians, and contractors) from the U.S. Army Medical Materiel Agency (USAMMA). The MLST normally deploys with the U.S. Army Materiel Command (USAMC) logistics support element (LSE). The MLST supports the reception and onward movement of APS, unit sets, and sustainment stocks prepositioned in the AO. The MLST provides medical materiel and maintenance capability, equipment accountability, and transfer support of reception operations at air and seaports of debarkation. The MLST is a component of the USAMC and is under the operational control of the LSE until a theater support command is established. The MLST transitions its mission to the theater MEDLOG battalion or the MLMC. After completing the mission transition, the MLST redeploys to CONUS. At the end of the operation, the MLST may again deploy to the AO to support the redeployment of U.S. forces and materiel from the AO to follow-on CONUS or OCONUS locations.

DENTAL SERVICES

9-28. Within the theater of operations, there are three levels of dental support: unit, hospital, and area. These levels are defined primarily by the relationship of the dental assets supporting the patient population within each level.

9-29. Unit-level dental care consists of those services provided by a dental module organic to divisional and nondivisional medical companies and all special forces groups. This module provides emergency dental treatment to soldiers during tactical operations.

9-30. Hospital-level dental care consists of those services provided by the hospital dental staff to minimize loss of life and disability resulting from oral and maxillofacial injuries and wounds. The hospital dental staff provides operational dental care, which consists of emergency and essential dental support to all injured or wounded soldiers as well as the hospital staff.

9-31. Dental service companies provide dental support on an area support basis. These dental units provide operational care. The dental companies are composed of modular dental teams capable of operating separate dental treatment facilities (DTFs) or of consolidating units and operating one large facility, depending on the METT-TC. Other teams provide far-forward emergency and essential dental care.

9-32. Within the theater, dental service support provides operational care, which is composed of emergency dental care and essential dental care. Another category, normally found only in fixed facilities in the United States, is comprehensive care. These categories are not absolute in their limits; they are the general basis for defining the dental service capabilities available at the different HSS levels of care. Categories are—

- Operational care. Care given for relieving oral pain, eliminating acute infection, controlling life-threatening oral conditions (hemorrhage, cellulitis, or respiratory difficulty), and treating trauma to teeth, jaws, and associated facial structures is considered emergency care. It is the most austere type of care and is available to soldiers engaged in tactical operations. Common examples of emergency treatments are simple extractions, providing antibiotics and pain medication, and temporary fillings.
- Essential care includes dental treatment necessary to intercept potential emergencies. This type of operational care is necessary for preventing lost duty time and preserving the fighting strength. Soldiers in dental class 3 (potential dental emergencies) should be provided essential care as the tactical situation permits. Soldiers in dental class 2 (untreated oral disease) should be provided essential care as the tactical situation and availability of dental resources permit. The scope of operational care includes definitive restoration, minor oral surgery, exodontic, periodontic, and prosthodontic procedures, as well as prophylaxis.
- Comprehensive care restores an individual's optimal oral health, function, and aesthetics. This category of care is usually reserved for force health protection plans that anticipate an extensive period of reception and training in theater. The scope of facilities needed to provide this level of dental support could equal that of Level III medical facilities. FM 4-02.19 has additional information on dental support.

VETERINARY SUPPORT

9-33. The U.S. Army Veterinary Service is the executive agent for veterinary support to all services and other U.S. agencies in theater. Appropriate mixes of veterinary units provide this support. These units can be task-organized to support food safety and quality assurance, and the medical care mission for government-owned animals. Services include sanitary surveillance for food source and storage facilities, procurement, and surveillance and examination of foodstuffs for safety and quality. The veterinary unit is responsible for publishing a directory of approved food sources for the theater/AO. Veterinary preventive medicine provides an effective combat multiplier through monitoring endemic zoonotic (animal) disease threats of military significance. The animal medical care mission provides complete medical care to all government-owned animals, especially military working dogs (MWDs), in the AO. The potential of food-borne disease, the threat of NBC contamination of subsistence, the need to assess the zoonotic disease threat, and the need to provide health care to government-owned animals requires a veterinary presence throughout the entire AO. Comprehensive veterinary medical and surgical programs are required to maintain the health of government-owned animals. See FM 8-10-18 for more details.

PREVENTIVE MEDICINE

9-34. In past conflicts, DNBI rendered more soldiers combat ineffective than combat action. Preventive medicine services to counter the medical threat

and prevent DNBI are the most effective, least expensive means of providing commanders with the maximum number of healthy soldiers. The Armed Forces Medical Intelligence Center conducts area studies on diseases for all regions. Medical companies of brigade and divisional support battalions, area support medical battalions, separate brigade support battalions, and medical troops of ACR support squadrons provide preventive medicine services. They receive additional support from the PVNTMED detachments of the corps and EAC medical brigades. See FM 4-02.17 for more details.

COMBAT OPERATIONAL STRESS CONTROL

9-35. Combat operational stress control (COSC) conserves the fighting strength by minimizing losses due to battle fatigue and neuropsychiatric disorders. The focus of Army COSC is on—

- Promoting positive mission-oriented motivation.
- Preventing stress-related casualties.
- Treating and the early detection of soldiers suffering from battle fatigue.
- Preventing harmful combat stress reactions, such as misconduct stress behaviors and post-traumatic stress disorders.

9-36. Brigade/division support battalion and separate brigade medical companies, armored cavalry regiment medical troops, and ASMBs provide COSC support. They receive further support from CSC companies or detachments assigned to the corps and EAC medical brigades. FM 22-51, FM 8-51, and FM 6-22.5 discuss COSC programs and activities.

AREA MEDICAL SUPPORT

9-37. Medical companies of divisions, separate brigades, and ACR, and the corps/EAC ASMB provide area medical support. These companies provide Levels I and II medical care throughout the division, corps, and EAC areas. They employ medical treatment squads/teams to establish Levels I and II MTFs and to reinforce medical treatment elements (BAS) of maneuver battalions. The ground ambulance platoons of these companies provide medical evacuation support on an area support basis from Level I MTFs and supported units to Level II MTFs.

MEDICAL LABORATORY SUPPORT

9-38. The theater MEDCOM area medical laboratory includes capabilities in endemic diseases, OEH hazards, and NBC. Its focus is the total health environment of the theater, not individual patient care. Its facility conducts studies in pest identification, the efficacy of pesticides, frequency of infectious agents, monitoring immune response, and transmission of zoonotic diseases, and in-theater confirmatory identification of suspect NBC samples/ specimens. Its personnel also function as consultants to hospital clinical laboratory services within the theater. It may task-organize teams and employ them forward to troubleshoot a particular problem. All Level II MTFs provide basic laboratory services within the theater. They perform basic procedures in hematology, urinalysis, microbiology, and serology. Level II MTFs receive, maintain, and transfuse blood products. Levels III and IV

MTFs (CSH) perform procedures in biochemistry, hematology, urinalysis, microbiology, and serology. These hospitals also provide blood-banking services.

MEDICAL INFORMATION SYSTEMS

9-39. Medical information systems facilitate the proper management of medical information that is critical to providing HSS. Decisions, such as those on where to treat casualties and when to evacuate to hospitals, depend on knowing what medical resources are available at all times. An effective medical management information system supports theater HSS operations by providing the capability to track resources, requirements, and patients. In particular, HSL relies heavily on information systems. Arriving with the lead element, units with information systems to manage medical information orchestrate both the arriving medical units in the AO and the interfacing with other information systems (such as movement and personnel) at all levels.

Chapter 10

Human Resource Support

Human resource support (HRS) encompasses the following functions: manning the force, personnel support, and personnel services. These activities include personnel accounting, casualty management, essential services, postal operations, and morale, welfare, and recreation. They are provided to service members, their families, DA civilians, and contractors.

HUMAN RESOURCE SUPPORT ACROSS THE LEVELS OF WAR

10-1. HRS covers all levels of war. Human resource (HR) considerations for each level or war include the following.

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STRATEGIC SUPPORT

10-2. Strategic HRS involves the national-level capability to plan, resource, manage, and control the HR life cycle functions for the Army. It involves integrating HR functions and activities across the Army staff, among the respective Army components, and among the services. At the strategic level, the DA Deputy Chief of Staff for Personnel (Army G1) provides HRS to all active component Army forces. The Army G1 develops Army policy for all systems and functions in HRS, while the assistant Secretary of the Army (Manpower and Reserve Affairs) is responsible for civilian personnel policy and operations. The U.S. Total Army Personnel Command (USTA PERSCOM) applies and implements these policies for military personnel. The assistant Chief of Staff for Installation Management (ACSIM), the U.S. Army Community and Family Support Center, and the Military Postal Service Agency also provide strategic support to the force for morale, welfare, and recreation services, and postal operations. The Chief, Army Reserve and the Director of the National Guard Bureau provide strategic HRS for the Army Reserves and National Guard elements respectively.

OPERATIONAL AND TACTICAL SUPPORT

10-3. Policies and procedures translate into action at the operational and tactical levels. Theater PERSCOMs, MACOM DCSPERs, corps and division G1/AGs, and brigade and battalion S1s provide the operational and tactical level HR life cycle support to service members, their families, civilians, and contractors. They are responsible for executing each of the following HR

functions. HR providers at all levels are responsible for successfully implementing the human dimension of soldiering.

MANNING THE FORCE

10-4. Manning the force consists of personnel readiness management, personnel accounting, personnel information management, and replacement operations management. The manning challenge is getting the right soldier to the right place at the right time with the right capabilities. Manning combines anticipation, movement, and skillful positioning of personnel assets. It relies on the secure, robust, and survivable communications and digital information systems of emerging technologies that provide common operational picture, asset visibility, predictive modeling, and exception reporting. This constitutes a significant reduction of forward-deployed personnel assets that manage the deployed forces.

PERSONNEL READINESS MANAGEMENT

10-5. The purpose of the personnel readiness management system is to distribute soldiers to units based on documented requirements or authorizations to maximize mission preparedness and provide the manpower needed to support full spectrum operations. This process involves analyzing personnel strength data to determine current mission capabilities and project future requirements. It compares an organization personnel strength to its requirements, and results in a personnel readiness assessment and allocation decision. This system depends on personnel asset visibility from the foxhole to strategic national provider level.

