
GENERAL SUPPLY AND FIELD SERVICES OPERATIONS

July 2014

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Headquarters Department of the Army

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General Supply and Field Services Operations

Contents

	Page
PREFACE	iv
INTRODUCTION	v
Chapter 1 INTRODUCTION TO GENERAL SUPPLY AND FIELD SERVICES OPERATIONS	1-1
Concept of Support Overview	1-1
General Supply Operations Overview	1-1
Field Services Operations Overview	1-1
Operational Energy.....	1-2
Chapter 2 ROLES AND MISSIONS IN GENERAL SUPPLY AND FIELD SERVICES OPERATIONS	2-1
General Supply Distribution and Field Services	2-1
Strategic Partners	2-1
Joint and Multinational Support.....	2-1
Executive Agency and Proponency	2-2
General Supply Organizations	2-2
Field Services Organizations.....	2-3
Theater Sustainment Command	2-4
Expeditionary Sustainment Command	2-4
Sustainment Brigade and Combat Sustainment Support Battalion	2-5
Brigade Support Battalion.....	2-5
Chapter 3 PLANNING FOR GENERAL SUPPLY AND FIELD SERVICES OPERATIONS	3-1
Planning the System.....	3-1
Special Considerations	3-1
Operational Contract Support.....	3-1
Chapter 4 GENERAL SUPPLY OPERATIONS	4-1
General Supply Concept of Support.....	4-1
General Supply Automation	4-2
Inventory and Materiel Management.....	4-3
Property Accountability.....	4-3
Classes II, III (Packaged) and IV	4-4
Class VI	4-4

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***This publication supersedes FM 10-27, dated 20 April 1993, and FM 42-414, dated 3 July 1998.**

	Class VII	4-5
	Class IX	4-5
	Fixed Base Supply Support Activities	4-5
	Deployable Supply Support Activities	4-5
	Configured Loads	4-6
	Retrograde Operations	4-6
Chapter 5	FIELD SERVICES OPERATIONS.....	5-1
	Field Services Concept of Support	5-1
	Personnel Responsibilities	5-2
	Shower Operations	5-4
	Nuclear Radioactive Fallout Decontamination	5-5
	Laundry Operations.....	5-6
	Field Site Selection and Layout Considerations	5-7
	Production Reports	5-8
Chapter 6	ENVIRONMENTAL STEWARDSHIP CONSIDERATIONS	6-1
	Environmental Stewardship Requirements.....	6-1
	Environmental Stewardship Responsibilities	6-1
	Environmental Operations Guidelines	6-1
	Unit-Level Environmental Training Program.....	6-3
	Hazardous MaterialS/Hazardous Waste Management.....	6-3
Chapter 7	SAFETY AND SECURITY	7-1
	Fire Hazards.....	7-1
	Toxic Hazards	7-1
	Lifting Hazards	7-1
	Chemical, Biological, Radiological, Nuclear (CBRN) Considerations.....	7-2
	Security and Protection	7-2
	Risk Assessment.....	7-2
	Antiterrorism Measures	7-3
	Information Protection	7-3
Appendix	DRY WEIGHTS OF STANDARD CLOTHING ITEMS	Appendix-1
	GLOSSARY	Glossary-1
	REFERENCES.....	References-1
	INDEX	Index-1

Figures

Figure 2-1. Quartermaster supply company organization.....	2-3
Figure 2-2. Quartermaster field services company organization	2-4
Figure 4-1. Distribution of general supplies	4-2
Figure 5-1. Sample field layout - shower and laundry team operation	5-2
Figure 5-2. Sample field layout – shower operation	5-5
Figure 5-3. Sample field layout – laundry operation	5-7

Tables

Table Appendix-1. Standard clothing weights	Appendix-1
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Preface

ATP 4-42 provides guidance for commanders, supervisors, Soldiers and other personnel involved in providing general supplies and field services during deployed operations. This manual is the operational level description the provision of general supplies and selected field service functions. It addresses these operations from the theater sustainment command (TSC) level, where the critical sustainment handover occurs from strategic agencies and commands, down to the tactical level, including applicable operations of the brigade support battalion (BSB).

The principal audience for ATP 4-42 is all members of the profession of arms. Commanders and staffs of Army headquarters serving as joint task force or multinational headquarters should also refer to applicable joint or multinational doctrine concerning the range of military operations and joint or multinational forces. Trainers and educators throughout the Army will also use this manual.

The general supplies addressed in ATP 4-42 are: Class II (clothing and individual/unit equipment), Class III Packaged (insulating and hydraulic oils, lubricants, fluids, compressed gases, chemical products and coolants), Class IV (construction and barrier materials), Class VI (personal demand items), Class VII (major end items), and Class IX (repair parts). ATP 4-42 does not address the following supplies due to their unique characteristics which are also addressed in separate manuals: Class I (subsistence) and Health and Comfort Packages; water; Class III Bulk (bulk petroleum); and Class V (ammunition).

The field service functions addressed in this Army techniques publication (ATP) are field laundry and shower operations. Although the following are also field service operations by definition, due to their high levels of complexity, they are not covered in this ATP and are addressed in separate manuals: aerial delivery; field feeding; water purification; mortuary affairs; and force provider base camp sustainment.

Commanders, staffs, and subordinates ensure that their decisions and actions comply with applicable United States, international and, in some cases host-nation laws and regulations. Commanders at all levels ensure that their Soldiers operate in accordance with the law of war and the rules of engagement. (See Field Manual [FM] 27-10.)

ATP 4-42 uses joint terms where applicable. For definitions shown in the text, the term is italicized and the number of the proponent publication follows the definition. This publication is not the proponent for any terms. ATP 4-42 applies to the Active Army, Army National Guard/Army National Guard of the United States, and United States Army Reserve unless otherwise stated.

The proponent for this publication is Headquarters, United States Army Training and Doctrine Command (TRADOC). Send comments and recommended changes directly to Commander, United States Army Combined Arms Support Command, Sustainment Center of Excellence, Training support and Doctrine Directorate, ATTN: ATCL-TS, Fort Lee, Virginia 23801-2102 or submit an electronic DA Form 2028 (Recommended Changes to Publications and Blank Forms) by e-mail to: usarmy.lee.tradoc.mbx.lee-cascom-doctrine@mail.mil.

Unless this publication states otherwise, masculine nouns or pronouns do not refer exclusively to men.

Introduction

ATP 4-42 provides logisticians and field commanders an understanding of general supply and selected field services functional principles, organizations, and associated guidance. It provides basic doctrinal discussion on the organization and operations of Quartermaster general supply and field services units.

The focus of Army techniques publication (ATP) 4-42 is operational and tactical level general supply and field services operations which are conducted in support of Army forces in a deployed environment. It discusses these functions through the various support levels of multi-functional and Quartermaster logistics units. From a supporting commander's perspective, it provides information on the functions of general supplies and field services to allow that commander to understand better how to execute support to the force. From a supported commander's perspective, it provides information on the types of support available in order to allow proper planning.

This ATP incorporates modular unit capabilities, designs and concepts, plus updated terminology in accordance with ADP/ADRP 3-0 and other commensurate doctrine. The net effect was to reduce the manual from approximately 300 pages down to approximately 60 pages. The significant reduction in the various types of units between Army of Excellence and modular forces contributed the most to size reduction. Additionally, material that was repeated in/from other manuals was eliminated to comply with Doctrine 2015 content requirements.

ATP 4-42 contains seven chapters:

- **Chapter 1** discusses the overall concept of support and describes the general supply and field services operational overviews.
- **Chapter 2** focuses on the roles and missions of strategic partners, joint and multinational support, executive agency and proponentcy, the general supply and field services units, and the higher level management organizations involved at theater sustainment command, expeditionary sustainment command, sustainment brigade, combat sustainment support battalion, and brigade support battalion levels.
- **Chapter 3** covers operational planning to include special considerations such as operational contract support and the Logistics Civil Augmentation Program.
- **Chapter 4** details the general supply concept of support to include automation, inventory and materiel management, property accountability, the specifics of the individual classes of supply, supply support activities, configured loads, and retrograde operations.
- **Chapter 5** details the field services operations concept of support to include personnel responsibilities, shower and laundry operations, field site selection and layout considerations, and production reports.
- **Chapter 6** discusses environmental stewardship considerations to include guidelines, training, and hazardous material/waste management.
- **Chapter 7** outlines fire, toxic, and lifting hazards, security and protection, risk assessment, antiterrorism measures, and information protection.

ATP 4-42 does not introduce any new terms, rescind any terms or modify any terms.

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Chapter 1

Introduction to General Supply and Field Services Operations

CONCEPT OF SUPPORT OVERVIEW

1-1. General supply and field services operations support all Army forces. Quartermaster units, tailored and task organized with other organizations, provide logistics support at the operational and tactical levels. Mission command and management of echelons above brigade supply and field services operations begins at the theater sustainment command (TSC), expeditionary sustainment command (ESC) and their supporting multi-functional sustainment brigades. Execution of general supply and field services operations is then carried out at the tactical level by combat sustainment support battalions (CSSB) assigned to a sustainment brigade and brigade support battalions (BSB). The centralized mission command of logistics produces a unity of effort that enables maneuver commanders to build and sustain combat power and maintain an operational tempo that their opponents cannot match. The result is the establishment of a single organization in theater that manages all logistics support in a seamless distribution system, coordinated by the distribution management center located in the TSC or ESC. Additionally, under the Modular Force, maneuver and most support brigades contain increased amounts of organic sustainment capabilities that provide enhanced levels of operational endurance. Support brigades with lesser amounts of internal sustainment capabilities will be more reliant on the echelon above brigade sustainment and should be planned for during the military decision making process.

GENERAL SUPPLY OPERATIONS OVERVIEW

1-2. General supply operations include the requisition, receipt, storage, protection, maintenance, issue, distribution, redistribution, and retrograde of supplies. Levels of supply are broadly classified under the levels of war as strategic, operational and tactical. Strategic supplies are items under the control of the United States Army Materiel Command life cycle management commands. Operational supplies are theater supplies that are positioned to replenish tactical stocks when strategic replenishment is not feasible. These supplies are considered inventory in motion and are part of the distribution system. Tactical level supplies are those items provided to and carried within each maneuver or support brigade to sustain operational endurance and those supplies held by sustainment brigades to provide area support at each level. These items are maintained in support of supported brigade units. Implementation of integrated supply chain business practices and total asset visibility enablers merge the strategic, operational, and tactical levels into a seamless supply system. It is imperative that the automated management systems, linked together by reliable communications, be in place to allow the supported units to place their demands rapidly and to assist sustainment units in providing supplies in a timely manner.

1-3. Under the Army modular design, supply and services battalions of the Army of Excellence were replaced by CSSBs. The redesign of several supply units into modular supply companies completed the transition of Class IX repair parts supply responsibilities from the Ordnance Branch to the Quartermaster Branch and consolidated warehousing operations with the other general supply classes. The mission to receive, store, and issue Class VII major end items is now accomplished by the supply companies as well.

FIELD SERVICES OPERATIONS OVERVIEW

1-4. Field service operations to be discussed in this manual are laundry and shower operations. These services reside within the modular field services companies. They are provided via shower and laundry team capabilities which are projected as far forward in the operational environment as possible. The field service company, located as far forward as the supported brigade combat team, provides soldiers a

minimum of two weekly showers and up to 17 pounds of laundered clothing each week (comprising three uniform sets, undergarments, socks, and two towels and washcloths).

OPERATIONAL ENERGY

1-5. Planning for the effective use of operational energy is an essential consideration. Operational energy means the energy required for training, moving, and sustaining military forces and weapons platforms for military operations. The term includes energy used by tactical power systems and generators and weapons systems. Energy informed decisions provide the greatest net operational benefits and increase mission success through extended range and endurance, flexibility and resilience, enhanced mobility and freedom of action. Commanders at all levels must reinforce behaviors and employ technical solutions that make effective use of energy. Energy considerations should be included during mission planning and resourcing, and then monitored during mission execution. These practices enhance combat effectiveness and reduce risk to Soldiers and units.