REPLACEMENT OPERATIONS MANAGEMENT

10-6. Replacement operations management moves personnel from designated points of origin to ultimate destinations. There are two parts to replacement operations management: replacement management and replacement support. Replacement management relates to accounting and processing while replacement support is the physical reception, support, and delivery of military and civilian personnel. This includes replacements and return-to-duty (RTD) soldiers. The system provides primarily for individual replacements and groupings of individuals up through squad, crew, or team level, as required by operations. Replacement management requires real-time access to information about all replacements, movement status from the point of selection, and personnel readiness management information to determine the final destination of replacements and RTD soldiers.

10-7. While the standard is individual soldiers, the replacement operations management system must be able to provide squads, crews, or teams. It must also coordinate for their transportation to weapon system link-up and training locations.

10-8. Personnel readiness managers coordinate with materiel managers to linkup weapon systems with squads, crew, and teams. Readiness managers also coordinate with the G3/S3 and other staff members for training resources for replacement training. Managers ensure replacements have all necessary qualifications, to include any additional skills identified as critical

for positions or particular operations. The replacement unit maintains an element's integrity and accountability until the replacement section in-processes the squad, crew, or team.

10-9. The replacement network serves as the conduit for soldiers and civilians returning to duty from hospitals. Personnel readiness managers also help military police determine the duty status of stragglers and assist in their eventual disposition through legal or replacement channels.

10-10. Replacement management operations are both predictive and responsive, and focus on throughput to the lowest possible level. This reduces the assembling of large pools of replacements within the area of operation (AO).

10-11. Readiness managers direct RTDs to their original units unless the tactical condition clearly dictates otherwise. The decision to begin assigning RTDs to other than their original unit is an operational decision of the commander or operations staff with recommendations from the personnel staff.

10-12. Whenever mission, enemy, troops, terrain and weather, time, civilian considerations (METT-TC) allows the replacement management system includes training individual replacements. Training individual replacements while in the replacement system reduces the unit commander's training requirements for newly assigned soldiers. Training individual replacements begins at continental United States (CONUS) replacement centers (CRCs). CRCs certify soldier readiness for deployment. They also coordinate the equipping, training, and local area transportation of replacement personnel, DA civilians, contract civilians, and personnel from the American Red Cross and other Federal agencies and National organizations. CRCs also receive, out-process, and account for individuals returning from the theater, including noncombatant evacuees.

10-13. The theater replacement directorate (RD), a staff element of the PERSCOM, or the senior personnel element in theater performing the RD mission coordinates, transportation requirements when in-theater air assets must transport replacements from EAC to corps or division release points. Replacement companies under command and control of replacement battalions are at CRC, theater, or corps level. These companies receive, support, and process replacements. They coordinate movement with the appropriate movement control element. The division replacement section coordinates with the G4 and division transportation officer for movement to the brigade support area (BSA). The brigade S1 processes and assigns replacements to battalions. The battalion S1 further assigns replacements to company level.

10-14. The personnel readiness management system depends on accurate and complete information. Therefore, personnel readiness managers must quickly establish a personnel accounting system within a theater of operations.

PERSONNEL ACCOUNTING

10-15. Personnel accounting is the system for recording by-name data on soldiers when they arrive in, and depart from, units; when their duty status changes (for example from duty to hospital); and when their grade changes. Strength reporting is a numerical end product of the accounting process. It starts with strength-related transactions submitted at unit level and ends with a database update through all echelons to the total Army personnel database. Standard reports available from the personnel accounting system include the following:

- Battle roster.
- Personnel summary.
- Personnel requirements report.
- Command and control task force personnel summary.

10-16. Personnel accounting will be accomplished primarily through the application of a corporate database and web enabled processes that facilitate personnel support from home station, thus reducing the personnel footprint on the battlefield.

PERSONNEL INFORMATION MANAGEMENT

10-17. Personnel information management encompasses the collecting, processing, storing, displaying, and disseminating of relevant information about soldiers, units, and civilians. Personnel readiness managers, casualty managers, and replacement managers all use a personnel information database when performing their missions. The Defense Integrated Military Human Resource System (DIMHRS) operates as a centralized database of all military personnel. Personnel readiness, casualty, and replacement managers access DIMHRS for the real-time information needed to perform their mission.

10-18. During split-based operations, the personnel information processing activity of the personnel services battalion (PSB) element or military personnel division at the home station provides continued support to deployed forces. The rear personnel information system element performs sustaining base personnel information management. A forward deployed personnel detachment or a forward area support team provides only essential services in contingency operations. The forward element synchronizes databases in the theater, and transmits, updates, and receives them from the rear element.

PERSONNEL SERVICES

10-19. Personnel services are integral to unit readiness as well as the human dimension of the force. Personnel services encompass casualty operations management, essential personnel services, and military pay.

CASUALTY OPERATIONS MANAGEMENT

10-20. The casualty operations management system includes the recording, reporting, verifying, and processing of information from unit level to Headquarters, Department of the Army. It also involves notifying

appropriate individuals and assisting family members. The system involves collecting casualty information from a number of sources, collating it, and analyzing it to determine the appropriate action. Accuracy and timeliness are critical components of casualty management, and depend on satellite communications and reliable access to personnel information.

10-21. Casualties can occur on the first day of an operation. Thus, casualty managers from each echelon of command may need to deploy early. Units report all casualties found to include civilians, contract personnel, and military personnel from other U.S. Army units, other services, and multinational forces. Reports go to the PSB as well as through G1/S1 channels. The future digital information exchange, through the management module of GCSS-A, provides an interface between medical facilities, mortuary affairs collection points, and personnel operators. Casualty liaison teams currently provide an interface between medical facilities, mortuary affairs collection points, and the personnel group.

10-22. Casualty operations require 100 percent personnel accounting reconciliation. The unit verifies casualty information against the database and emergency data in an individual's deployment packet. Initial and updated reports move through channels to the USTAPERSCOM. USTAPERSCOM verifies information in the casualty report against available information systems. It then directs and coordinates notification actions through the appropriate casualty area commander. The casualty area commander (usually a commander of an active duty installation in CONUS) makes the notification to next of kin and provides casualty assistance.

10-23. All commanders, soldiers, and deployed civilians must be sensitive to the accuracy and sensitive nature of casualty information. Modern communications have increased the risk that family members will get casualty information from sources outside the official system. To combat this risk, casualty managers must use all available means to get casualty information at the earliest possible moment.

ESSENTIAL PERSONNEL SERVICES

10-24. Essential personnel services include—

- Awards and decorations.
- Noncommissioned officer and officer evaluations.
- Enlisted promotions and reductions.
- Officer promotions.
- Enlisted and officer transfers and discharges.
- Identification documents.
- Leaves and passes.
- Line of duty investigations.
- Officer procurement.
- Band support.

10-25. There is a possibility that during combat operations, the current S1 structure can provide only critical wartime personnel support and essential

personnel services, limiting and delaying other services throughout the operation.

MILITARY PAY

10-26. Military pay input transactions are an integrated and embedded process within the personnel system architecture. They capitalize on information systems and seamless processes to maintain the critical links between personnel actions and activities that impact pay entitlements.

PERSONNEL SUPPORT

10-27. Personnel support activities encompass the elements of postal operations management; morale, welfare, and recreation; and band operations.

POSTAL OPERATIONS MANAGEMENT

10-28. Efficient postal operations rely on the availability of an accurate database, automated sorting, and automated identification technology (AIT) to provide rapid, responsive mail service to soldiers and commanders. The use of electronic mail, cellular communications, and facsimile transmissions will be developed to provide an automated mail system.

10-29. The postal operations management system provides a network to process mail and provides postal services within a theater of operations. Processing mail involves receiving, separating, sorting, dispatching, and redirecting ordinary and accountable mail, conducting international mail exchange, and handling casualty, contaminated, and enemy prisoner of war mail. Postal services involve selling stamps; cashing and selling money orders; providing registered (including classified up to secret), insured, and certified mail services; and processing postal claims and inquiries.

10-30. Official mail moves through the postal system until it reaches the postal services platoon of the unit addressed. FM 12-6 and AR 25-51 address official mail.

10-31. The Military Postal Service Agency (MPSA) establishes policy and procedures required for properly administering the military postal system. The MPSA acts as the single point of contact with the U.S. Postal System (USPS) and other Government agencies on policy and operational matters. The MPSA activates contingency Army post offices and coordinates initial mail routing schemes with the Joint Military Postal Agency (JMPA). It also coordinates an integrated network of major military mail distribution and transportation facilities in overseas areas. The JMPA is the single point of contact with the USPS at the gateways in CONUS and the theater. It coordinates transportation of mail to and within the theater.

10-32. The USPS sorts to battalion level in CONUS. To support force deployment, the MPSA, in coordination with the USPS and the operational major command, assigns contingency Army post office numbers to contingency forces.

10-33. A postal operations platoon routes the mail to a postal services platoon where the unit separates it. Postal elements coordinate mail

transportation requirements with transportation managers at all levels. This applies to both inbound and outbound mail.

MORALE, WELFARE, AND RECREATION AND COMMUNITY SUPPORT

10-34. This system enables commanders to provide soldiers and civilians with recreational and fitness activities and goods and services not available through appropriated funds. For contingency operations, the MWR network provides unit recreation and sports programs and rest areas for brigade-size and larger units. MWR personnel provide these services and facilities.

10-35. Community support programs include the American Red Cross (ARC), family support, and the exchange system. During mobilization and deployment, the ARC provides emergency communication and case management services to support the health, welfare, and morale of the armed forces and their families. ARC provides forward-deployed units a direct link to their families during family emergencies. The mission of family support programs is to foster total Army family readiness. Mission accomplishment for forward-deployed units depends on soldiers' confidence that their families are safe and capable of carrying on during their absence. AAFES, through its exchange system, provides basic health, hygiene, and personal care items to soldiers and deployed civilians.

10-36. The MWR system becomes an immediate outlet for soldiers to combat stress, which is critical to sustaining the readiness of the force, as the speed and intensity of operations escalate. The MWR system relies on Force Provider packages, DA civilians, and contract recreation specialists. It capitalizes on using cellular, e-mail, and video-teleconference (VTC) technologies to provide links between soldiers and their families. Soldiers are entertained through the latest in visual and audio entertainment over satellite, worldwide web, and virtual reality technologies.

10-37. The human dimension of the soldier will remain as critical as it is today. The human resource element of sustainment to the fighting force contributes to both National will and the will of the soldier to fight.

Chapter 11

Financial Management Operations

Financial management operations sustain Army, joint, and multinational forces. The two core processes, finance operations and resource management operations, provide funding for procuring goods and services that are critical in austere theaters. Table of organization and equipment (TOE) finance units provide banking and currency support, U.S. and non-U.S. pay support, and host-nation support. Resource management cells accomplish the accounting and cost capturing essential to a commander's allocation of available resources and legally required for all of these missions. FM 14-100 fully describes financial management operations.

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Financial management and accountability requirements are not service unique. Therefore, while the Army sustains deployed civilian and military personnel from other services and nations, many non-tactical responsibilities lie with the Department of Defense. The Defense Finance and Accounting Service (DFAS) performs core fiduciary activities for all services—standard finance and accounting policies, procedures, systems, and oversight. Real-time financial management information, accounting, and payment services emanate from DFAS with two exceptions: tactical operations and classified activities. Army financial managers provide finance and resource management services within the tactical arena.

FINANCE OPERATIONS

11-1. During operations, Army finance units provide real-time, split-based support to individuals and organizations. They supply currency and banking support to deployed military and civilian personnel and help sustain military families and communities at home stations. Organizational funding support goes to local procurement of supplies and services, enemy prisoner of war (EPW) pay, legal claims, and the cost of local national employees supporting intelligence elements, CSS units, military police, the staff judge advocate, civil affairs units, tactical field exchanges, and other unit commanders.

11-2. Contracting and banking support, cost capturing, and fund control, capabilities are necessary for commanders to fully accomplish their missions. The senior finance commander in theater determines which finance and

accounting functions to perform there and which to assign to a designated finance support activity. Additionally, this finance officer is responsible for central funding support, commercial accounts, foreign national pay, accounting, and funding support to other U.S. and multinational organizations.

TACTICAL FINANCE SUPPORT

11-3. Modular finance force structure design allows units to task-organize, even in rapidly changing situations. Units can tailor financial management support to operational task forces from platoon to corps-size. Finance elements deploy with the advance tactical force and immediately coordinate with procurement and host nation elements for contracting support, commercial vendor payment procedures, banking and currency support, and conversion rates. Finance units support local procurement of supplies, equipment, and services by both combat service support (CSS) elements and operational forces.

11-4. There are four types of support provided by finance operations: contract support, banking support, currency support, and disbursing.

CONTRACT SUPPORT

11-5. Contract support pays for laundry and shower operations, transportation assets and facilities, all classes of supply, and maintenance services obtained through formal contracting procedures. Commercial vendor services support is for the immediate needs of the force that Army CSS elements cannot reasonably or economically satisfy. The force makes cash payments for day-laborer wages, Class I supplements, and purchasing construction materials. The need for this type of support is greatest in austere theaters and at remote sites. Additionally, when so designated during joint and multinational operations, Army finance units prepare and pay vouchers for supplies and non-personal services procured by other U.S. military services or multinational forces.

BANKING AND CURRENCY SUPPORT

11-6. To provide banking and currency support, finance elements coordinate with embassies, DFAS, and/or the Treasury Department to set up in-country banking facilities. They link with the host-nation banking industry officials to establish local depository (LD) accounts and coordinate an established exchange rate. Finance personnel provide U.S. currency, foreign currencies, and U.S. Treasury checks to all U.S. Army finance units and other U.S. services. Requisite pay support benefits military, civilian, and foreign national personnel, and includes advice and assistance to enemy prisoners of war (EPW) camp commanders in the payment of EPWs and civilian internees. Pay support for civilians in theater may include technical guidance, leave and payroll data, pay inquiries, and pay actions.

DISBURSING

11-7. Disbursing officers disburse and collect currency; they are personally and legally accountable for all funds. Disbursing is essential to all

deployments, and is particularly critical in underdeveloped areas and in early stages of all deployments. Finance personnel—

- Disburse funds by treasury check, cash, and electronic funds transfer (EFT) on properly certified vouchers.
- Receive, collect, and control currencies.
- Exchange currencies (on limited bases).
- Maintain accountable records.
- Fund paying agents.
- Cash personal checks and similar negotiable instruments for military, civilian, and contractor personnel.

11-8. Disbursing officers make solatium payments to alleviate grief, suffering, or anxiety over injury and personal or property loss, and to meet cultural expectations. They also support noncombatant evacuation operations (NEO) and bounty programs. This disbursement is made through finance units operating in the AO. In all cases, accounting is accomplished to rigid standards.

RESOURCE MANAGEMENT OPERATIONS

11-9. *Resource management operations* involve the execution of the resource management mission, which includes providing advice and guidance to the commander, developing command resource requirements, identifying sources of funding, determining cost, acquiring funds, distributing and controlling funds, tracking costs and obligations, cost capturing and reimbursement procedures, and establishing a management control process (JP 1-02). Resource management helps maintain peacetime readiness, and is a key to success in full spectrum operations. Resource management functions relate to acquiring, distributing, controlling, executing, and reporting funds. Resource managers advise commanders on time phasing and actions, and provide support on fund controls and reporting requirements. They are the in-theater experts on the obligation authority and fund documentation necessary to procure and pay for local goods and services. They ensure that all policies and procedures developed adhere to U.S. law and military regulation.

11-10. Operationally, the senior resource manager (RM) develops, justifies, and continually refines command resource requirements, considering joint/multinational/UN reimbursements, transportation, theater infrastructure, available ports, and communications. The RM advises the Army service component commander on preventing fraud, waste, and abuse; on financial management policies; and on using resources. Once resource managers identify sources of available funding (appropriations, host nation support, foreign contributions, assistance-in-kind, and legal extraordinary and emergency measures), they obtain authority and solicit funds for Army, joint, or multinational operations. They distribute obligation authority or other legal means of exchange among units in the AO, and provide limited funding authority to field ordering officers (FOOs) and contracting officers.

11-11. Resource managers track commitments and obligations, control and certify funds, track the value of allied support, and maintain internal reviews. When the Army supports other services or international agencies,

Army resource managers must fully account for the expenditures and track the use of CSS assets to capture costs for reimbursement. They also manage vouchers sold between services to prevent cross-disbursements. Accurate billing and full accountability at all levels are essential to the reimbursement process, and are legally required for reporting to Congress the costs of military operations.

INFORMATION SYSTEM SUPPORT

11-12. The Defense Finance Battlefield System (DFBS) is the fundamental system for digitizing financial management battlefield functions at theater, corps, division, and lower echelons of command. DFBS provides the capability to fully and accurately account for funds and control costs of host nation, contractor, and procurement support so essential to austere AOs.

11-13. A deployable hardware/software platform, DFBS supports financial management operations in peacetime and during operations. It is the maneuver commander's communications interface capability to operate the financial management information systems that support soldiers, units, and logisticians. DFBS gives finance units the capability to provide financial management support equal to that provided in garrison.

11-14. DFBS will be fielded with standard hardware operating DFAS financial management software. System functionality includes accounts payable/vendor services, military pay, disbursing, accounting, and travel. Continuous refinement of technology will develop a deployable financial management platform for the Army of 2005 and beyond.

Chapter 12

Legal Support to Operations

This chapter provides information about how the Judge Advocate General Corps (JAGC) provides legal support to operations. The mission of judge advocates and supporting legal personnel is to provide professional legal services at all echelons of command throughout full spectrum operations. For more information, see FM 27-100.

LEGAL SUPPORT AND OPERATIONAL FUNCTIONAL AREAS

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12-1. Legal support to operations encompasses all legal services provided by judge advocates and other legal personnel in support of units, commanders, and soldiers in an area of operation (AO) and throughout full spectrum operations. Legal support to operations falls into three functional areas: command and control, sustainment, and personnel service support (referred to as support).

12-2. Command and staff functions include advice to commanders, staffs, and soldiers on the legal aspects of command authority, command discipline, applying force, and the law of war (LOW). Some examples of judge advocates' command and control responsibilities are—

- Interpreting, drafting, and training commanders, staffs, and soldiers on rules of engagement
- Participating in targeting cells.
- Participating in the military decisionmaking process.
- Participating in information operations.
- Applying the LOW.
- Advising commanders on policies prescribing soldier conduct and ensuring discipline (jurisdictional alignment, convening authority structure, and authority to issue general orders).

Generally, issues directly affecting the commander's operational decision making process on the battlefield fall within command and control functions.

12-3. Sustainment functions include negotiating acquisition and cross-servicing agreements and status of forces agreements (SOFAs), combat contingency contracting, fiscal law, processing claims arising in an operational environment, and environmental law.

12-4. Personnel service support functions include soldier discipline advocacy services (courts-martial, nonjudicial punishment, and other routine matters in administering military justice), legal assistance services, and basic soldier-related claims issues.

LEGAL SUPPORT TO OPERATIONS

12-5. Legal support to operations must include operational law (OPLAW) and each core legal discipline (military justice, international law, administrative law, civil law, claims, and legal assistance). Staff judge advocates (SJAs) tailor legal support in OPLAW and the core legal disciplines to the organization's mission-specific requirements.

OPERATIONAL LAW

12-6. OPLAW is domestic, foreign, and international law that directly affects the conduct of operations. OPLAW supports the command and control of military operations, to include the military decisionmaking process and the execution of operations. OPLAW supports the military decisionmaking process by performing mission analysis, preparing legal estimates, designing the operational legal support architecture, wargaming, writing legal annexes, assisting in developing and training the rules of engagement (ROE), and reviewing plans and orders. OPLAW supports the execution of operations by maintaining a common operational picture, and advising and assisting with targeting, ROE implementation, and information operations. OPLAW also involves the provision of core legal disciplines that sustain the force.

12-7. SJAs normally provide OPLAW support at each brigade headquarters (main command post [CP]), and at each key operational cell at every higher level of command (tactical CP, main CP, rear CP, G3 plans, G3 operations, information operations cell, and targeting cell). OPLAW supports each joint and multinational headquarters. Some missions also require OPLAW support at battalion level, or in specialized units or operational cells. This is increasingly the case in peace operations and disaster relief.

MILITARY JUSTICE

12-8. *Military justice* is administering the Uniform Code of Military Justice (UCMJ), and disposing alleged violations by judicial (courts-martial) or nonjudicial (Article 15, UCMJ) means. The purpose of military justice, as a part of military law, is to promote justice, to assist in maintaining good order and discipline in the armed forces, to promote efficiency and effectiveness in the military establishment and, thereby, to strengthen the National security of the United States (MCM, Part I, para 3).