Chapter 2

Roles and Missions in General Supply and Field Services Operations

This chapter describes the roles and missions of the units, organizations and agencies involved in general supply distribution and field services operations in the area of responsibility. The following topics are discussed: strategic partners; joint and coalition support; executive agency and proponentcy; general supply organizations; field services organizations; TSC; ESC; sustainment brigade, CSSB; and BSB.

GENERAL SUPPLY DISTRIBUTION AND FIELD SERVICES

2-1. Future operations will be dynamic, distributed and simultaneous. Support units must therefore be capable of conducting continuous supply distribution and field services functions during ongoing combat operations. In order to accomplish the mission, supply and field services organizations and systems must support the requirement for expeditionary agility and responsiveness as well as staying power to support a quality Army. Supply and field services support 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. The principles which align with the characteristics of the supported forces, guide the development, employment, movement, and functionality of the supply and field services organizations to provide optimal support to the Soldier are: integration, anticipation, responsiveness, simplicity, economy, survivability, continuity, and improvisation. See Army Doctrine Publication and Army Doctrine Reference Publication 4-0, *Sustainment*, for details concerning these principles.

STRATEGIC PARTNERS

2-2. The Defense Logistics Agency is the Department of Defense strategic logistics provider. The Defense Logistics Agency supports each geographic combatant commander with a contingency support team as its focal point for coordinating activities throughout the theater. It integrates materiel management support of common commodities including general supplies. The Defense Logistics Agency contingency support team also provides disposal support as required, through the Defense Disposition Services. Defense Disposition Services establishes theater-specific procedures for the reuse, demilitarization, or disposal of excess property including general supplies and waste.

2-3. The United States Army Materiel Command provides support to deployed Army forces through its subordinate Army Sustainment Command, life cycle management commands, Army Contracting Command, and other subordinate activities to provide a seamless approach to linking the national sustainment base with deployed Army forces. In addition to supporting deployed Army forces, Army Materiel Command assets within a theater may also provide acquisition, life cycle logistics, and technology support to joint, interagency, and multinational forces as directed by the Army Service component commander.

2-4. Quartermaster general supply and field services operations may require coordination with other strategic partners as well, such as the: Defense Contract Management Agency ; United States Transportation Command and its Military Surface Deployment and Distribution Command ; the Army Sustainment Command, Army field support brigades , and the United States Army Contracting Command .

JOINT AND MULTINATIONAL SUPPORT

2-5. The geographic combatant commander assigns lead Service common-user logistics responsibilities, normally through the contingency planning process, in order to achieve efficiencies and eliminate

redundancies. He usually assigns lead Service responsibilities to the dominant user and/or most capable Service for a particular common supply item or service. In many cases, the lead Service for common-user logistics and other support within a joint or multinational force is the Army. These lead Service support functions may include general supplies and field services.

EXECUTIVE AGENCY AND PROPONENCY

2-6. The Secretary of Defense designates the Army as the executive agent for numerous common support requirements. These executive agent or proponent requirements relate to lead Service responsibilities, but they are not one and the same. Executive agency refers to Secretary of Defense Directives and instructions to one Service department to provide specific categories of support to other Service departments. Executive agency reduces redundancy across the Services and assists the Services in programming, planning, and budgeting. The term “executive agent” does not refer to any specific organization supporting a geographic combatant commander, however Service department executive agency is considered when assigning lead Service responsibilities within a particular joint operation. In many cases, lead Service requirements will be closely related to the Department of Defense executive agent requirements.

GENERAL SUPPLY ORGANIZATIONS

2-7. General supplies are handled at the theater level primarily by Quartermaster supply companies which are assigned to a TSC and/or ESC, sustainment brigades and CSSBs. The supply companies support operations by providing general supplies on an area support basis to local units and BSBs, including forward support companies, via throughput methods whenever possible. The supply company mission is to establish and operate one to three supply support activities (SSA) for distribution operations to above-brigade units and back-up support for brigade combat teams (BCTs) and support brigades. It may also provide support to centralized receiving and shipping points, theater distribution centers, and convoy support centers (primarily for class IX repair parts). See figure 2-1 on page 2-3 for the organization of the Quartermaster supply company.

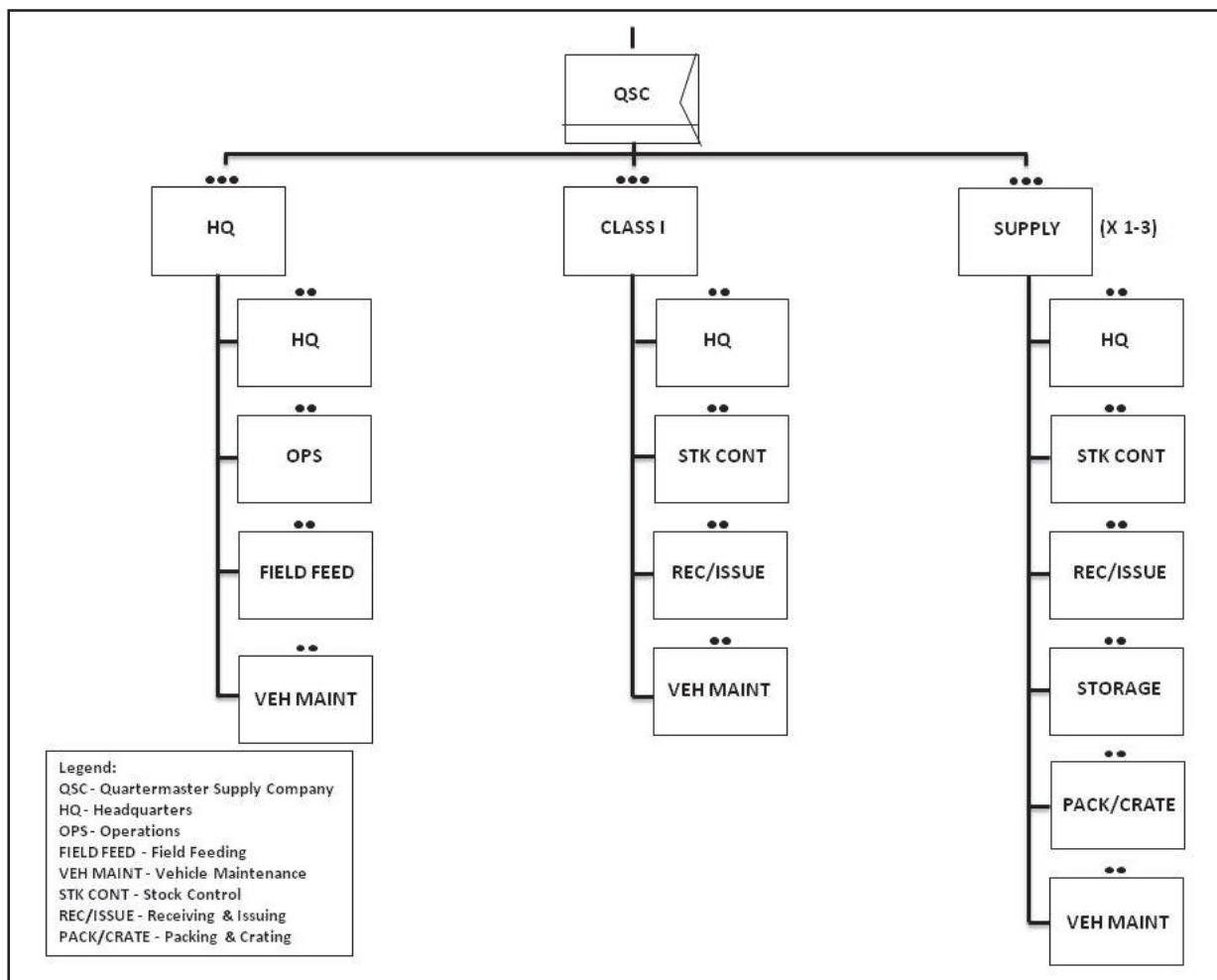


Figure 2-1. Quartermaster supply company organization

FIELD SERVICES ORGANIZATIONS

2-8. Field services are performed within an area of responsibility on an area support basis by Quartermaster field service companies which are normally assigned to CSSBs. In some cases, shower and laundry teams may be assigned down to BSB level. They may also support convoy support centers, as may the shower and laundry support elements of the force provider system. The company mission is to provide shower and laundry support for approximately 21,000 troops on an area support basis. The shower and laundry teams are the key elements of the theater field services function and they may be separately deployed as far forward as BSBs. See figure 2-2 on page 2-4 for the organization of the Quartermaster field services company.

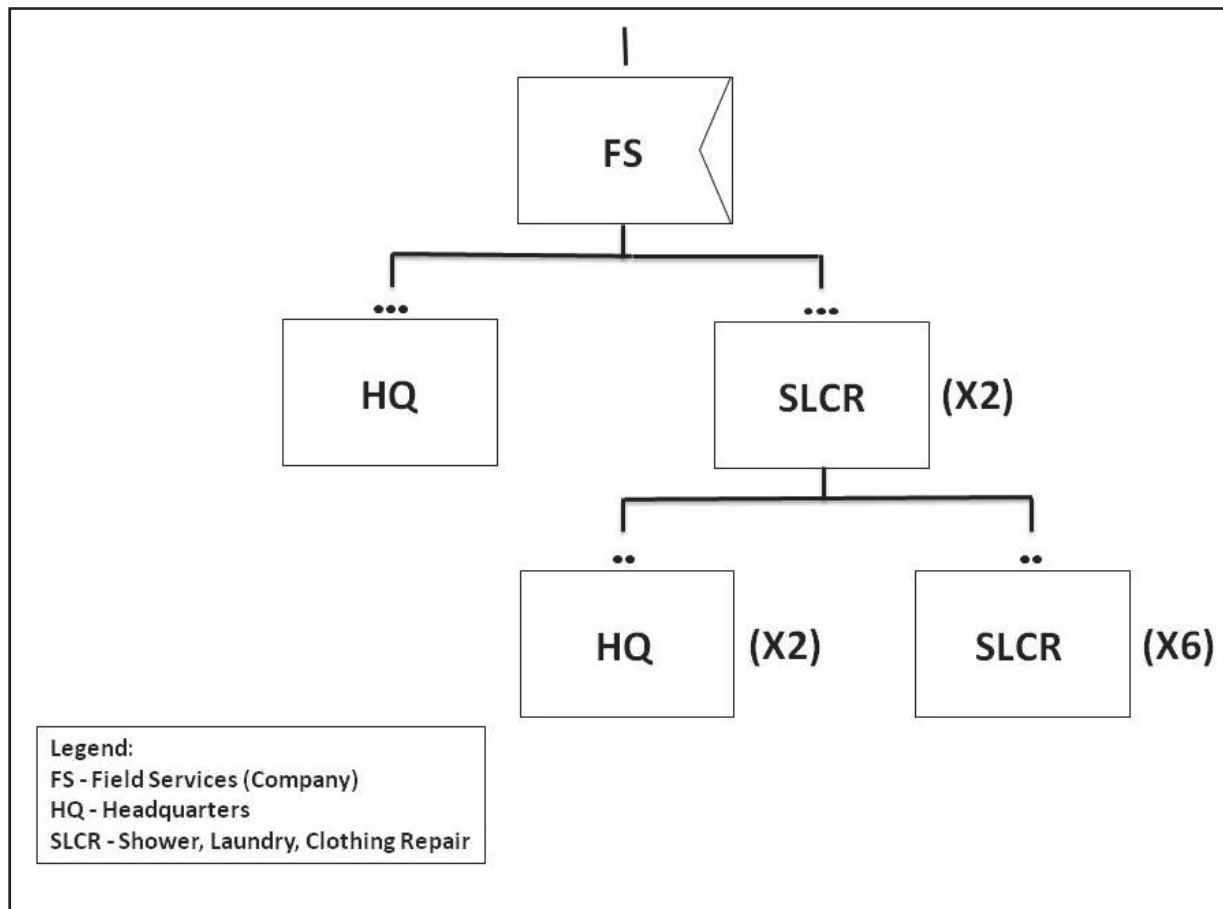


Figure 2-2. Quartermaster field services company organization

THEATER SUSTAINMENT COMMAND

2-9. The theater sustainment command (TSC) and its subordinate units are assigned to an Army Service component command supporting a geographic combatant commander. It can deploy an expeditionary sustainment command (ESC) when the TSC determines that a forward command is required or when task organized directly under the mission command of a Corps or Army Forces. The TSC possesses a centralized materiel and field services management capability that provides increased efficiencies and effectiveness by reducing redundant materiel management layers, centralizing materiel management functions, and employing a theater-wide view of resources. The result is responsive support for Army requirements and reduced customer wait time. The TSC performs materiel management for all general supplies and overall management of field services. TSC personnel perform the day-to-day planning for operations, providing the theater interface between the strategic and operational levels of support. See ATP 4-94 for additional information on the TSC.