12-9. The Judge Advocate General (TJAG) is "responsible for the overall supervision and administration of military justice within the Army." (AR 27-10). The commander is responsible for administering military justice

in the unit, and must communicate directly with the SJA about military justice matters.

12-10. There are three components of military justice, each with its distinct functions. First, the SJA is responsible for military justice advice and services to the command. The SJA advises commanders concerning the administration of justice, the disposition of alleged offenses, appeals of nonjudicial punishment, and action on court-martial findings and sentences. The SJA supervises the administration and prosecution of courts-martial, prepares records of trial, and manages the victim-witness assistance program and military justice training.

12-11. Second, the Chief, U.S. Army Trial Defense Service supervises, controls, and directs defense counsel services. Judge advocates assigned to the trial defense service advise soldiers and represent soldiers before courts-martial. These judge advocates also represent soldiers in adverse administrative hearings.

12-12. Third, the Chief Trial Judge, U.S. Army Trial Judiciary provides military judges for general and special courts-martial, supervises military judges, promulgates rules of court, and supervises the military magistrate program. Military judges assigned to the Trial Judiciary preside over courts-martial, exercise judicial independence in conducting courts martial, conduct training sessions for trial and defense counsel, and perform or supervise military magistrate functions. Military magistrate functions include reviewing pretrial confinement and confinement pending the outcome of foreign criminal charges, and issuance of search, seizure, or apprehension authorizations.

12-13. Military justice services are normally centralized to facilitate timely, efficient delivery; however, military justice advice is provided to all levels of command. Normally, Army service component command (ASCC), corps, division, or other headquarters commanded by a general court-martial convening authority processes courts-martial. Joint force commanders (JFCs) and Army brigade and battalion commanders also have court-martial convening authority, and may require support to conduct courts-martial. Military justice advice is required for general court-martial convening authorities, including JFCs with general court-martial authority, subordinate commanders, and the U.S. element of a multinational organization.

12-14. The Army provides trial defense and judiciary services on an area basis under the independent supervision and control of the U.S. Army trial defense service and U.S. Army Trial Judiciary, respectively. Trial defense counsel is normally located with SJA sections at ASCC, corps, and division, from where they travel throughout the operational area to provide advice and services as far forward as required. Military judges are normally collocated with SJA sections at ASCC, corps, and division, depending on judicial workloads.

INTERNATIONAL LAW

12-15. *International law* includes applying international agreements, international customary practices, and the general principles of law recognized by civilized nations relating to military operations and activities. Within the Army, the practice of international law also includes foreign law, comparative

law, martial law, and domestic law affecting overseas, intelligence, security assistance, and counter-drug and civil assistance activities.

12-16. The SJA's international law responsibilities include—

- Implementing the LOW Program, including LOW training, advice concerning applying the LOW (or other humanitarian law) to military operations, determining enemy prisoner of war (EPW) status, and supervising war crime investigations and trials.
- Assisting with international legal issues relating to U.S. forces overseas, including the legal basis for conducting operations, status of forces agreements, and the impact of foreign law on Army activities and personnel.
- Monitoring foreign trials and confinement of Army military and civilian personnel and their dependents;
- Assisting with legal issues in intelligence, security assistance, and counter-drug and civil assistance activities.
- Advising the command concerning the development of international agreements
- Providing legal liaison with host or allied nation legal authorities.

12-17. Normally, the SJA provides international law support at the main and rear command posts in Army of Excellence divisions and corps, and rear command posts in Force XXI divisions, TSC headquarters, ASCC headquarters, and each joint and multinational headquarters. In addition, international law support may be required at brigade and battalion headquarters.

ADMINISTRATIVE LAW

12-18. *Administrative law* is the body of law containing the statutes, regulations, and judicial decisions that govern the establishment, functioning, and command of military organizations. The practice of administrative law includes advice to commanders and litigation on behalf of the Army involving many specialized legal areas:

- Military personnel law.
- Government information practices.
- Investigations.
- Relationships with private organizations.
- Labor relations and civilian employment law.
- Military installations.
- Government ethics.

12-19. Administrative law attorneys perform the following functions:

- Advise commanders, review actions, and litigate cases involving military personnel law
- Advise Army officials regarding their obligations under the Freedom of Information Act (FOIA) and Privacy Act.
- Advise investigating officers, review investigations for legal sufficiency, and advise appointing authorities concerning investigative findings and recommendations

- Advise Army officials concerning support for, and relationships with, private organizations.
- Advise Army officials concerning labor relations, including certifying and negotiating with labor unions, grievances and arbitration, and unfair labor practice allegations.
- Advise Army officials concerning the recruiting, hiring, evaluating, and disciplining of employees, and represent the Army in litigation arising from employee grievances and discrimination complaints.
- Advise installation commanders concerning the legal authorities applying to military installations.
- Advise Army personnel concerning government ethics, and supervise the command financial disclosure and ethics training programs.

12-20. Administrative law support is usually provided at brigade headquarters, main and rear command posts in Army of Excellence divisions and corps, rear command posts in Force XXI divisions, COSCOM headquarters, and at each higher Army, joint, and multinational headquarters. Because of the vast scope of issues they face, administrative law attorneys, especially, must be capable of conducting specific technical legal research and writing.

CIVIL LAW

12-21. *Civil law* is the body of law containing the statutes, regulations, and judicial decisions that govern the rights and duties of military organizations and installations regarding civil authorities. The practice of civil law includes contract law, fiscal law, environmental law, and many other specialized areas of law.

Contract Law

12-22. *Contract law* is applying domestic and international law to acquire goods, services, and construction. The practice of contract law includes battlefield acquisition, contingency contracting, bid protests and contract dispute litigation, procurement fraud oversight, commercial activities, and acquisition and cross-servicing agreements.

12-23. The SJA's contract law responsibilities include furnishing legal advice and assistance to procurement officials during all phases of the contracting process. It includes overseeing an effective procurement fraud abatement program and providing legal advice to the command concerning battlefield acquisition, external contractor support for contingencies and the Logistics Civil Augmentation Program (LOGCAP), acquisition and cross-servicing agreements (ACSAs), the commercial activities program, and overseas real estate and construction.

12-24. Legal counsel must participate fully in the acquisition process, be continuously available to their clients, involve themselves early in the contracting process, communicate closely with procurement officials and contract lawyers in the technical supervision chain, and provide legal and business advice as part of the contract management team. To accomplish this, SJAs usually provide contract law support at the main and rear command posts in Army of Excellence divisions and corps, main command posts in Force XXI divisions, COSCOM, TSC headquarters, and each higher Army and joint

headquarters. Contract law advice may also be required at brigade or battalion headquarters. SJAs should deploy a contract law attorney with contracting early entry modules (EEMs). The Army should train OPLAW JAs supporting a DISCOM or COSCOM in contract law. Expertise may be required at the multinational command headquarters to advise concerning international acquisition agreements.

Fiscal Law

12-25. *Fiscal law* is applying domestic statutes and regulations to funding military operations, and supporting non-Federal agencies and organizations. The SJA's fiscal law responsibilities include providing legal advice on the proper use and expenditure of funds, interagency agreements for logistics support, security assistance, and support to non-Federal agencies and organizations.

12-26. SJAs usually provide fiscal law support at the main and rear command posts in Army of Excellence divisions and corps, rear command posts in Force XXI divisions, DISCOM, COSCOM, TSC headquarters, and each higher Army and joint headquarters. Expertise may also be required at the multinational command headquarters to advise concerning international support agreements.

Environmental Law

12-27. *Environmental law* is the body of law containing the statutes, regulations, and judicial decisions relating to Army activities affecting the environment to include navigable waters, near-shore and open waters, and any other surface water, groundwater, drinking water supply, land surface or subsurface area, ambient air, vegetation, wildlife, and humans. Overseas, host nation law may also affect Army operations.

12-28. SJAs provide legal advice and services on all aspects of environmental matters including—

- Representing Army activities in environmental litigation and at hearings before local, state, or Federal agencies in coordination with the Chief, Environmental Law Division, U.S. Army Legal Services Agency (USALSA), and the Department of Justice (DOJ).
- Monitoring state and Federal environmental legislative and regulatory developments
- Providing advice concerning the appropriateness of any environmental enforcement activities.
- Reviewing all draft environmental orders, consent agreements, and settlements with Federal, state, or local regulatory officials before signature.

12-29. SJAs usually provide environmental law support at the main and rear command posts in Army of Excellence divisions and corps, rear command posts in Force XXI divisions, DISCOM, COSCOM, TSC headquarters, and each higher Army and joint headquarters.

CLAIMS

12-30. The Army claims program investigates processes, adjudicates, and settles claims on behalf of, and against, the United States worldwide. The claims program supports commanders by preventing distractions to the operation from claimants, promoting the morale of Army personnel by compensating them for property damage suffered incident to service, and promoting good will with the local population by providing compensation for personal injury or property damage caused by Army or personnel. Categories of claims include claims for property damage of soldiers and other employees arising incident to service, torts alleged against Army or personnel acting within the scope of employment, and claims by the United States against individuals who injure Army personnel or damage Army property.

12-31. The Secretary of the Army (SA) heads the Army Claims System. TJAG supervises the Army Claims Program and settles claims in accordance with delegated authority from the SA. The U.S. Army Claims Service (USARCS) administers the Army claims program and designates area claims offices, claims processing offices, and claims attorneys. SJAs, or other supervisory judge advocates, operate each command's claims program and supervise the ACO or CPO designated by USARCS for the command. ACOs and CPOs are the normal claims offices at Army installations that investigate, process, adjudicate, and settle claims against the United States. They also identify, investigate, and assert claims on behalf of the U.S. claims attorneys at each level, settle claims within delegated authority and forward claims exceeding that authority to the appropriate settlement authority.

12-32. Claims must be investigated and paid in an AO. The foreign claims commissions, which are composed of one or more claims attorneys, settle foreign claims. In multinational operations, unless otherwise specified in applicable agreements, a troop-contributing nation is generally responsible to resolve claims arising from its own operations. Army claims services are normally provided in the main or rear command posts in Army of Excellence divisions and corps, rear command posts in Force XXI divisions, the TSC headquarters, and ASCC headquarters. While claims services are centrally processed at these locations, claims personnel must travel throughout the AO to investigate, negotiate, and settle claims.