EXPEDITIONARY SUSTAINMENT COMMAND

2-10. The role of the expeditionary sustainment command (ESC) is to provide mission command of assigned support units including general supply and field services organizations. It normally deploys to the area of operations/joint operational area and provides logistics mission command when multiple sustainment brigades are employed or when the TSC determines that a forward command presence is required. The functions of the ESC are the same as the TSC but smaller in scale. See ATP 4-94 for additional information on the ESC.

SUSTAINMENT BRIGADE AND COMBAT SUSTAINMENT SUPPORT BATTALION

2-11. The sustainment brigade provides mission command of theater opening, theater distribution, and sustainment operations to include general supply and field services. CSSBs are the building blocks of the sustainment brigades. CSSBs may be tailored with 3-7 companies to support unified land operations. CSSBs are modular and task organized to accomplish sustainment brigade missions. See ATP 4-93 for additional information on the sustainment brigade and CSSB.

BRIGADE SUPPORT BATTALION

2-12. The brigade support battalion (BSB) plans, coordinates, synchronizes, and executes replenishment operations in support of brigade combat team operations. It distributes supply classes II, III (P) and III B (bulk petroleum), IV, VII, and IX, and when required, may provide field services support via attached field service elements. BSBs provide a materiel carrying capability that enables the brigades to conduct sustained operations for a finite period of time. BSBs typically plan and execute replenishment operations in support of maneuver force battles and engagements. They are deliberate, time-sensitive operations conducted to replenish forward support companies with essential supplies to sustain the operations pace. When required, a supporting sustainment brigade may augment BSB capabilities during BSB-planned and executed replenishment operations. See ATP 4-90 for additional information on the BSB.

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Chapter 3

Planning for General Supply and Field Services Operations

General supply distribution and field services support planning require understanding of the operational environment, knowledge of the geographic combatant commander's priorities and requirements, and understanding the link between global and theater distribution.

PLANNING THE SYSTEM

3-1. Theater distribution planning is the final portion of the global distribution pipeline. The distribution plan outlines who, what, when, where, and how distribution will be accomplished. The distribution plan is a constantly evolving document that must be flexible enough to support changing operations. Distribution planning describes how sustainment flows from the theater base to the tactical levels.

3-2. Effective and efficient distribution at the theater level is required to support the mission of the geographic combatant commander. Hidden within distribution are various capabilities that support the delivery of sustainment and the positioning of sustainment forces. Land, water, and aerial modes of delivery must be optimized.

3-3. Developing the distribution plan is the single most important aspect of theater distribution. In developing the distribution plan, commanders start by understanding the operational environment in terms of mission, enemy, terrain and weather, troops and support available, time available and civil considerations (METT-TC). Specific considerations include: mission priorities; units to be supported; size of the operational area; limitations on supplies; and outside support required (such as from transportation, engineer and other units).

SPECIAL CONSIDERATIONS

3-4. Sustainment preparation of the operational environment assists supply and services planning staffs in refining the sustainment estimate and concept of support. This includes all actions taken by logistics planners to optimize the means of supporting the commander's supply distribution, field services and overall battle plans. These actions include identifying and preparing forward operating bases, selecting and improving lines of communication, projecting and preparing forward sustainment bases, determining operational stock assets, and building a distribution infrastructure for the theater. See ATP 3-05.40 for specific information on the sustainment of Army special operations forces. The initial planning focus includes identifying and ensuring access to resources currently in theater via theater support contracts. Planning should also consider the use of the Logistics Civil Augmentation Program (LOGCAP) when in-theater resource estimates are inadequate to support theater support contracts. This allows logisticians to prepare a detailed logistics estimate, and they advise commanders of the best method of providing sustainment without overwhelming the force or the distribution system.

OPERATIONAL CONTRACT SUPPORT

3-5. The Army Materiel Command provides contracting and acquisition support to deployed Army forces via subordinate organizations such as the contracting support brigade and the Army field support brigade. The Army Service component command contract support integration plan integrates the capabilities of these organizations and ensures effective and efficient general supply and field services contract support to a particular operation. The contracting support integration plan development process is intended to ensure the operational commander and supporting contracting personnel conduct advance planning, preparation, and coordination to support deployed forces, and that the contract support integration and contractor

management related guidance and procedures are identified and included in the overall plan. While formal contracting support integration plans are normally required only at the operational level, contract support should be considered in both the deliberate and crisis action planning process at brigade combat team through theater army levels. The need for quality, committed, trained, and dedicated contracting personnel employed in all unified land operations cannot be over-emphasized. See ATTP 4-10 for additional information on Operational Contract Support Tactics, Techniques, and Procedures.

3-6. The contracting support brigade, through contracting authority delegated by the Expeditionary Contracting Command, executes theater support contracting actions in support of deployed Army forces and coordinates other common contracting actions as directed by the supported commander. The contracting support brigade missions include: providing mission command over assigned/attached subordinate contingency contracting battalions and teams; providing operational contract support advice (less that related to materiel systems support) and planning assistance to the Army Service component command (or subordinate Army forces command) and the associated senior sustainment command; assisting in the development of contracting support integration plans as required; coordinating and providing contracting support advice and planning assistance at major tactical unit levels (such as corps, division, BCT/brigade); and performing contract administration for contracts executed under contracting support brigade authority. See FM 4-92 for additional information on the contracting support brigade.

3-7. The Army field support brigade, in coordination with the supported command and supporting contracting support brigade, is responsible for the planning and integration of LOGCAP support. LOGCAP leverages pre-approved performance contract companies to provide sustainment and other support services to deployed U.S. forces. LOGCAP provides a rapid and responsive contract capability which augments U.S. forces by helping to meet general sustainment requirements. See ATP 4-91 and AR 700-137 for more information on LOGCAP. The Army field support brigade's primary contingency mission is to assist in the coordination of acquisition logistics and technology support to Army units world-wide. The Army field support brigade provides this support from the operational to tactical echelons of command across the entire range of military operations. The Army field support brigade meets its mission requirements through its assigned and attached subordinate organizations, use of contracted support, and close coordination/synchronization with the supporting program executive officers and program managers.

Chapter 4

General Supply Operations

This chapter describes the general supply concept of support and includes coverage of the following topics: automation; inventory and materiel management; property accountability; the unique aspects of the individual general supply classes; supply support activities; and retrograde operations.

GENERAL SUPPLY CONCEPT OF SUPPORT

4-1. The primary objective of theater distribution is to throughput supplies to the ultimate user to the greatest extent possible. Within the BCTs operating on the battlefield, emphasis is placed on mobile and agile sustainment units capable of supporting the Army's lighter, but more lethal, combat units. These modular sustainment units are more responsive to geographic combatant commander needs; better employ joint capabilities; facilitate force packaging and rapid deployment; and fight as self-contained units in the asymmetrical area of operations.

4-2. Supply and field services operations must effectively support all Army forces. To accomplish this, Quartermaster units, tailored together with other sustainment units to form multi-functional CSSBs, provide sustainment at the operational level. The brigade combat teams and support brigades have organic support capabilities that provide operational endurance. Mission command and management of echelon above brigade supply and field services operations begins at the TSC and its supporting multi-functional sustainment brigades. It is, executed by CSSBs and BSBs. The centralized mission command of sustainment produces a unity of effort that enables maneuver commanders to build and sustain combat power and maintain an operational pace that their opponents cannot match. The overall effect results in the establishment of a centralized logistics mission command organization in theater that coordinates all logistics support into a seamless distribution system. See figure 4-1 on page 4-2 for a schematic of the distribution flow of general supplies.

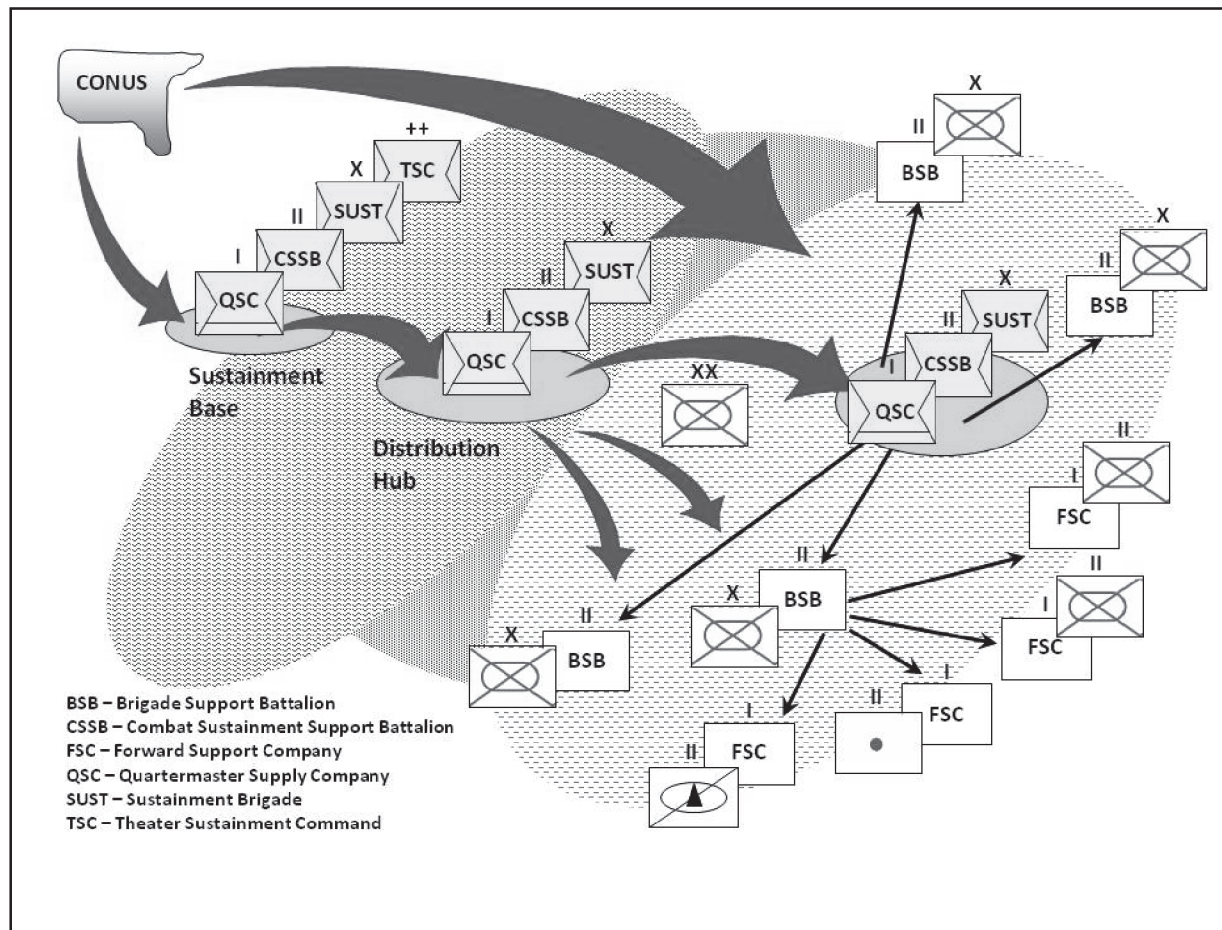


Figure 4-1. Distribution of general supplies

GENERAL SUPPLY AUTOMATION

4-3. Global Combat Support System-Army (GCSS-Army) is the principal and comprehensive logistics automation enabler for the Army. The GCSS-Army Enterprise Resource Planning solution provides a single system with a single data base for anticipating, allocating and synchronizing the flow of supplies in support of combatant commanders. It integrates enterprise information and provides all echelons access to critical logistics information used to support distribution and materiel management that may affect the outcome of combat operations, combat power generation and planning for future operations. GCSS-Army provides essential operational sustainment capabilities to staffs and commanders at all levels in areas of materiel management, maintenance management, and property accountability within an enterprise environment. It will integrate and replace the functions of existing Army systems.