LEGAL ASSISTANCE

12-33. *Legal assistance* is providing personal civil legal services to soldiers, their family members, and other eligible personnel. The Army Legal Assistance Program promotes morale and discipline and, thereby, contributes directly to mission accomplishment.

12-34. Legal assistance attorneys and legal staffs working under their supervision, provide legal assistance in a variety of settings. This includes—

- Combat readiness exercises, premobilization legal preparation (PLP), soldier readiness program processing (SRP), demobilization briefings, noncombatant evacuation operations.
- Client interviews, informal requests for assistance.
- Federal and state income tax assistance.
- Preventive law programs.

12-35. They also provide extensive legal services:

- Ministerial and notary services.
- Legal counseling, legal correspondence, negotiation, legal document preparation and filing, limited in-court representation, legal referrals, and mediation.
- Handle a variety of cases such as family law, estates, real property, personal property, economic matters, civilian and military administrative matters, torts, taxes, and civilian criminal matters.

12-36. Legal assistance is provided at the ASCC headquarters, TSC headquarters, main and rear command posts in Army of Excellence divisions and corps, and main command posts in Force XXI divisions and, as required, at brigade or lower echelons. While each service and each troop contributing nation is responsible to provide legal assistance for its personnel, some legal assistance may be required at joint or multinational headquarters.

MATERIEL

12-37. All legal personnel must be well equipped to deliver legal support in a theater. The most critical categories of equipment are legal information systems, mobility, and communications.

LEGAL INFORMATION SYSTEMS

12-38. The JAGC requires a dedicated system of information systems to provide responsive legal services at all echelons of command. That system is the Legal Automation Army-Wide System (LAAWS). LAAWS integrates legal information and services into a network that projects legal services down to battalion level and permits sharing of appropriate legal work product. LAAWS provides for standardized software throughout the JAGC, and includes modules and databases for all core legal disciplines. LAAWS programs process, transmit, receive, and display essential information. Legal references compiled by LAAWS are available in compact disk and via databases on the JAGC Information Network (JAGC Net at www.jagcnet.army.mil), a work group consisting of more than 70 computer servers and thousands of clients throughout the world. SJA sections, the military judges, and defense counsel all use LAAWS and the JAGC Net, which are critical to the accuracy and responsiveness of operational legal services. Judge advocates also require access to classified databases and information through Secret Internet Protocol Router Network (SIPRNET).

12-39. The standard package of legal information systems is the Rucksack Deployable Law Office and Library (RDL). The RDL is a set of computer hardware, software, and networking products that provide the judge advocate or legal specialist all the capabilities required to support operations. The

RDL is, and must remain, completely compatible with standard Army communications equipment, and be fully integrated into appropriate parts of the Army battle command system (ABCS), to include the global command and control system (GCCS), the global combat service support system—Army (GCSS-A), and the Force XXI battle command-brigade and below system (FBCB2).

MOBILITY

12-40. Legal personnel depend on their assigned units for transportation. Separate legal organizations (such as legal support organizations or mobilization support organizations) require organic transportation assets. Sufficient vehicles are required for legal personnel (the SJA and his staff, military judges, and defense counsel). The number and type of vehicles depend on the commander's requirements for legal services. The failure to provide SJA with mobility means specific legal functions (such as interaction with host nation officials) cannot be accomplished; failure to effectively accomplish these functions affects the mission. Mobility serves three distinct functions: controlling legal assets, effectively delivering operational law and support in the core legal disciplines, and servicing geographic zones.

INFORMATION SYSTEMS

12-41. Modern theater operations frequently take place in a fluid, chaotic, and lethal environment in which mobility is constrained. Legal advice is time-sensitive and often critical, and influences C2 and support operations. Legal personnel must have access to tactical networks that provide situational understanding. The COP allows legal personnel to apply their professional training to identify potential legal issues and take proactive, timely, and effective steps to eliminate or minimize the impact of those legal issues on mission accomplishment. Avoiding legal issues is always preferable to resolving legal issues; it is the most efficient method and directly contributes to the organization's combat effectiveness. Judge advocates must also be assured access to communications that link them with the commander, the subordinate commanders, the staff, and the SJAs at higher echelons. In addition to digital communications across the Army battle command system, judge advocates must use combat net radios (CNRs), area common user (ACU) telephones, Army data distribution system (ADDS) equipment, and other information systems, when necessary, to connect into the C2, CS, and CSS tactical networks.

Chapter 13

Religious Support

Chaplains, on behalf of the commander, provide and perform religious support (RS) in the Army to ensure the free exercise of religion. Chaplains are obligated to *provide* for those religious services or practices that they cannot personally perform. Chaplains *perform* religious support when their actions are in accordance with the tenets or beliefs of their faith group. Chaplain assistants assist the chaplain in providing or performing this religious support.

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The First Amendment guarantees every American the right to the free exercise of religion. Title 10 requires the military to ensure that right to military personnel. The Army implements this requirement in AR 165-1. Religious support operations ensure those rights of free exercise of religion to the soldier, family members, and authorized civilians. This includes religious services, rites, sacraments, ordinances, pastoral care, religious education, family life ministry, institutional ministry, professional support to the command and staff, management and administration, religious/humanitarian support, religious support planning/operations and religious support training. Religious support also includes advice to the command on matters of religion, morals, morale, and the coordination with nongovernmental organizations (NGOs) and private voluntary organizations (PVOs), as appropriate. FM 1-05 and JP 1-05 provide detailed discussions of religious support.

RELIGIOUS SUPPORT FUNCTIONS

13-1. Comprehensive religious support includes the following three major functions.

NURTURE THE LIVING

13-2. In preparation for missions that span the full spectrum of operations, unit ministry teams (UMTs) develop and provide religious support activities to strengthen and sustain the spiritual resilience of soldiers and family members. During the battle UMTs bring hope and strength to those who have

been wounded and traumatized in body, mind, and spirit assisting the healing process.

CARE FOR THE DYING

13-3. UMTs provide religious support, spiritual care, comfort, and hope to the dying. This focus of religious support affirms the sanctity of life, which is at the heart of the chaplaincy. Through prayer and presence the UMT provides the soldier with courage and comfort in the face of death.

HONOR THE DEAD

13-4. Our nation reveres those who have died in military service. Religious support honors the dead. Funerals, memorial services, and ceremonies reflect the emphasis our American people place on the worth and value of the individual. Chaplains conduct these services and ceremonies fulfilling a vital role in rendering tribute to America's sons and daughters who paid the ultimate price for their nation.

RELIGIOUS SUPPORT ACROSS THE LEVELS OF WAR

STRATEGIC-LEVEL RELIGIOUS SUPPORT

13-5. Religious support planning and management at the strategic level considers force-tailoring UMTs to perform and provide religious support for all types and sizes of forces in all contingencies. The senior Army chaplain in theater provides staff supervision over all Army religious support in the theater and is responsible for recommending religious support policy to the commander of the Army service component command (ASCC). Installation chaplains and their staffs provide seamless religious support across all levels of war via information systems.

OPERATIONAL-LEVEL RELIGIOUS SUPPORT

13-6. The ARFOR chaplain supports the ARFOR commander's operational-level responsibilities and roles by—

- Establishing links with joint, multinational, interagency, NGOs, PVOs, and religious leaders of the host nation.
- Planning and executing religious support for corps operations.
- Monitoring religious support in major subordinate commands.
- Executing support operations to sustain subordinate Army forces.

13-7. Religious support is tailored to the operation when the division is designated as an ARFOR or as part of a joint task force (JTF).

TACTICAL-LEVEL RELIGIOUS SUPPORT

13-8. The UMT is embedded within and provides religious support to combat, CS, and CSS units at the battalion, squadron, brigade, regiment, and division; this includes specialized and special operations units like the Rangers and special forces.

UNIT RELIGIOUS SUPPORT

13-9. Unit religious support is provided in the following three ways:

- **Unit support.** Support provided to the unit to which the UMT is assigned or attached. The team normally gives first priority to this mission.
- **Area support**. Support provided to soldiers, members of other services, and authorized civilians who are not a part of the team's unit, but operate within the supporting unit area of operations (AO).
- **Denominational support.** Support given to soldiers and other authorized persons of the chaplain's denomination or distinctive faith group. Limited assets affect the availability of denominational support.

STAFF INTEGRATION AND COORDINATION

13-10. The chaplain is a personal staff officer responsible for coordinating the religious assets and operations within the command. The chaplain is a confidential advisor to the commander for religious matters. A chaplain is located at every echelon of command from battalion through corps to ASCC. Select chaplains from the various services also serve on the joint personal staffs of combatant commanders and the Chairman of the Joint Chiefs of Staff.

13-11. As a personal staff officer, the chaplain works for the commander, advises the commander, and executes the commander's religious support program on his behalf. The UMT coordinates the execution of the commander's religious support program with the chief of staff or executive officer. The team plans cooperatively with all staff sections for the exchange of information. As a result of dispersion, UMTs also need to synchronize religious support within their subordinate units. Establishing synchronization procedures with subordinate commanders, command sergeants major, and first sergeants before deployment reduces the communication challenge for the UMT.

RELIGIOUS SUPPORT PLANNING

13-12. The chaplain participates in the military decisionmaking process, developing the religious support estimate (RSE) that becomes the basis for the religious support plan (RSP). Development of the RSE ensures the careful and intentional planning of religious support.

13-13. To meet the religious needs of soldiers and other authorized personnel in all operations, the UMT prepares a comprehensive RSP that is staffed and integrated into every operational phase. The UMT advises the commander on the plan for accomplishing the religious support mission. The plan encompasses RS required from training and mobilization through redeployment and demobilization.

TRANSPORTATION AND INFORMATION SYSTEMS

13-14. Title 10 USC 3547 mandates transportation assets are afforded to the chaplain for conducting religious services. This is especially necessary for the UMT assigned to a heavy or mounted unit.

13-15. As the UMT travels throughout the AO, they must maintain communications with their assigned headquarters to keep the commander informed of their status, location, and travel plans. At the same time, the team receives and transmits situation reports. The commander provides the team with dedicated communications equipment that is compatible with the unit secure communication equipment.

13-16. Religious support is synchronized and implemented throughout the AO, theater of operations, and communications zone (COMMZ) by full UMT integration into the information systems of the unit. The ability to reach back from the area of operations to the home station is essential for relaying time-sensitive information and religious support requests. A mobile communication link between echelons enables UMTs to communicate time-sensitive data rapidly to and from each echelon. This is essential for the UMT's mission to provide soldiers with the personal delivery of religious support. This link provides UMTs immediate access to critical information needed to ensure the commander's religious support plan is executed successfully. For more information, see FM 1-05.