4-4. Property Book Unit Supply-Enhanced accomplishes the functions of property accountability required by Army Regulations 710-2 and 735-5 and Department of the Army Pamphlet (DA Pam) 710-2-1. Property Book Unit Supply-Enhanced processes sensitive but unclassified information in the system's high-level mode, which uses permission control to manage personal access data. The system is accessed through user identifications and passwords and operates over internet connections.

4-5. Property Book Unit Supply-Enhanced processes include: formal property accountability (to include sub-hand receipts and component listings); requests for supplies including an interactive catalog; document register maintenance; unit load management; financial capabilities; and asset visibility.

4-6. Property Book Unit Supply-Enhanced uses the Combat Service Support Automated Information System Interface to interface with supply support activities, the Standard Army Retail Supply System (SARSS), the standard Army maintenance system - enhanced, and the Federal Logistics Record. Property Book Unit Supply-Enhanced also provides property book related data to the logistics information warehouse.

4-7. SARSS provides stock control and supply management to the Army retail level. SARSS also provides supply-related data to the logistics information warehouse. SARSS supports the accountability, requisition, storage, issue, and management of supply classes II, III (P), IV, VII, and IX. SARSS supports split-based operations that provide supply management functions to all elements within a sustainment domain. SARSS is comprised of two subsystems: SARSS-1 and SARSS-2AC/B. SARSS-1 operates at the BSB and CSSB levels. SARSS-1 maintains accountable records and performs supply functions such as receipt, storage, and issue of supplies. Major functions executed in SARSS-1 include: processing of customer requests for issue, cancellation, or modification; replenishment; excess identification; inventory; and location survey. SARSS-2AC/B supports materiel management functions performed by the TSC and can also be found in ESCs and sustainment brigades. SARSS-2AC/B also maintains a custodial availability balance file that is updated by SARSS-1. This function provides the TSC with visibility of assets in all SARSS-1 activities throughout the theater. SARSS-2AC/B processes include: management support; financial adjustment; Department of Defense activity address code parameter maintenance; general system administration; and it supports Army war reserves, materiel rebuild programs, and major item acquisitions. SARSS-2AC/B capabilities also include non time-sensitive functions such as cataloging, document history, and demand history. SARSS interfaces with several systems for data transfer. It supports the exchange of information using local area networks, modems, wireless combat service support automated information system interface, and very small aperture terminal capabilities.

INVENTORY AND MATERIEL MANAGEMENT

4-8. The theater distribution system allows units to request, receive, store, maintain, distribute, retrograde, and control inventory and the flow of resources between the point of entry into the theater system and the destination within the theater. Materiel managers in the distribution management centers are responsible for managing inventory within theater and executing the priorities established by the geographic combatant commander. They are responsible for ensuring the distribution system is effective in supporting the geographic combatant commander.

4-9. Materiel management functions include warehousing, cataloging, requirements determination and validation, prioritization for procurement, distribution, redistribution of excess, and retrograding of materiel. The distribution management center executes materiel management functions centrally at the TSC/ESC thus reducing redundant materiel management layers and employing a theater-wide view of resources. It performs materiel management for all classes of supplies (less medical/class VIII materiel management which is provided by the applicable medical command) and maintenance management for those activities for which the TSC has control and responsibility. The sustainment brigade distribution management center does some materiel management as well.

PROPERTY ACCOUNTABILITY

4-10. Unless units are specifically authorized by the Secretary of the Army to operate under wartime policy, All property acquired by the Army from any source must be accounted for as prescribed by DA Pam 710-2-1. The accounting must be continuous from the time of acquisition until the ultimate consumption or disposal of the property. All Army property, except real property, is classified for property accounting purposes as expendable, non-expendable, or durable.

4-11. One of the most critical aspects of maintaining supply discipline is to assign responsibility for equipment down to the user level. By ensuring that property is individually assigned and 100% accounted for, commanders greatly enhance their command supply discipline programs. The principal tools used to assign property responsibility are property books, hand receipts, sub-hand receipts, temporary hand receipts, and equipment receipts.

4-12. Inventories are mandatory property accounting instruments used to assist commanders and supervisors in their duties of maintaining accurate accountability of property and sustaining supply discipline. The key inventories that commanders and supervisors must conduct in order to maintain supply discipline are: change of hand receipt holder or change of command; annual/cyclic; and sensitive items. Other required inventories are listed in DA Pam 710-2-1. Understanding the various inventory types and conducting them as required ensures that commanders and supervisors maintain high visibility and designation of responsibility for all items of their assigned property.

CLASSES II, III (PACKAGED) AND IV

4-13. Class II supplies include clothing and individual/unit equipment, tentage, tool sets, and administrative housekeeping supplies and equipment. Class III (Packaged) supplies include insulating and hydraulic oils, lubricants, fluids, compressed gases, chemical products and coolants. Class IV supplies include construction, fortification and barrier materials.

4-14. Distribution for general classes of supply II, III (Packaged), and IV is characterized by throughput of loads as far forward as the BSB. Supply distribution is conducted by the Quartermaster supply companies that are normally assigned to the sustainment brigade CSSBs at the operational and lower tactical levels. In some instances, the Quartermaster supply company may be assigned directly to an sustainment brigade headquarters. Coordination with Defense Logistics Agency activities is essential.

4-15. After supplies have been identified and configured for forward movement to the customer, the Quartermaster supply company coordinates through the appropriate support operations officer (SPO) for the most expeditious mode of transport. Priority of effort and coordination of the supply flow, maintenance and component repair activities, transportation, and distribution assets will be conducted by the distribution management center in the TSC or ESC and communicated to the sustainment brigade.

4-16. During unified land operations where units assume more static, base-centric positioning, demands for Class IV construction material can dramatically increase. This is usually the result of increases in Army and joint base improvements and support to local national infrastructure. This increase in demand can easily and quickly overwhelm the Class IV distribution management capability of sustainment organizations. Engineer units can also be unable to properly manage requisition, receipt, and storage of Class IV construction material. This situation is further exacerbated by frequent unit turnover and multiple duplicate requisitions for Class IV materiel often result. Sustainment commanders, SPOs, distribution management center chiefs, and their logistics management staffs at all levels must anticipate these surge demand requirements and plan ahead accordingly to better enable the smooth execution of Class IV construction material supply operations. Key considerations for each mission requirement should include: routine coordination with engineer units to anticipate requirements well in advance; pre-designation, establishment and maintenance of adequate storage facilities at all levels and locations; devotion of sufficient supply processing personnel to address regulatory requisition, receipt, accountability, storage and issue matters; and the tasking and employment of sufficient transportation and materiel handling equipment assets. As the tactical situation permits, all Class IV requisitions should be checked to ensure none are duplicated.

CLASS VI

4-17. Class VI supplies are personal demand items such as toiletry, hygiene and small recreational items. Class VI support in the theater and operational areas is a significant quality of life enhancer and a morale multiplier for deployed soldiers. Soldiers may deploy with a 30-day supply of health and comfort items, or the commander may request a 30-day supply of health and comfort packages for inclusion in the unit basic load, which comes out of unit funds. After the first 30 days, health and comfort packages are centrally funded and provided at 30-day intervals through Class I channels at the request of the unit commander and until Army and Air Force Exchange Service support can be established. Tactical field exchanges manned by military manpower and operated through Army and Air Force Exchange Service Imprest Fund Activity provide Class VI supply support beyond the health and comfort packs. As the theater becomes more stable, and at the discretion of the commander, Army and Air Force Exchange Service personnel may provide operations as far forward as the brigade level. In more secure areas and during operations dominated by stability and Defense Support of Civil Authorities, The Army and Air Force Exchange Service may

establish a direct operation exchange - tactical to support deployed Soldiers. The level of Army and Air Force Exchange Service support to be provided is also contingent upon the duration and level of a given operation. Where internet access is available, soldiers can order items directly from the Army and Air Force Exchange Service web site and have these items delivered through the mail system.

CLASS VII

4-18. Class VII supplies include major end items such as trucks, tanks, generators, helicopters, and weapons. Due to their high dollar value and critical importance to combat readiness, Class VII major end items are intensely managed and controlled through command channels. They are distributed from the strategic level, an intermediate staging base, or forward operating base, through the Quartermaster supply company in the operational level sustainment brigade to the BSB distribution company or directly to the requesting unit when conditions allow. See FM 4-40 for detailed information on class VII supply operations and their inherent critical property accountability issues. Depending on the length of operation, a Army field support brigade may need to set up battle loss/battle damage replacement operations, or redistribution property assistance team yards, to ensure freedom of action for the maneuver force. Should operations proceed to Phase IV level, redistribution property assistance team yards may be established at strategic locations to facilitate reception, staging, and integration of units conducting relief in place/transfer of authority missions to support the continued U.S./allied presence in the area of operations.

CLASS IX

4-19. Class IX supplies include individual repair parts and major assemblies such as engines, transmissions and final drives which are required to maintain unit equipment and operational readiness. Class IX supplies are stocked in the Quartermaster supply company's consolidated supply support activities. Coordination with Defense Logistics Agency activities is essential. The Quartermaster supply company is normally co-located with the support maintenance companies attached to a CSSB to facilitate repair and return items to the supply system. The Quartermaster supply company packages Class IX items for distribution to supply support activities. When feasible, Class IX items coming from the strategic level may be throughput to end users.

4-20. The BSB distribution company's supply platoon receives all supplies coming into the brigade to include Class IX repair parts. It stores and issues these supplies to the forward support company maintenance platoon and field maintenance teams during replenishment operations. As with general supplies, the supply platoon headquarters provides the materiel control/accounting capability. The platoon headquarters communicates class IX requirements through the corps/theater automatic data processing service center.

FIXED BASE SUPPLY SUPPORT ACTIVITIES

4-21. Fixed base SSAs refer to continental United States, outside the continental United States or operational theater facilities that are located in and operate out of permanent or semi-permanent facilities to support the sustainment effort for the operational force.

DEPLOYABLE SUPPLY SUPPORT ACTIVITIES

4-22. The Quartermaster supply company, as the deployable SSA, provides for the receipt, storage, and issue of Classes II, III (P), IV, VII, and IX. The company packages and repackages supplies for distribution as required, to include redistribution within theater and retrograde requirements. It is the center-post of the distribution hub at the numbered Army level, receiving all stocks as they enter the theater that cannot be readily throughput to a unit destination. The Quartermaster supply company area support platoons at the operational level configure pure pallet packages to satisfy unit requests or assemble support packages to replenish supply companies at lower tactical levels. See DA Pam 710-2-2 for additional information on SSA operations.

CONFIGURED LOADS

4-23. The Quartermaster supply company area support platoons build customized configured loads, combining pre-packaged loads received from designated distributors. These loads will be further combined with any required bulk supplies. Combined packages received from the strategic level will also be packaged for issue and forward movement to meet unit requests. These loads are throughput as far forward as feasible.

RETROGRADE OPERATIONS

4-24. Retrograde is the timely return of serviceable and unserviceable assets back into the distribution system. Excess supplies may be redistributed to other units to satisfy user requirements. For unserviceable items, the intent is to ensure the return of reparable items for maintenance and reintroduction into the supply base and the proper disposal of unserviceable, uneconomically reparable items. Unserviceable, uneconomically reparable items, sometimes referred to as salvage, will be pushed back to the theater sustainment base for proper disposition. Salvage items are normally placed into supply channels at the time they are classified as unserviceable or uneconomically reparable. Based on theater policy and instructions from the life cycle management command, salvage items are evacuated through the system, destroyed, or demilitarized. Once the items are considered unusable or not required by the numbered Army, they are reported to the Defense Logistics Agency Disposition Services for processing. Mature theaters will normally have a Defense Logistics Agency disposition office located in the theater sustainment base.

4-25. Retrograde items (predominantly class VII and class IX items) are collected and packaged with like items by the BSB distribution company. Once disposition instructions are received, items are transported to the appropriate source of repair or salvage point. Serviceable items or subcomponents are returned to Army stocks. The Quartermaster supply company packaging and crating capabilities may be utilized to facilitate retrograde of some items from the BCT. The Quartermaster supply company handles the retrograde flow of repair parts from the combat repair teams to reintroduce unserviceable items into the system for evacuation from theater. When repaired by the support maintenance company, serviceable items are reintroduced into the supply system by the Quartermaster supply company for redistribution.

4-26. General Department of Defense disposal guidance is to consume or transfer Classes II, III (P), IV and VI in theater when feasible. Most Class III (P) items will require special handling due to their environmentally hazardous nature. Certain items will require demilitarization actions before their ultimate disposal. Class VII and IX materiel will involve redistribution decisions from life cycle management commands item managers and retrograde to continental United States may be required in many cases. See DOD 4160.21-M, *Defense Materiel Disposition Manual*, and DOD 4160.28-M, Volumes 1-3, *Defense Demilitarization Manual*, for additional information on disposal operations.

4-27. The redistribution property assistance team is an ad hoc Army Materiel Command organization formed when Class VII retrograde requirements exceed a supporting sustainment commands' supply support activity capabilities. The redistribution property assistance team mission is to manage theater provided equipment and other Class VII property, including its distribution, redistribution, and retrograde, as determined by the senior sustainment commander and as coordinated with the Army Sustainment Command. The requirement for the formation of a redistribution property assistance team is normally triggered by changes to operational mission requirements that necessitate significant reductions or redistribution of theater provided equipment and/or organic unit equipment. Redistribution property assistance teams are formed and called forward upon the request of the senior sustainment commander and are coordinated through the supporting Army field support brigade to the Army Sustainment Command. There is no fixed redistribution property assistance team size or structure. Actual redistribution property assistance team composition and required skill sets will be determined based upon the situation and mission. The redistribution property assistance team, once formed, is attached to the supporting Army field support brigade and is normally co-located with the senior sustainment command's centralized receiving and shipping point. The redistribution property assistance team is dissolved when mission analysis of the theater size, theater provided equipment mission, and other factors indicate that the redistribution property assistance team is no longer required, or it is determined that the theater provided equipment mission can

be managed within the TSC force structure or capabilities. See ATP 4-91, *Army Field Support Brigade*, for additional information.

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Chapter 5

Field Services Operations

This chapter addresses only the shower and laundry field service functional operations within the Army. The other field services functions are addressed in separate manuals due to their complex natures. They are aerial delivery, including parachute packing, air item maintenance, and rigging of supplies and equipment for aerial delivery; field feeding; water purification; mortuary affairs operations including the recovery, identification, and processing of human remains; and Force Provider base camp sustainment.

FIELD SERVICES CONCEPT OF SUPPORT

5-1. The shower and laundry capabilities are resident within the Quartermaster field services company, which contains six organic shower and laundry teams. These teams are provided from the SBs, normally through the CSSBs, with projection as far forward as possible, and to BCT level if required. The mission is to provide Soldiers a minimum of two showers and 15 pounds of “wash and return” laundered clothing per week. Refer to appendix B of this techniques manual for estimated clothing item weight. Each shower and laundry team can provide support for 500 personnel per day and consists of one shower unit, and one Laundry Advanced System. The laundry unit operates 20 hours per day and the shower unit operates 20 hours per day. Two hours per shift are allocated for equipment maintenance. Personnel augmentation may be required to maintain this operational pace or multiple shower sites. This augmentation is for basic manual labor and assistance with customer flow through the sites. Augmentation does not require additional 92S qualified soldiers. See figure 5-1 on page 5-2 for a sample field layout of a consolidated shower and laundry team operation.

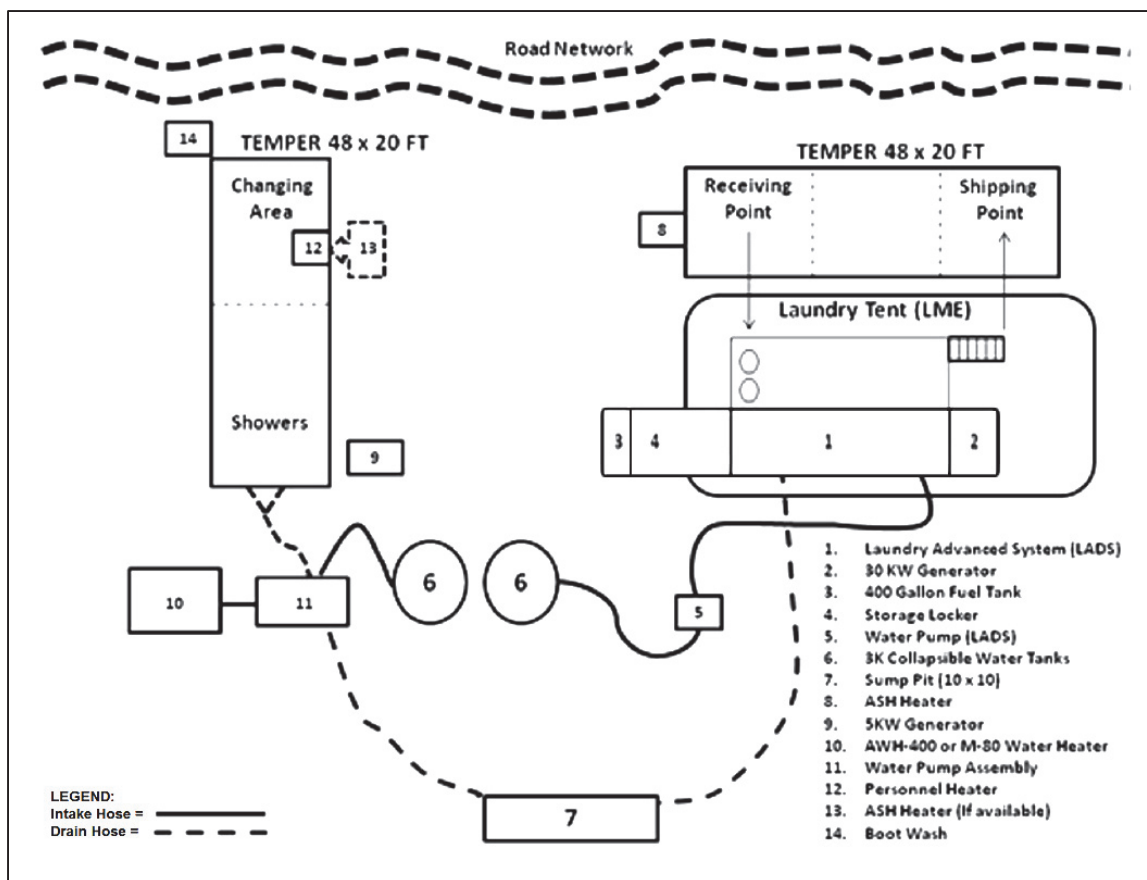


Figure 5-1. Sample field layout - shower and laundry team operation

PERSONNEL RESPONSIBILITIES

5-2. Support operations officers at all levels are the commander's advisors and central coordinators for field services support. The SPO at the TSC/ESC and SBs advise the commander on shower and laundry operations for echelons above brigade, keeping the command informed on the shower and laundry capabilities to support units on an area basis. The SPO at the BSB level advises the commander on shower and laundry support missions available to the BCT.

5-3. Logistics support coordinators at the brigade and battalion levels are the chief planners for shower and laundry operations. They operate in the support operations sections and normally work directly for the SPO. They plan shower and laundry support for the theater based on command guidance. Shower and laundry support is based on the theater requirement to sustain the fighting force. Clear guidance must be obtained from the command prior to planning shower and laundry support for a theater operation.

5-4. Quartermaster field services, composite supply company, and forward support company commanders and platoon leaders are responsible for coordinating the shower and laundry mission at brigade and battalion levels. They keep supporting and supported units' commands advised on ongoing operations and adjust support as mission requirements evolve. The primary responsibility is to make an accurate determination of the support requirement, assessment of capability, and communication of support gaps to but the supported and supporting headquarters.

5-5. Senior shower and laundry non-commissioned officers serve as the enlisted advisors to the command on shower and laundry operations. They are the key links to effective shower and laundry support operations. They work closely with commanders and the SPO logistics coordination officers to plan, coordinate and carry out shower and laundry support to the units on the ground. They ensure that required

shower and laundry personnel and equipment are available and operating properly and keep the command informed of operational status and requirements.

5-6. Shower and laundry platoon sergeant duties include:

- Supervising and monitoring shower and laundry operations
- Keeping the chain of command advised on operations
- Selecting field sites for platoon headquarters and operations
- Developing standard operating procedures for the platoon
- Developing training schedules and monitoring training
- Assisting in preparing the platoon status report
- Coordinating scheduling requirements with supported units
- Inspecting field operating sites
- Consolidating and forwarding administrative and supply reports and requirements
- Ensuring that all personnel are properly fed and billeted
- Assuming duties as platoon leader when required
- Supervising equipment maintenance, environmental, and security requirements

5-7. Shower and laundry section/team chief duties include:

- Providing input to platoon standard operating procedures on all shower and laundry functions
- Participating in selection of operations sites
- Supervising the layout and setup of all shower and laundry operations sites
- Ensuring environmental stewardship standards and requirements are met
- Conducting routine operational inspections of all shower and laundry functions
- Reporting to platoon leadership on status of personnel and operations
- Enforcing safety and environmental stewardship requirements
- Developing and distributing schedules for work personnel
- Keeping the shower and laundry platoon leader/sergeant informed on overall operational status
- Preparing and submitting required operational reports and supply requests
- Inspecting operational equipment and supervising operator maintenance
- Conducting unit and individual training as required

5-8. Shower non-commissioned officer duties include:

- Providing input to standard operating procedures on shower matters
- Assisting in shower operations site selection
- Supervising the layout and setup of shower sites
- Enforcing safety and environmental stewardship requirements
- Developing and distributing schedules for shower work personnel
- Developing and distributing schedules for customer personnel male/female usage times
- Keeping the shower and laundry section /team chief informed on shower operational status
- Preparing and submitting required operational reports and supply requests
- Coordinating with supported units on shower requirements
- Coordinating with preventive medicine personnel for water testing
- Inspecting operational equipment and supervising operator maintenance.
- Conducting unit and individual training as required

5-9. Laundry non-commissioned officer duties include:

- Providing input to standard operating procedures on laundry matters
- Assisting in laundry operations site selection
- Supervising the layout and setup of laundry sites
- Enforcing safety and environmental stewardship requirements
- Developing and distributing schedules for laundry work personnel

- Keeping the shower and laundry section /team chief informed on laundry operational status
- Preparing and submitting required operational reports and supply requests
- Coordinating with supported units on laundry requirements
- Inspecting operational equipment and supervising operator maintenance.
- Conducting unit and individual training as required
- Ensuring laundered items are returned to appropriate personnel and/or organization(s) within 24 hours

5-10. Shower and laundry specialist duties include:

- Performing shower and laundry and operations tasks to standard under non-commissioned officer supervision
- Operating section equipment and performing operator maintenance as required
- Submitting operational reports as required

SHOWER OPERATIONS

5-11. Each shower and laundry team utilizes the twelve-head shower unit for shower operations. This unit provides warm showers for a maximum of 500 Soldiers per day. Each shower section is capable of operating 20 hours per day, providing shower service for approximately 3,500 Soldiers per week. The shower element may be set up at a fixed facility site or a tactical field location. All teams are capable of deploying independently and may be required to deploy to provide services to troops in forward areas. A planning factor of 12,000 gallons of water per day is required for normal operations. An approved central drainage system to collect the contaminated grey water must be coordinated through command channels.