Chapter 14

Band Support

Army Bands are a powerful commander's tool to promote goodwill and good relations to members of a local population. Army Bands entertain soldiers and citizens of the United States, its allies, and host nations in both garrison and battlefield environments as evidenced by participation in Operation Desert Shield, Operation Desert Storm, Operation Joint Endeavor, and Operation Urgent Fury, as well as task forces Eagle, Falcon, and Andrew. Details on Army Band support are covered in FM 12-50.

"Hours are to be assigned to all the drums and fifes of each regiment, and they are to attend them and practice; nothing is more agreeable and ornamental than good music; every officer, for the credit of his corps, should take care to provide for it."

From Library of Congress: Writings of General George Washington,
June 4, 1777, John C, Fitzpatrick, Editor

TYPES OF ARMY BAND SUPPORT

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14-1. Army bands are capable of a wide variety of musical support. Bands perform indoors and outdoors in most climatic conditions. See AR 220-90 for regulatory guidance on use of Army bands. A band's committing authority is normally the G1/AG.

CEREMONIAL SUPPORT

14-2. Army bands perform music that is connected to American heritage, military history, unit lineage, and individual honors. Among soldiers, ceremonial music helps build enthusiasm, maintain motivation, and increase devotion to the unit, the Army, and the United States. Army band participation in a ceremony adds dignity, solemnity, tradition, and honor. Music creates an emotional bond that leaders can use to draw a unit closer together, to show honor and devotion to a leader, and to remind them of friends and family back home. Music highlights history and draws attention to sacrifices and hardships as well as victory and heroism.

14-3. Ceremonial music can be tailored to fit the occasion and includes official music (national anthems, honors for visiting dignitaries), marches, patriotic selections, and organizational songs. A band commander is the technical

expert on music to be performed and should be consulted as to the appropriateness and feasibility of a particular selection.

14-4. Army bands can be used to enhance ceremonial events and are not limited to reviews, military honor guards and cordons, and funerals.

CIVIC SUPPORT

14-5. Music, with its inherent ability to raise emotions, highlight events past and present, and promote optimism and determination for the future, is the ideal tool for a commander to use in supporting civic events. The Army band supports and participates in public events because the Army belongs to the American people. Common ownership requires that Army resources be used to support events and activities of common interest and benefit. A successful community relations program enhances the community's perception of the Army and fosters an appreciation and spirit of cooperation for the military installation, the soldiers and their families, and civilians who are part of the installation

14-6. Civic events that may be appropriate for Army band participation include parades, holiday and community concerts, sporting events, dedications, cultural events, and ribbon cutting ceremonies.

RECRUITING SUPPORT

14-7. Army bands are an important tool for use in recruiting. Bands highlight the Army and support local recruiting activities. Musical selections may be drawn from many styles ranging from patriotic to popular music in a single performance. All Army bands in continental United States (CONUS) are directly charged to support recruiting efforts.

OTHER SUPPORT

14-8. In addition to the types of support mentioned previously, Army bands may participate in most events not prohibited by AR 360-1 and AR 220-90. These regulations and DODD 5500.7, govern off duty participation in unofficial events

TYPES OF ARMY BANDS

14-9. Army bands are organized into three distinct types.

SPECIAL BANDS

14-10. Special bands have no tactical equipment or capability. There are four special bands.

- The U.S. Army Band (Pershing's Own).
- The Old Guard Fife and Drum Corps.
- The U.S. Army Field Band.
- The U.S. Military Academy Band

14-11. Special bands provide—

- Musical support to the Military District of Washington (MDW) and its tenant and supported activities, national U.S. Army recruiting operations and, as directed, by Headquarters, Department of the Army.

- National and international musical support to strengthen the ties between the Army and the civilian community for the Office, Chief of Public Affairs and, as directed, by Headquarters, Department of the Army.
- Musical support for the U.S. Military Academy, its tenant and support activities and, as directed, by Headquarters, Department of the Army.

GENERAL SUPPORT BANDS

14-12. General support (GS) bands are assigned to a major command (FORSCOM, TRADOC, and USAREUR) and are so designated by table of organization and equipment (TOE). They provide both CONUS and OCONUS support.

14-13. CONUS bands provide musical support to select MACOM headquarters, regional and national U.S. Army recruiting operations, and regional musical support to further the parent unit commander's community relations activities.

14-14. OCONUS or forward deployed bands provide musical support to their parent unit and its subordinate units, and multinational operations, as well as civil military operations (CMO) and community relations activities.

14-15. GS bands provide support to information operations and should be integrated into public affairs (PA), CMO, and psychological operations (PSYOP) plans. GS bands are capable of providing augmentation for local security forces.

DIRECT SUPPORT BANDS

14-16. Direct support (DS) bands are units that are not a special or GS band, and are assigned to a corps, division, TRADOC branch qualifying schools, or other activity of the U.S. Army, and are normally OPCON to the G1/AG, or equivalent.

14-17. CONUS based DS bands provide musical support to their parent unit and its subordinate units, local U.S. Army recruiting operations; they also provide local musical support to further the commander's community relations efforts.

14-18. OCONUS and forward deployed bands provide musical support to their parent unit and its subordinate units, counterpart multinational partners, and local host nations in support of CMO.

14-19. DS bands provide support to information operations, and should be integrated into PA, CMO, and PSYOPS plans. DS bands assigned to divisions and corps, or forward deployed can provide augmentation of perimeter security for EPW/civilian internee operations or augmentation of local security forces. All other DS bands (TRADOC branch qualifying schools) can provide augmentation for local security forces.

14-20. Army bands perform music that connects the Army to its heritage. It is a direct line between the soldier of today and the foundations of our country. Army bands provide music to the civilian community, promoting patriot-

ism, interest in the Army, and demonstrating the professionalism of our forces. Details on Army bands are covered in FM 12-50 and AR 220-90.

Appendix A

Engineering Support to CSS Operations

Operational-level engineer units maintain a support/coordination relationship to theater-level CSS functional assets. The engineer command (ENCOM), as the Army senior engineer commander, provides general engineering support throughout the theater. This support extends from the communications zone (COMMZ) to well forward into the corps rear area. The numbers and types of operational-level engineer units depend on the size of the support base required, host nation (HN) infrastructure, the mission, the availability of existing engineer support in the theater, and perceived threat in the rear area. See FM 100-7 for more details.

SUPPORT/COORDINATION RELATIONSHIPS

A-1. The senior engineer commander task organizes echelon above corps (EAC) assets to best satisfy the priorities of effort and support established by the joint force commander (JFC). Within the COMMZ, the commander aligns engineer assets to provide general support (GS) on an area basis, as they receive service support on an area basis from the CSS community. Current and evolving doctrine would place an engineer brigade in direct support (DS) to the TSC, with subordinate engineer groups in DS to the area support groups (ASGs).

CONSTRUCTION SUPPORT

A-2. In accordance with JCS guidance, the JFC establishes broad standards and policies for theater construction that guide engineer operations, whether they are performed by Air Force, Army, or Navy units. They are based on coordinated planning by construction representatives from all service components. Theater construction policies establish standards, priorities, and the theater construction management structure. The JFC may retain control at his level or delegate construction management to a regional contingency engineering manager (RCEM). When the Army is the RCEM, the senior engineer commander, usually the ENCOM commander, performs this function. The RCEM manages all construction, repair, and facility modifications in the COMMZ. This structure provides centralized control and decentralized execution. The RCEM also manages all troop, contract, and HN construction repair operations in the COMMZ. Such a structure ensures that theater construction assets are employed according to JFC-established priorities and policies.

REAL ESTATE PLANNING AND ACQUISITION

A-3. U.S. Army Corps of Engineers (USACE) theater elements provide technical real estate guidance and advice to the theater commander. In

addition to recommending real estate policies and operational procedures, they acquire, manage, dispose of, administer payment for rent and damages, handle claims, and prepare records and reports for real estate used within the theater.

REAL PROPERTY MAINTENANCE

A-4. The JFC has overall responsibility for real property maintenance activities (RPMA). He normally delegates authority to the ASCC/ARFOR, who may further delegate to the TSC. The TSC and installation commanders (in most cases an ASG) normally provide the needed RPMA support. Principal RPMA in AO includes operation, repair, and maintenance of facilities and utilities; fire prevention and protection; and refuse collection and disposal. RPMA requirements that exceed the CSS organization's capabilities are forwarded to the local senior engineer commander (in most cases, the engineer group providing support to an ASG on an area basis) or USACE element for execution according to theater priorities. The TSC provides technical RPMA guidance to subordinate CSS organizations. The subordinate CSS organizations provide RPMA support to all Army facilities in the theater, including leased facilities unless HNS is available for leased facilities.

ENVIRONMENTAL CONSIDERATIONS

A-5. In addition to his common staff responsibilities, the senior engineer commander advises the commander on environmental issues. He coordinates with other staff offices to determine the impact of operations on the environment and helps the commander integrate environment considerations into the decisionmaking process.

Glossary

This glossary lists acronyms used in this publication and selected terms that the user of this publication needs to understand. Army and joint definitions sometimes vary slightly. JP 1-02 (http://www.dtic.mil/doctrine/jel/doddict/index.html) defines DOD military and associated terms; FM 101-5-1 (http://www.dtic.mil/doctrine/jel/service_pubs/101_5_1.pdf) defines Army operational terms. For terms not included in either of these manuals, see the manual listed with the definition for further information. For terms for which this manual is the Army authority, see the paragraph listed with that definition for further information about that term.