5-12. Supported units rotate through the shower site on a schedule, which is normally based on unit availability. Supported units provide their own security for their weapons and valuables. Female Soldiers are scheduled separately from male Soldiers. If a routine unit schedule is not feasible, a general schedule is implemented to accommodate separate times for males and females. Using unit Soldiers are responsible for furnishing all of their personal hygiene items unless sundry packs are provided by the command. Traffic flow runs from the changing area to the shower area to the changing area. Seven minutes are allocated per individual shower.

5-13. Shower operations personnel maintain a log book to account for the number of Soldiers utilizing each shower facility. The number of Soldiers supported and water and fuel usage data are reported daily to higher headquarters. See figure 5-2 on page 5-5 for a sample field layout of a stand-alone shower operation.

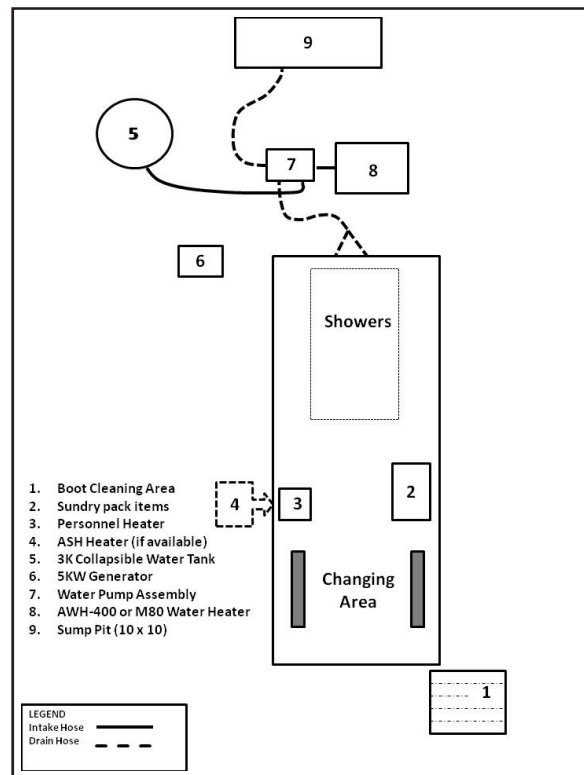


Figure 5-2. Sample field layout – shower operation

NUCLEAR RADIOACTIVE FALLOUT DECONTAMINATION

5-14. Showers may be required for soldier radiation decontamination if commanders determine that personnel have become contaminated with radioactive fallout. Showers will not be used for chemical or biological decontamination. When the company has been tasked to provide shower support for decontamination must follow these techniques to provide effective and safe operations.

SET UP DECONTAMINATION SHOWER OPERATIONS

5-15. Setup of a shower area for contaminated personnel effected by radiation fallout will be located in an area outside the normal shower section's/team's operational area. The S3 of battalion to which the company providing shower support is attached or assigned will assign the shower decontamination location. At the same time, the S3 will coordinate for medical personnel assistance and with the nearest chemical support element. Chemical personnel, using radiac meters, will monitor radiation levels at the shower decontamination site and advise on disposal of contaminated clothing, equipment, and textiles. medical personnel will carry out required medical treatment care. Prior planning for such an occurrence as this should be set up in the company standing operating procedures. The following decontamination procedures and actions should be started by shower team personnel.

5-16. Shower personnel wear appropriate chemical protective equipment when conducting decontamination showers or handling contaminated clothing or equipment. Standard production reports are used to identify supported units and record the number of personnel processed through the shower decontamination site. Shower personnel will destroy washing soap and towels used in shower operations. The most common ways to dispose of heavily contaminated items is by burial. However, units should coordinate with a chemical support element for advice on proper disposal. A chemical decontamination element will normally be in the area assisting in monitoring radiation levels and may be tasked to assist in the disposal operation.

DISPOSAL OF CONTAMINATED SHOWER WATER

5-17. Water used for shower decontamination contains radioactive matter. This water must not be allowed to drain into any fresh water source. To dispose of this contaminated wastewater, a drainage pit or interlocking drainage pits should be constructed by using engineer and chemical support personnel.

5-18. The location of the wastewater site must be reported to higher headquarters and the site must be clearly marked with the appropriate nuclear markers.

5-19. Decontamination of shower equipment will be processed by the decontamination element advising and assisting the shower element, as authorized through the chain of command.

LAUNDRY OPERATIONS

5-20. In order to implement the individual “wash and return” policy, the following laundry item control procedures are necessary. As a precautionary loss prevention measure, each soldier should routinely mark individual laundry items with the last four digits of their social security number on collars or waistbands using a permanent marker. Laundry sections may be employed as separate operations performing routine operations support, or they may be employed in multiples to support large requirements such as those generated at field hospitals.

5-21. DA Form 2886 (Laundry List for Military Personnel) is used for processing individual laundry. The form is made up of three copies separated by carbon paper.

- The first copy is the bundle copy. The customer Soldier submits laundry with this copy filled out. The heading is completed, the quantity of each laundry item is entered, and the form is submitted to shower and laundry personnel along with the laundry bag. Any items requiring repair and the quantities of all items will be identified as such by a note at the end of the item description area.
- The second copy is used only when outer garments, such as fleece jackets, are processed at the laundry. If the Soldier does not require this copy, he removes it. Note that this second copy is normally not utilized in a field environment.
- The third copy, the patron's copy, is retained as a receipt by the customer Soldier until his clean laundry is returned. See figure 5-3 on page 5-7 for a sample field layout of a stand-alone laundry operation.

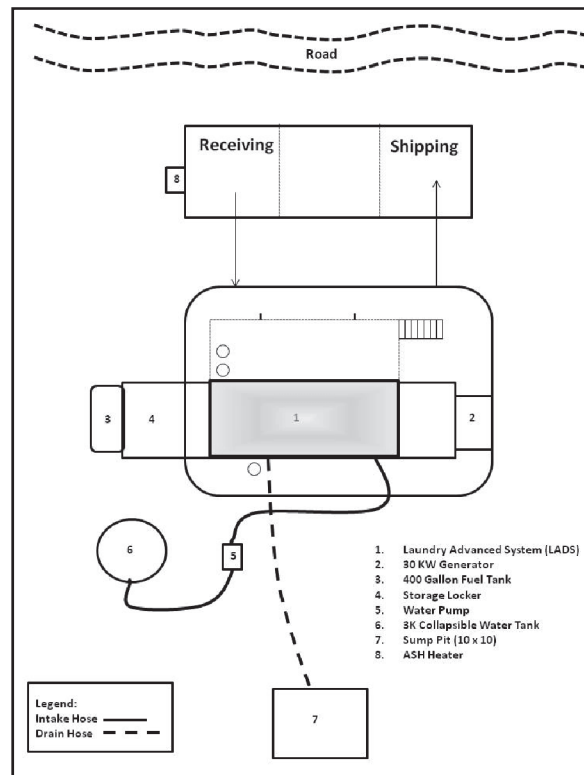


Figure 5-3. Sample field layout – laundry operation

5-22. Checking and marking by shower and laundry personnel.

- **Checking.** As customer Soldier laundry bags arrive in the receiving area, a shower and laundry team member empties one laundry bag at a time onto a table. Each DA Form 2886 is checked for accuracy against the laundry items submitted. Incorrect quantities are circled with a red pencil and the correct quantity is entered beside it. Correct entries are annotated with a red pencil check mark in the “IN” column. The checker’s initials are then entered in the “CHECKER” block at the bottom of the form.
- **Marking.** All items of each customer Soldier’s laundry are placed into separate numbered mesh bags. In the “BUNDLE NUMBER” block of each DA Form 2886, the mesh bag number is entered by a shower and laundry team member. All mesh bag numbers being used in each laundry batch are recorded in the DA Form 2886 “STATEMENT” block.

5-23. After the laundry is washed and dried it is moved to the shipping area for out-processing and pickup by the individual Soldier or a designated unit representative.

FIELD SITE SELECTION AND LAYOUT CONSIDERATIONS

5-24. Shower and laundry team field site selection considerations include:

- Quartermaster field services company and shower and laundry team assigned support missions are the primary factors involved in selecting field site locations.
- Mission support sites should be located in central locations, as close as possible to customer units.
- Locations should provide for ample supplies of clean water from natural sources, Army water units, or local procurement sources.
- Fuel sources, whether Army provided or locally procured, must be sufficient to sustain all support equipment for required mission periods.
- Support sites must provide adequate drainage, preferably on firm, gently rolling terrain.

- Adequate road networks must be available to support the missions and customer vehicle traffic.
- If fixed facilities/buildings are not available for mission use, natural cover and concealment should be employed and supplemented by artificial camouflage techniques when required.
- Laundry sites should employ separate receiving and shipping areas to prevent crowding and the potential for the mixing of incoming soiled and outgoing clean laundry.
- The shower and laundry non-commissioned officers must coordinate the location of their mission sites to best accommodate the overall shower and laundry mission and customer traffic flow.
- The shower and laundry non-commissioned officers must consider supplemental items required for shower and laundry operations. These may be equipment items such as wash basins, clothes lines, water cans, buckets or similar items.

5-25. Containment of grey water must be conducted for shower and laundry operations if the tactical situation permits. A standard technique is to dig a 10x10 sump pit at least 30 feet from the shower and laundry area for containment waste water/gray water. It should be large enough to handle peak highs and lows. If water has to be hauled away for disposal, it may be pumped into a 3,000-gallon collapsible, water tank for temporary storage. Ensure to mark water tank for "Grey Water or Waste Water". Once water tank is used for grey water/waste water it may never be used for source water/potable water again. Disposal coordination should be established for shower and laundry operations through the battalion operations S-3 office.

PRODUCTION REPORTS

5-24. Each shower and laundry team element prepares daily production reports. The format of the report is determined by the command and may vary. The data recorded on a production record may include:

- Frequency of operation; daily, weekly, or monthly.
- Identification of the company performing the service.
- Number of operating personnel.
- Hours of operation.
- The types and quantity of supplies used;
- The types of shower and laundry equipment used.
- Start and stop times for the equipment.
- Total number of showers performed or laundry loads processed. For laundry include bundles, pieces, and pounds.

Chapter 6

Environmental Stewardship Considerations

The Army no longer merely complies with the laws and regulations of environmental protection stewardship. It leads in environmental protection matters by setting goals and requirements for its leaders.

ENVIRONMENTAL STEWARDSHIP REQUIREMENTS

- 6-1. The goals of the Army's environmental protection stewardship program are:
- Compliance. Ensuring that all Army sites and operations attain and sustain 100 percent compliance with environmental laws and regulations in a climate of changing requirements. Army sites or operations could be subject to a notice of violation or a fine for not complying with following host nation, local, state, or federal environmental directives.
 - Prevention. Adopting and using integrated management approaches in all Army mission areas to prevent and reduce the volume and toxicity of all categories of environmental pollution.
 - Conservation. Conserving, protecting, and enhancing environmental and cultural resources entrusted to the Army's stewardship of future generations using all practical and available means consistent with the Army mission.
- 6-2. The requirements of the Army's environmental stewardship protection program are:
- Appraisal. Requiring an appraisal to determine potential environmental impacts.
 - Training. Requiring all key Army decision-makers and planners to attend National Environmental Policy Act training.
 - Restoration. Ensuring strict compliance with all spill and release reporting, timely resource requests and allocations, and clean-up requirements of all Army contaminated sites, as quickly as resources are made available to protect human health and the environment.
 - Environmental consideration. Ensuring that all available environmental and cultural resources are incorporated early in the mission decision-making and planning process.