AA	assembly area
AAFES	Army and Air Force Exchange Service
ABCA	American, British, Canadian, Australian Army Standardization Program
ABCS	Army battle command system
ABL	ammunition basic load
ABPO	Army Blood Program Office
ABS	automated battlebook system
ACE	analysis and control element
ACO	area claims office
ACofS	Army Chief of Staff
ACP	Army country profiles
ACR	armored cavalry regiment
ACSA	acquisition and cross-servicing agreements
ACSIM	Assistant Chief of Staff for Installation Management
ACU	area common user
ACUS	area common user system
ADA	air defense artillery
ADCON	administrative control
ADDS	Army data distribution system
ADES	airdrop equipment and systems
AIT	automated identification technology
AJBPO	area joint blood program office
AJP	allied joint publication
ALOC	aerial lines of communications
ALP	allied logistics publication
AMC	Air Mobility Command
AMEDD	Army Medical Department
AMS	automated manifest system

AO	area of operations
AOE	Army of Excellence
AOR	area of responsibility
APA	Army prepositioned afloat
APOD	aerial port of debarkation
APOE	aerial port of embarkation
APS	Army prepositioned stocks
ARC	American Red Cross
ARFOR	Army forces: an ARFOR consists of the senior Army headquarters and all Army forces assigned or attached to a combatant command, subordinate joint force command, joint functional command, or multinational command (FM 3-0)
Army prepositioned stocks	supplies located at or near the point of planned use or at other designated locations to reduce reaction time and to ensure resupply (FM 100-17-2)
ARSOF	Army special operations forces
ASA	ammunition support activity
ASCC	Army service component command
ASDC	area support dental company
ASG	area support group
ASL	authorized stockage list
ASMB	area support medical battalion
ASMC	area support medical company
ASP	ammunition supply point
ATAV	Army total asset visibility
ATP	ammunition transfer point
attainability (or adequacy)	ability to provide the minimum essential supplies and services required to begin combat operations (JP 4-0)
AVIM	aviation intermediate maintenance
AVUM	aviation unit maintenance
AWCF	Army working capital fund
AWCF-SMA	Army Working Capital Fund, Supply Management Army
AWRDS	Army war reserve deployment system
band support	the provision of music to instill in soldiers the will to fight and win, foster the support of citizens, and promote National interests at home and abroad (paragraph 1-30)
BDAR	battle damage assessment and repair
BOS	battlefield operating system
BSA	brigade support area

BSB	brigade support battalion
BSC	brigade support company
BSD	blood support detachment
BSMC	brigade support medical company
BSU	blood supply unit
C2	command and control
C4I	command, control, communications, computers, and intelligence
CAA	command arrangement agreement
campaign	series of related military operations aimed at accomplishing a strategic or operational objective within a given time and space. (JP 1-02)
CAPS II	consolidated aerial port system II
CASCOM	Combined Arms Support Command
CCAS	contingency contract administration service
CCIR	commander's critical information requirements
CFMS	CONUS freight management system
CHE	container-handling equipment
CHLS	combat health logistics system
CINC	commander of a combatant command (JP 4-0)
civil law	body of law containing the statutes, regulations, and judicial decisions that govern the rights and duties of military organizations and installations regarding civil authorities (paragraph 12-21)
CJCS	Chairman of the Joint Chiefs of Staff
CJMAO	Central Joint Mortuary Affairs Office
CMEDCOM	corps medical command
CMMC	corps materiel management center
CMO	civil military operations
CMOS	cargo management operations system
CNR	combat net radios
COA	course of action
COC	contingency operations center
COCOM	combatant command (command authority)
combat loading	arranges personnel and equipment in a manner designed to conform to the anticipated tactical situation (paragraph 3-55)
COMMZ	communications zone
configured load	a single or multicommodity load of supplies built to the anticipated or actual needs of a consuming unit (paragraph 1-42)
containerization	use of containers to unitize cargo for transportation, supply and storage (JP 1-02)

contract law	applying domestic and international law to acquire goods, services, and construction (paragraph 12-22)
CONUS	continental United States
COP	common operational picture
COR	contracting officer representative
COSC	combat operational stress control
COSCOM	corps support command
CP	command post
CPL	combat prescribed load
CPO	claims processing office
CRAF	civil reserve air fleet
CRC	CONUS replacement center
CROP	containerized roll-on/off platforms
CS	combat support
CSA	corps storage area
CSB	corps support battalion
CSC	combat stress control
CSG	corps support group
CSH	combat support hospital
CSR	controlled supply rate
CSS	combat service support
CSS reach operations	operational positioning and efficient use of all available CSS assets and capabilities, from the industrial base to the soldier in the field (FM 3-0)
CSSC	combat service support company
CSSCS	combat service support control system
CTA	common table of authorization
CTIL	commander's tracked item list
CTOC	corps tactical operations center
CUL	common-user logistics
CWT	customer wait time
CZ	combat zone
DA	Department of the Army
DAAS	Defense Automated Addressing System
DAC	Department of the Army civilian
DAL	directive authority for logistics
DAMMS-R	Department of the Army Movement Management System—Revised
DAO	division ammunition officer

DASB	division aviation support brigade
DCAS	dental company area support
DCMA	Defense Contract Management Agency
DCSPER	Deputy Chief of Staff for Personnel
DCST	Defense Logistics Agency contingency support team
DEL	deployment equipment list
DFAS	Defense Finance and Accounting Service
DFBS	Defense Finance Battlefield System
DIA	Defense Intelligence Agency
DIMHRS	Defense Integrated Military Human Resource System
DISA	Defense Information Systems Agency
DISCOM	division support command
distribution	process of synchronizing all elements of the CSS system to deliver the right things to the right place at the right time to support the commander (paragraph 5-63)
DIVARTY	division artillery
DLA	Defense Logistics Agency
DMC	distribution management center
DMC/E	distribution management center/element
DMI	depot maintenance inter-servicing
DNBI	disease and non-battle injury
DOD	Department of Defense
DODD	Department of Defense directive
DOL	directorate of logistics
DOMS	Director of Military Support
DOS	Department of State, days of supply
DOT	Department of Transportation
DOTMLPF	doctrine, organizations, training, materiel, leader development, personnel and facilities
DRMO	Defense Reutilization and Marketing Office
DS	direct support
DSA	division support area
DSB	division support battalion
DSCA	Defense Security Cooperation Agency
DSMC	division support medical company
DSO	domestic support operations
DSOR	depot source of repair
DSP	deployment stock planner

DTLOMS	doctrine, training, leader development, organizations, materiel, and soldiers
DTOC	division tactical operations center
DTS	Defense Transportation System
DTTS	Defense Transportation Tracking System
EAC	echelon above corps
EAD	echelon above division
economy	effective support using the fewest resources at the least cost, and within acceptable levels of risk (JP 4-0)
EDA	equipment downtime analyzer
EEM	early entry module
EFT	electronic funds transfer
ENCOM	engineer command
environmental law	body of law containing the statutes, regulations, and judicial decisions relating to Army activities affecting the environment to include navigable waters, near-shore and open waters, and any other surface water, groundwater, drinking water supply, land surface or subsurface area, ambient air, vegetation, wildlife, and humans (paragraph 12-27)
EOD	explosive ordnance disposal
EPW	enemy prisoner of war
FBCB2	Force XXI battle command brigade and below
FEMA	Federal Emergency Management Agency
field services	essential services to enhance a soldier's quality of life during operations (paragraph 1-21)
FINCOM	finance command
fiscal law	domestic statutes and regulations to funding military operations, and supporting non-federal agencies and organizations (paragraph 12-25)
flexibility	ability to adapt CSS structures and procedures to changing situations, missions, and concepts of operations (paragraph 1-13)
FM	field manual
FMO	financial management operations
FOIA	Freedom of Information Act
FOO	field ordering officer
FOP	follow on package
force protection	actions taken to prevent or mitigate hostile actions against DOD personnel (to include family members), resources, facilities, and critical information (FM 3-0)

force provider	modular system, principally designed to provide the front-line soldier with a brief respite from the rigors of a combat environment (paragraph 6-71)
FORSCOM	Forces Command
FRA	forward repair activities
FRAGO	fragmentary order
FSB	forward support battalion
FSC	forward support company
FSMC	forward support medical company
FST	forward surgical team
GATES	Global Air Transportation and Execution System
GCCS-A	global command and control system—Army
GCSS	global combat support system
GCSS-A	global combat service support—Army
GDSS	global decision support system
GPMRC	global patient movement requirements center
GR	graduated response
GS	general support
GSA	General Services Administration
GTN	Global Transportation Network
HAP	humanitarian assistance program
HAZMAT	hazardous materials
HCA	humanitarian and civic assistance
HCP	health and comfort packages
HDR	humanitarian daily rations
HEMTT-LHS	heavy expanded mobility tactical truck—load handling system
HET	heavy equipment transport
HHC	headquarters and headquarters company
HN	host nation
HNS	host nation support
HQDA	Headquarters, Department of the Army
HR	human resource
HRS	human resource support
HSS	health services support
HSSN	home station support node
IA	implementing agreement
IAW	in accordance with
ICM	improved conventional munitions

IDP	initial deployment package
IED	improvised explosive devices
ILAP	integrated logistics analysis program
ILS	integrated logistics system
IM	information management
information systems	equipment and facilities that collect, process, store, display and disseminate information; includes computers (hardware and software) and communications, as well as policies and procedures for their use (FM 3-0)
integration	synchronizing CSS operations with all aspects of Army, joint, interagency, and multinational operations (paragraph 1-18)
intermediate staging base	secure staging base usually established near to, but not in, the area of operations (FM 3-0)
international law	applying international agreements, international customary practices, and the general principles of law recognized by civilized nations relating to military operations and activities (paragraph 12-15)
IPB	intelligence preparation of the battlefield
IPDS	inland petroleum distribution system
ISB	intermediate staging base
ISSA	interservice support agreement
IT	information technology
ITO	installation transportation office
ITV	in-transit visibility
JAGC	Judge Advocate Generals Corps
JFC	joint forces commander
JFLCC	joint force land component command/commander
JFSOCC	joint force special operations component command
JLOTS	joint logistics over the shore
JMC	joint movement center
JMPA	Joint Military Postal Agency
JOA	joint operations area
joint reception, staging, onward movement, integration	essential processes required to transition arriving personnel, equipment, and materiel into forces capable of meeting operational requirements (JP 4-01.8)
JOPES	Joint Operational Planning and Execution System
JP	joint publication
JPMRC	joint patient movement requirements center
JRA	joint rear area

JRC	joint reception center
JRSOI	joint reception, staging, onward movement and integration
JTAV	joint total asset visibility
JTB	joint transportation board
JTF	joint task force
JTLM	joint theater logistics management
LAAWS	Legal Automation Army-Wide System
LD	local depository
lead nation	multinational operation for which one nation (lead nation) provides most of the forces and resources and the multinational force commander (FM 3-0)
legal assistance	personal civil legal services to soldiers, their family members, and other eligible personnel (paragraph 12-33)
legal support	all legal services provided by judge advocates and other legal personnel in support of units, commanders, and soldiers in an area of operation and throughout full spectrum operations (paragraph 12-1)
LOC	lines of communications
LOGCAP	logistics civil augmentation program
LOGSA	Logistics Support Agency
LOTS	logistics over the shore
LOW	law of war
LPT	logistics preparation of the theater
LRC	logistics readiness center
LSE	logistics support element
LSV	logistics support vehicle
MACOM	major Army command
maintenance	actions taken to keep materiel in a serviceable, operational condition, returning it to service, and updating and upgrading its capability (paragraph 1-23)
major operation	series of tactical actions (battles, engagements, strikes) conducted by various combat forces of a single or several services, coordinated in time and place, to accomplish operational, and sometimes strategic objectives in an operational area (FM 3-0)
MC	military committee
MCA	movement control activity
MCB	movement control battalion
MCD	military committee decision
MCL	mission configured load
MCT	movement control team
MDSS	Marine Air-Ground Task Force Deployment Support System

MDW	Military District of Washington
MEDBDE	medical brigade
MEDCOM	medical command
medical regulating	actions and coordination necessary to arrange for the movement of patients through the levels of care; matches patients with a medical treatment facility that has the necessary health service support capabilities and available bed space (JP 4-02)
MEDLOG	medical logistics
METL	mission essential task list
METS	mechanized export traffic system
METT-TC	mission, enemy, troops, terrain and weather, time, civilian considerations
MHE	materiel handling equipment
MI	military intelligence
military justice	administering the Uniform Code of Military Justice and disposing alleged violations by judicial (courts-martial) or nonjudicial means (paragraph 12-8)
MJLC	multinational joint logistics center
MLMC	medical logistics support team
MLRS	multiple launch rocket system
MLST	medical logistics support team
MMC	materiel management center
MOADS	maneuver-oriented ammunition distribution system
mobilization	process by which the armed forces or part of them are brought to a state of readiness for war or other national emergency (paragraph 3-42)
MOOTW	military operations other than war
MP	military police
MPSA	Military Postal Service Agency
MRE	meals ready to eat
MRO	medical regulating officer
MROCS	materiel release order control system
MSB	main support battalion
MSC	Military Sealift Command
MSE	mobile subscriber equipment
MSR	main supply route
MST	maintenance support teams
MTF	medical treatment facility
MTMC	Military Traffic Management Command
MTOE	modified table of organization and equipment

MTS	movement tracking system
MTW	major theater of war
MWD	military working dogs
MWR	morale, welfare, recreation
NAF	nonappropriated fund
NAMI	non-Army managed item
NAP	not authorized for prepositioning
NATO	North Atlantic Treaty Organization
NBC	nuclear, biological, chemical
NDMS	national disaster medical system
NEO	noncombatant evacuation operations
NGO	non-governmental organization
NICP	national inventory control point
NMM	national maintenance manager
NMP	national maintenance program
NMS	national military strategy
NSS	national security strategy
OCONUS	outside continental United States
OEL	organizational equipment list
OMC	optical memory card
OPCON	operational control
operational picture	single display of relevant information within a commander's area of interest (FM 3-0)
operational reach	distance over which military power can be employed decisively (FM 3-0)
OPLAN	operations plans
OPLAW	operational law
OPORD	operations order
OPSEC	operations security
OSD	Office of the Secretary of Defense
OST	order ship times
PA	public affairs
parallel command	nations (of a multinational force) retain control of their deployed forces (FM 3-0)
PARC	principle assistant responsible for contracting
PEO	program executive officer
PERSCOM	personnel command

physical network	quantity and capability of fixed structures and established facilities; includes factories, warehouses, airfields, seaports, roads, railroads, inland waterways, pipelines, terminals, bridges, tunnels, and buildings (FM 3-0)
PIT	process improvement teams
PLL	prescribed load list
PLP	premobilization legal preparations
PLS	palletized loading system
PM	program manager
PMCS	preventive maintenance checks and services
POD	port of debarkation
POE	port of embarkation
POL	petroleum, oils, and lubricants
PRAMS	passenger reservation and manifesting system
PSB	personnel services battalion
PSYOP	psychological operations
PVNTMED	preventive medicine
PVO	private voluntary organizations
RAA	redeployment assembly areas
RCEM	regional contingency engineering manager
RD	replacement directorate
RDL	Rucksack Deployable Law Office and Library
relevant information	all information of importance to commanders and staffs in the exercise of command and control (FM 3-0)
religious support	provision and performance of operations for the commander to protect the free exercise of religion for soldiers, family members, and authorized civilians (paragraph 1-29)
resource network	the people, materiel, and machines operating within and over the physical network (FM 3-0, paragraph 12-50)
responsiveness	right support in the right quantity in the right place at the right time (JP 4-0)
RF	radio frequency
RFDC	radio frequency data collection
RFID	radio frequency identification device
RM	resource manager
ROE	rules of engagement
ROPU	reverse osmosis purification unit
RPMA	real property maintenance activity
RS	religious support
RSA	religious support annex

RSE	religious support estimate
RSO&I	reception, staging, onward movement, and integration
RTD	return to duty
RX	repairable exchange
S&S	supply and service
S&T	supply and transportation
SA	Secretary of the Army
SAAS-MOD	Standard Army Ammunition System—Modified
SACEUR	Supreme Allied Commander Europe
SAMS	Standard Army Maintenance System
SARSS-O	Standard Army Retail Supply System—Objective
SATCOM	satellite communications
SBCT	Stryker brigade combat team
SCC	small-scale contingency
SECDEF	Secretary of Defense
SIDPERS	standard installation/division personnel system
SIMLM	single integrated medical logistics manager
simplicity	reflects the need to reduce complexity and often fosters efficiency in both the planning and execution of national and theater logistic operations (JP 4-0)
SIPRNET	secret internet protocol router network
SIT	site improvement team
SITLM	single integrated theater logistics manager
SJA	staff judge advocate
SLOC	sea lines of communications
SME	subject matter expert
SMFT	semitrailer mounted fabric tanks
SO	special operations
SOF	special operations forces
SOFA	status of forces agreement
SOP	standing operating procedure
SOR	source of repair
SOSCOM	Special Operations Support Command
SOTSE	special operations theater support element
split-based operations	performing certain combat service support administrative and management functions outside the joint operations area, whether in a secure location in the communications zone, at an intermediate staging base, or at home station (paragraph 1-38)
SPM	single port manager

SPOD	seaport of debarkation
SPOE	seaport of embarkation
SRA	special repair activities
SRP	soldier readiness processing
SSA	supply support activity
SSC	small-scale continguency
SSF	single stock fund
STAMIS	Standard Army Management Information System
STANAG	standardization agreement
SU	situational understanding
supply	acquiring, managing, receiving, storing, and issuing all classes of supply except class VIII (paragraph 6-1)
survivability	being able to protect support functions from destruction or degradation; function of force protection that consists of those actions to prevent or mitigate hostile actions against personnel, resources, facilities, and critical information (paragraph 1-16)
sustainability	ability of the force to conduct operations over time (paragraph 3-18)
SWA	Southwest Asia
TACON	tactical control
tactics	(Army) employment of units in combat; ordered arrangement and maneuver of units in relation to each other, the terrain, and the enemy to translate potential combat power into victorious battles and engagements (FM 3-0)
	(DOD) employment of units in combat; ordered arrangement and maneuver of units in relation to each other and/or to the enemy in order to use their full potentialities (JP 1-02)
TAMMIS	The Army Medical Management Information System
TAT	to accompany troops
TAV	total asset visibility
TC-ACCIS	transportation coordinators—automated command and control information system
TC-AIMS II	transportation coordinators automated information movement system II
TCC	transportation component command
TCF	tactical combat force
TCMD	transportation control and movement document
TDA	table of distribution and allowances
TDD	time-definite delivery
TFE	tactical field exchange
TFEO	tactical field exchange officer

TFOM	theater force opening module
TFOP	theater force opening package
throughput	flow of sustainability assets in support of military operations, at all levels of war, from point of origin to point of use (paragraph 1-41)
TJAG	The Judge Advocate General
TMDE	test measurement and diagnostic equipment
TMEDCOM	theater medical command
TO	theater of operations
TOC	tactical operations center
TOE	table of organization and equipment
TPFDD	time-phased force deployment data
TPMRC	theater patient movement center
transportation	moving and transferring units, personnel, equipment, and supplies to support the concept of operations (paragraph 1-22)
TSA	theater storage area
TSC	theater support command
TSOP	tactical standing operating procedure
TTP	tactics, techniques, and procedures
TWV	tactical wheeled vehicle
UBL	unit basic load
UCL	unit configured loads
UCMJ	Uniform Code of Military Justice
UDL	unit deployment list
UGR	unitized group ration
UGR-A	unitized group ration-A
UGR-H&S	unitized group ration-heat and serve
UJTL	universal joint task list
ULLS	unit-level logistics system
UMT	unit ministry team
UN	United Nations
UNAAF	United Action Armed Forces
unit loading	allows troop units to move with their equipment and accompanying supplies on the same conveyance (paragraph 3-55)
unitized cargo	single item or a number of items packaged, packed, or arranged in a specified manner that can be handled as a unit (paragraph 3-32)
urban operations	offensive, defensive, stability, and support operations conducted in a topographical complex and adjacent natural terrain where manmade construction and high population density are the dominant features (FM 3-0)

USACE	U.S. Army Corps of Engineers
USAF	United States Air Force
USALSA	U.S. Army Legal Services Agency
USAMC	U.S. Army Materiel Command
USAMEDCOM	U.S. Army Medical Command
USAMMA	U.S. Army Medical Materiel Agency
USAMRMC	U.S. Army Medical Research and Materiel Command
USARC	U.S. Army Reserve Command
USARCS	U.S. Army Claims Services
USAREUR	U.S. Army Europe
USASOC	U.S. Army Special Operations Command
USC	United States Code
USPS	U.S. Postal Service
USTAPERSCOM	U.S. Total Army Personnel Command
USTRANSCOM	U.S. Transportation Command
UXO	unexploded ordnance
VA	Veterans Administration
velocity management	strives to provide world-class logistics support while providing a hedge against unforeseen interruptions in the logistics pipeline by leveraging information technologies and optimizing its processes (paragraph 1-46)
VM	velocity management
WIN	warfighter information network
WIN-T	warfighter information network-tactical
WPS	worldwide port system
WRSA	war reserve stocks for allies
WRAS-K	war reserve stocks for allies-Korea

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