ENVIRONMENTAL STEWARDSHIP RESPONSIBILITIES

6-3. The purpose of the environmental protection stewardship program is to standardize environmental protection compliance with federal, state, local, and host nation laws and regulations. Noncompliance with the program may result in: damage to the environment and to natural resources; endangerment of personnel health and safety; or severe civil or military penalties.

6-4. The Army vision includes the goal to be a national leader in environmental and natural resource stewardship for present and future generations. The definition of stewardship is to take proper care of property while also caring about the rights of others. Quartermaster supply and field services personnel embrace this role and endeavor to exemplify their care and concern for the environment throughout all facets of support operations. Operations must be planned to be carried out without harming the local environment. Sound environmental stewardship enables Quartermaster leaders to better take care of Soldiers and also conserve resources vital to combat readiness.

ENVIRONMENTAL OPERATIONS GUIDELINES

6-5. Each member of the Quartermaster supply and field services companies must comply with the environmental protection stewardship program and higher headquarters directives and policies.

6-6. The company commander's environmental responsibilities are to:

- Comply with all applicable environmental protection laws and regulations.
 - Know the National Environmental Policy Act, hazardous materials, hazardous waste, hazardous communications efforts, and spill contingencies.
 - Set up the unit's hazardous materials and/or hazardous waste management policy.
 - Ensure that personnel comply with the provisions, laws, and regulations outlined in the program, to include all applicable procedures for documentation, inspections and follow-ups.
 - Appoint and ensure that the environmental compliance officer, the hazardous materials and/or hazardous waste coordinator, and senior personnel have received appropriate training.
 - Ensure that all personnel who may be exposed to hazardous materials or hazardous waste when performing their duties receive training about potential hazards and relevant precautions within 90 days of assignment.
 - Ensure personnel receive annual refresher training about potential hazards and relevant precautions.
 - Commit subordinate leaders to environmental protection.
 - Continuously assess the influence of the mission on the environment.
- 6-7. The company executive officer's environmental responsibilities are to:
- Serve as the unit's environmental compliance officer.
 - Serve as the commander's eyes and ears for environmental protection matters.
 - Conduct periodic assessments of the unit's environmental protection program and the unit's level of compliance.
 - Act as liaison between the unit and the higher headquarters responsible for managing environmental protection compliance programs and provide information on training requirements and certifications needed by unit personnel.
 - Commit subordinate leaders to environmental protection.
 - Analyze the influence of the environment on the mission.
- 6-8. The maintenance sergeant's environmental responsibilities are to:
- Serve as the unit hazardous materials and/or / hazardous waste coordinator.
 - Serve as the unit spill coordinator.
 - Maintain accountability for all hazardous materials and hazardous waste.
 - Ensure that hazardous materials and hazardous waste are stored and disposed of properly.
 - Ensure that hazardous materials and hazardous waste spills are immediately contained and reported to the local fire department and to the environmental compliance officer.
- 6-9. The section leaders' and noncommissioned officers' environmental responsibilities are to:
- Protect the environment with daily sound decisions.
 - Ensure Soldiers are aware of Army environmental protection ethics matters.
 - Train Soldiers to be prudent environmental protection stewards.
 - Identify environmental risks associated with the tasks they and their Soldiers perform.
 - Plan and conduct environmental sustainability actions and training.
 - Protect the environment during training and other activities.
 - Continuously assess the influence of the mission on the environment.
 - Integrate environmental considerations into unit activities.
 - Train peers and Soldiers to identify the environmental effects of plans, actions, and mission.
 - Counsel Soldiers on the importance of protecting the environment and the results of not complying with environmental laws.
 - Incorporate environmental considerations into after action reviews .
 - Report spills of hazardous materials or hazardous waste immediately.
 - Provide ideas through the chain of command concerning the improvement of the unit's environmental protection program.
 - Support the Army recycling program.

6-10. All Soldiers' environmental responsibilities are to:

- Follow the unit's environmental protection stewardship policies, unit standing operating procedures, Army regulations, and environmental laws and regulations.
- Make environmentally sound decisions in day-to-day activities.
- Identify environmental risks in individual and team tasks.
- Report spills of hazardous materials or hazardous waste immediately.
- Provide ideas through the chain of command concerning the improvement of the unit's environmental protection program.
- Support the Army recycling program.

UNIT-LEVEL ENVIRONMENTAL TRAINING PROGRAM

6-11. An effective environmental protection stewardship training program allows personnel to carry out their responsibilities without undue damage to the environment or to personnel safety. It is the responsibility of the company commander to ensure that all personnel are trained on environmental hazards and the appropriate precautions for reducing or eliminating damage to the environment or risk to personnel.

6-12. All personnel should receive environmental awareness and protection training within 90 days of assignment and annually thereafter. All personnel will be trained to do their tasks in compliance with environmental laws and regulations. They must also respond properly to emergencies. All environmental protection and hazardous materials and/or hazardous waste training must be properly documented and kept on file in the operations/training office. Issues that should be addressed in the unit's environmental protection training program are:

- hazardous materials management.
- hazardous waste management.
- Hazardous communications.
- Pollution prevention.
- Hazardous waste minimization.
- Spill prevention and response.
- Recycling program.

HAZARDOUS MATERIALS/HAZARDOUS WASTE MANAGEMENT

6-13. The hazardous materials and/or hazardous waste coordinator will minimize hazardous material requests and maintain an up-to-date list of the entire unit's on hand hazardous materials, documents, and corresponding manuals. The unit inventory should be kept as small as possible to reduce potential for an incident. The least hazardous or potentially hazardous materials necessary to accomplish required tasks should be requested.

6-14. Storage of hazardous materials can create safety hazards and extended term storage may lead to environmental hazards. Hazardous materials will be stored in their original or approved containers. All containers must be clearly labeled with the appropriate material safety data sheet) information. All material safety data sheets will be kept in the appropriate hazard communications manuals. Hazardous materials will be used on a first-in first-out basis. Surplus quantities of hazardous materials, which would require an extended period of storage, will be turned in.

6-15. Petroleum, oils and lubricants will be stored with secondary containment measures. To stop spillage outside the immediate area, berms will be constructed that can hold one and one-half times the volume of the largest container stored in the area. All hazardous materials and hazardous waste must be stored so that they are protected from the elements and to maintain container integrity. All containers must be inspected for leaks and for incomplete, unreadable, or out-of-date labels weekly. Hazardous waste will be inspected weekly. Inspection results will be documented in a log and made accessible to federal, state, or local inspectors. Inspection logs will contain the following:

- Description of waste.
- Location.

- Quantity.
- Date accumulation started.
- End of 90-day period.
- Date removed to Defense Disposition Services or other agency.
- Remarks (condition of containers).
- Inspector's printed name, signature, and date of inspection.

6-16. Defense Disposition Services offices provide guidance for local turn in of hazardous waste and unused hazardous materials. All hazardous waste awaiting turn-in must be documented using an accumulation log. The log provides the date the container was opened, date and quantity of each addition to the container, name of the person adding hazardous waste to the container, the date the container was filled or closed, and the date of turn-in to Defense Disposition Services or other authorized agency. All turn-in documents for hazardous materials and hazardous waste and the accumulation logs for hazardous waste must be kept on file by the unit for two years.

6-17. Hazardous waste will be labeled, consolidated on non-permeable bermed hardstands, and located at least 50 feet from any buildings. Hazardous waste must be protected from the elements. Used greases, solvents, brake fluids, hydraulic fluid, and antifreeze are examples of substances that should be stored in separate containers. To safeguard against spills and prevent water seepage, keep hazardous waste containers closed except when depositing waste. If threaded caps on 55-gallon drums are missing, they must be replaced through unit maintenance channels.

6-18. To be accepted for turn-in, hazardous waste must be stored in safe, non-leaking, durable containers. Leaking containers must be over-packed in removable-head steel drums. Containers leaking liquid must be packed in absorbent material. Leaking 55-gallon drums may be over-packed in 85-gallon drums. The absorbent material must be able to soak up all of the liquid contents of the drum; therefore, 6 inches of absorbent must be placed under the bottom and on top of the interior container, with at least 2 inches placed along the sides. Leaking containers of non-liquid hazardous waste may not need to be over-packed with absorbent material. Many liquids, such as battery acid, cannot be packed in steel containers.

6-19. Immediate response to any spillage issues is crucial. A reportable spill is one that involves any amount of hazardous material which may harm the environment or personnel. The hazardous materials most commonly associated with field services operations are fuel, oil, hydraulic fluid, grease, solvent, gray water, and black water. While other potentially hazardous substances exist, these are the most prevalent and require effective management planning.

6-20. In areas where hazardous materials are used or stored or where hazardous waste is stored, appropriate supplies, equipment, and personal protective items must be readily available to allow immediate responses to spills or accidents. Refer to the material safety data sheet for a specific product or contact the hazardous waste and/or hazardous materials section of the Defense Disposition Services for guidance on the spill response items and equipment required to safely respond to a spill incident.

6-21. If a hazardous waste spill occurs, available personnel will immediately take the following steps:

- Ensure the safety of those in the area.
- Evacuate the area if necessary.
- Report the spill to supervisors. Sound the alarm or give a verbal warning. Have someone call the fire department if the spill is something that cannot be handled safely.
- Extinguish smoking materials and all other sources of ignition.
- Take personal precautions as detailed on the material safety data sheet for the spilled material.
- Stop the leak or flow, if possible (shut off valves, tip drums, plug holes).
- Contain the spill by using absorbent material. Make dams to prevent materials from spreading or entering water sources or storm drains.
- Clean up material with a non-sparking shovel or broom.
- Place the residue in a serviceable container with lid, marked "Hazardous Waste – (insert name of hazardous material)"
- Check with the environmental compliance officer for proper disposal.

- If the spill resulted from a leaky container, transfer the product to a serviceable container. Label the container as follows: for fuel, oil, or hydraulic fluid spills label the container “Petroleum, oils, and lubricants Spill Residue.”; for flammable liquid spills, including solvents, paints, paint thinners, and alcohol, label the container “(name of liquid) Spill Residue–FLAMMABLE.”; for acid spills, label the container “(name of acid) Spill Residue ACID”
- Store the container in the hazardous waste area while awaiting turn-in.
- Turn-in to Defense Disposition Services or other authorized agency.
- A written report must be generated to describe the details of the incident, corrective actions taken, and measures instituted to prevent recurrence.

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Chapter 7

Safety and Security

This chapter discusses safety and security matters and includes coverage of the following topics: fire, toxic and lifting hazards; chemical, biological, radiological, and nuclear considerations; security and protection; risk assessment; antiterrorism measures; and information protection.

FIRE HAZARDS

7-1. Fire hazards may cause any flammable materials to ignite in any number of ways in general supply SSA warehouses, outdoor storage areas or field services operational areas. Most often, fires start in local vegetation or accumulated waste materials, wastepaper, scrap lumber, dunnage, broken pallets, or boxes. Root causes of fires may include the following: improper storage or ventilation of hazardous or combustible materials; use of faulty or unapproved lighting, heating or other electrical equipment; use of defective materials handling equipment or other vehicles; unauthorized use of spark-producing tools; improper electrical grounding or lightning protection techniques; failure to provide adequate space separation, barricades, or firebreaks.

7-2. Fire prevention awareness must remain a top priority for all general supply and field services personnel, beginning with unit leaders, running down through all levels of supervisors, and including all functional level operational personnel.

TOXIC HAZARDS

7-3. General supply and field services personnel routinely handle hazardous materials and generate toxic waste. Petroleum-based fuels are employed to power organic vehicles, materials handling equipment, tactical generators, and functional support equipment. Fuels pose personnel hazards in the form of contact, flammability, ingestion, and inhalation. Fuels must be handled with care at all times, with their storage areas clearly marked and designated as "no smoking" areas. These markings must also include the languages of the host nation where applicable. Proper grounding procedures must be employed on all fuel storage facilities and whenever transferring fuel from one container to another.

7-4. Fuels also present dangers in the form of potential carbon monoxide gas exposure. Expended fuel produces this gas, which if inhaled for an extended period of time may cause injury or death. Engine exhausts must be properly vented. Soldiers must not be permitted to work in unventilated areas where carbon monoxide gas may be present.

7-5. Wastewater generated from the operations of the shower and the laundry systems is considered gray water. Gray water contains detergents, bleaches, and other substances which could be hazardous to personnel as contact or ingestion threats. All precautions should be taken eliminate or reduce exposure to gray water. If Soldiers must work with components containing gray water, appropriate personnel protective equipment should be worn. If a person comes in contact with gray water, they must immediately and thoroughly flush the exposed area with soap and potable water.

LIFTING HAZARDS

7-6. The setup, operation, and dismantling of general supply and field services operations are labor intensive. Personnel are required to perform significant amounts of heavy lifting. Many equipment systems associated with these missions, such as water heaters and pumps, weigh in excess of 400 pounds and require a forklift or a minimum of a six-man lift to position. The erection of operational tents also requires extensive amounts of physical effort. Supervisors must ensure that all Soldiers employ proper lifting

techniques and body mechanics when setting up, operating, and dismantling operational systems. Soldiers must be tasked in teams suitable to the lifting requirements of each task. Forklifts, cranes and other materials handling equipment must be employed whenever possible to reduce the risk of injuries to operational personnel. Ground guides must always be used whenever materiel handling equipment is in operation to ensure safety during automated lifting and supply stock/operational equipment repositioning tasks.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR (CBRN) CONSIDERATIONS

7-7. When CBRN attacks occur, Soldiers may be required to operate in contaminated environments until they themselves are decontaminated or they are ordered out of the operational areas. To reduce these hazards, Soldiers must know what to do before, during and after a CBRN attack. See FMs 3-11.3 and 3-11.4 for information on the warning and reporting system and for guidance on protecting Soldiers and their unit from these attacks. General CBRN considerations include:

- Mission oriented protective posture concerns. The CBRN status of the operational area will greatly affect the support mission and mission oriented protective posture status will affect Soldier performance. Buildup of heat in protective equipment from work exertion may physically harm Soldiers. Work and rest cycles must be established to prevent Soldiers from overheating.
- Contamination precautions. Various CBRN agents will have different effects on unit equipment and supply stocks and those agents may impact unit support performance. Precautions must be taken at all times to prevent contamination of Soldiers, operating equipment and operational supplies.

SECURITY AND PROTECTION

7-8. Security measures must be taken by general supply and field services units to protect against enemy air and ground attacks, guerilla and sabotage actions, and ambushes. Maximum use of camouflage, cover, and concealment is required at all times. Small arms fire, when employed in volume, can be effective against enemy aircraft attacks. However, personnel must be adequately trained on both friendly and enemy aircraft recognition to guard against fratricide incidents. Unit tactical SOPS should outline battle drills to address likely threats.

7-9. Protection makes the most efficient use of the defensive capabilities of the unit and it aids in preventing interruptions in mission support. Unity of effort, economy of forces, and responsiveness are key principles. Unity of effort ensures that the protection of sustainment operations is a routine consideration in the development of the total battle plan. Economy of forces involves sustainment units' capabilities to adequately defend themselves until supporting combat units can be employed. Responsiveness demands rapid actions to address, analyze and defeat the threat. Reaction forces must be identified for employment in response to threats and Soldiers must be rotated through perimeter security sentry, reconnaissance, or security patrol roles, as necessary.

RISK ASSESSMENT

7-10. A risk assessment is a careful examination of hazards or threats that could cause harm to Soldiers or the mission. These are weighed against whether enough precautions have been taken to prevent or mitigate them, or whether additional measures should be implemented. The five basic steps of risk assessment are: identify the hazards; analyze the hazards and decide who or what might be harmed; evaluate the risk and decide on precautionary and mitigating measures; record findings and implement corrective measures; review and update the assessment often. The process should not be over-complicated. In many organizations, the risks are well known and the necessary control measures are easy to apply.

ANTITERRORISM MEASURES

7-11. Antiterrorism is the Army's defensive program to protect against terror activities. Antiterrorism consists of defensive measures used to reduce the vulnerability of individuals and property to terrorist acts, including limited response and containment by local military and civilian forces. Battalion and higher level organizations incorporate antiterrorism measures into all plans and operations. Staff responsibility for antiterrorism usually falls under the intelligence section unless otherwise designated by the commander. Typical antiterrorism measures include the following: conduct unit threat and vulnerability assessments; conduct training in antiterrorism awareness; establish special reaction teams and protective services; ensure that antiterrorism measures protect personnel, physical assets, and information, including high-risk personnel and designated critical assets; establish civil-military partnerships for weapons of mass destruction crises and consequence management; develop terrorist threat and incident response plans that include managing the protection condition system; and establish appropriate policies based on the threat and protection condition system.

INFORMATION PROTECTION

7-12. Information protection is active or passive measures that protect and defend sustainment information and logistics automation systems to ensure timely, accurate, and relevant friendly sustainment management. It denies enemies, adversaries, and others the opportunity to exploit friendly logistics information and systems for their own purposes. When pursuing their objectives, adversaries attempt to prevent commanders from exercising effective sustainment mission command and therefore often target key decision makers and their information systems.

7-13. Information systems are typically vulnerable along the following primary attack vectors:

- Unauthorized access.
- Malicious software.
- Physical destruction.
- Propaganda.

7-14. Protecting information is an enduring requirement that occurs in all environments. Information protection is accomplished with a full range of protective means. Passive information protection measures are those technical and nontechnical measures that are inherent to everyday operations and directly impact users. They are designed to: conceal information from, and deny information to, the threat; protect information from unauthorized modification; and protect information from unauthorized destruction. Measures include, but are not limited to, the implementation of access controls, application security, physical security, security education, communications security, and network security. Passive measures are readily standardized in unit policies and procedures.

7-15. Although carefully designated and implemented, passive protection measures reduce risk; they do not provide total protection. In order to enhance the Army's ability to safeguard information and information systems against increased threats, vulnerabilities, and attacks, protection in a dynamic network environment requires an active operational component at all echelons. Active processes consist of proactive measures that enable an organization to protect against, and counteract the dynamic nature of, a threat by using known tactics to detect friendly vulnerabilities before the adversary. Additionally, active processes enable a unit to react decisively during an incident and recover quickly after an incident.

7-16. External and internal information perimeter protection prevents unknown or unauthorized users or data from entering a network. External efforts include communications security, router filtering, access control lists, and security guards. Where necessary, units physically isolate or place barriers between protected and unprotected networks. Internal perimeter protection consists of firewalls and router filters to serve as barriers between echelons or functional communities.

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Appendix

Dry Weights of Standard Clothing Items

Table Appendix-1. Standard clothing weights

<i>Item</i>	<i>Wt lb</i>	<i>Item</i>	<i>Wt lb</i>
Bag, Duffle	2.33	Mitten Set, Artic	1.45
Blanket, Wool	4.00	Mitten, Shell, Cotton, White	.20
Cap, Combat,	.35	Muffler, Wool	.40
Woodland Camouflage Pattern			
Cap, Field, Cotton	.18	Parka, Man's	3.10
Cap, Field, Cotton, Wool Pile	.45	Parka, Woman's Wool Pile	2.48
Lining			
Coat, Combat,	1.65	Parka, Overwhite, Man's	1.50
Woodland Camouflage Pattern			
Coat, Lightweight	.97	Shirt, Man's, Wool, Olive green 108	1.60
Coat, Man's, Field	3.25	Shirt, Woman's, Winter, Cotton	.75
Coat, Utility	1.36	Shirt, Utility, Cotton	1.35
Drawers, Cotton, Short	.22	Socks, Man's or Woman's,	.20
Wool, Cushion Sole			
Drawers, Man's Winter	.88	Suspenders, Trousers	.25
Gloves, Insert, Wool	.14	Towel, Bath	.75
Handkerchief	.10	Trousers, Combat, Woodland	1.12
Camouflage Pattern			
Hood, Winter (Field Jacket)	.28	Trousers Lightweight	.92
Hood, Winter (Fur Ruff)	.85	Trousers, Man's, Cotton Jean,	.90
White			
Liner, Coat, Man's	2.20	Trousers, Man's, Cotton,	2.25

Table Appendix-1. Standard clothing weights, continued

<i>Item</i>	<i>Wt lb</i>	<i>Item</i>	<i>Wt lb</i>
Weather-Resistant Sateen			
Liner, Coat, Woman's	2.30	Trousers, Man's Outer	1.12
Liner, Parka, Man's	2.93	Trousers, Man's or Woman's,	1.75
Wool Serge (Cold-Wet)			
Liner, Trousers, Artic	2.20	Trousers, Utility, Cotton	1.39
Liner, Trousers, Field	1.70	Undershirt, Cotton, Short Sleeve	.30
(Cold-Dry)			
Mitten Inserts, Trigger	.21	Undershirt, Winter	.87

Glossary

SECTION I – ACRONYMS AND ABBREVIATIONS

ADP	Army doctrine publication
ADRP	Army doctrine reference publication
AR	Army regulation
ATP	Army techniques publication
BCT	brigade combat team
BSB	brigade support battalion
CBRN	chemical, biological, radiological, and nuclear
CSSB	combat sustainment support battalion
DA	Department of the Army
DA Pam	Department of the Army Pamphlet
DOD	Department of Defense
ESC	expeditionary sustainment command
FM	field manual
GCSS-Army	Global Combat Support System- Army
JP	joint publication
LOGCAP	Logistics Civil Augmentation Program
NSN	national stock number
SARSS	Standard Army Retail Supply System
SPO	support operations officer
SSA	supply support activity
TSC	theater sustainment command

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These documents must be available to intended users of this publication.

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Index

A
antiterrorism measures, 7-3
Army sustainment command, 2-1

B
brigade support battalion, 2-5

C
chemical, biological, radiological,
nuclear (CBRN) considerations,
7-2
Class IX, 4-5
Class VI, 4-4
Class VII, 4-5
Classes II, III (Packaged) and IV,
4-4
concept of support overview, 1-1
configured loads, 4-6

D
deployable supply support
activities, 4-5

E
environmental operations
guidelines, 6-2
environmental stewardship
requirements, 6-1
environmental stewardship
responsibilities, 6-1
executive agency and
proponency, 2-2
expeditionary sustainment
command, 2-4

F
field service organizations, 2-3

field services concept of support,
5-1
field services operations overview,
1-2
field site selection and layout
considerations, 5-7
fire hazards, 7-1
fixed base supply support
activities, 4-5

G
general supply automation, 4-2
general supply concept of support,
4-1
general supply distribution and
field services, 2-1
general supply operations
overview, 1-1
general supply organizations, 2-2

H
hazardous material/hazardous
waste management, 6-3

I
information protection, 7-3
inventory and materiel
management, 4-3

J
joint and multinational Support, 2-
2

L
laundry operations, 5-6
lifting hazards, 7-1

O
operational contract support, 3-1
operational energy, 1-2

P
personnel responsibilities, 5-2
production reports, 5-8
property accountability, 4-3

R
retrograde operations, 4-6
risk assessment, 7-2

S
safety and security, 7-1
security and force protection, 7-2
shower operations, 5-4
strategic partners, 2-1
sustainment brigade and combat
sustainment support battalion,
2-5

T
theater sustainment command, 2-
4
toxic hazards, 7-1

U
United States Army contracting
command, 2-2
unit-level environmental training
program, 6-3

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ATP 4-42 (FM 10-27/FM 42-414)
14 July 2014

By Order of the Secretary of the Army

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:

A handwritten signature in black ink, appearing to read "Gerald B. O'Keefe", with a stylized flourish at the end.

GERALD B. O'KEEFE
Administrative Assistant to the
Secretary of the Army
1418901

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