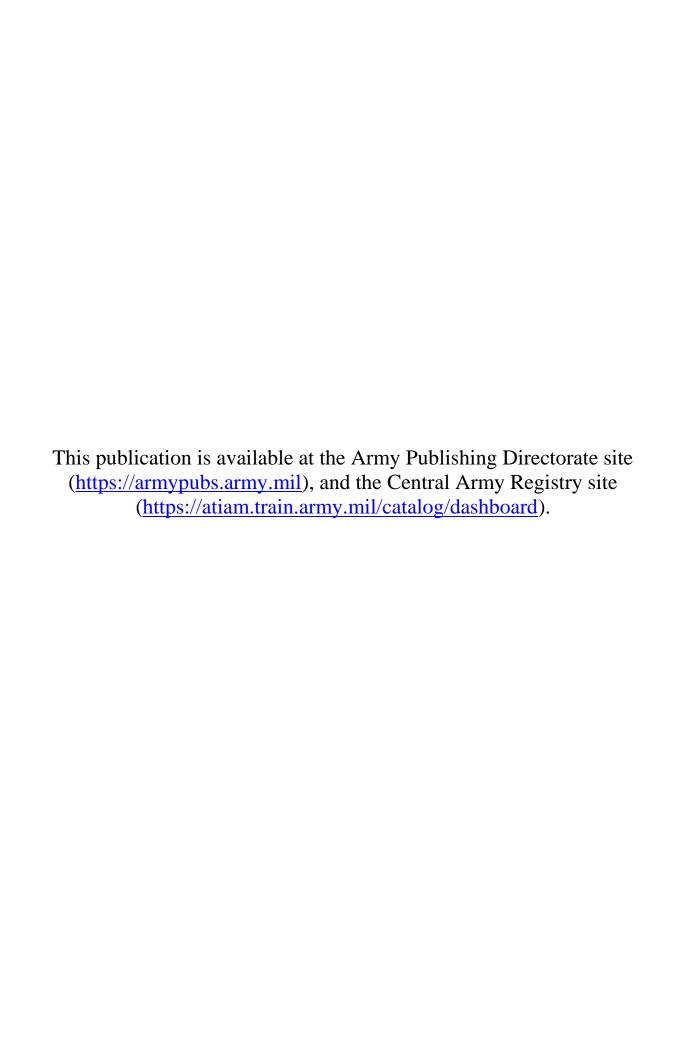
Materiel Management, Supply, and Field Services Operations

NOVEMBER 2020

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*This publication supersedes ATP 4-42 dated 14 July 2014.

Headquarters, Department of the Army



Materiel Management, Supply, and Field Services Operations

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Preface

ATP 4-42 provides supply personnel, logisticians, and leaders information on materiel management, distribution management, supply support, and field services support. It focuses on how staffs, supply units, and field services units support large-scale combat operations, incorporating themes from FM 3-0 and FM 4-0. It also addresses the Army Health System's medical logistics function specifically focusing on class VIII materiel management. This supply and services functions manual provides information on what Soldiers at the tactical, operational, and strategic levels need to know to make supply and field services support decisions. This manual describes the supply support process from an enterprise perspective, but it does not dwell on a single commodity or automated system. Of the field service functions it addresses only shower and laundry operations in detail as aerial delivery, field feeding, mortuary affairs, and water purification are covered in depth in separate Army techniques publications (ATPs). This publication addresses force health protection as it relates to preventive medicine and veterinary services support to class I materiel management, field hygiene, and sanitation as it relates to provision of field services. It also addresses the Army Health System's medical logistics function, to include a brief introduction to the medical units, with a focus on the class VIII supply support mission.

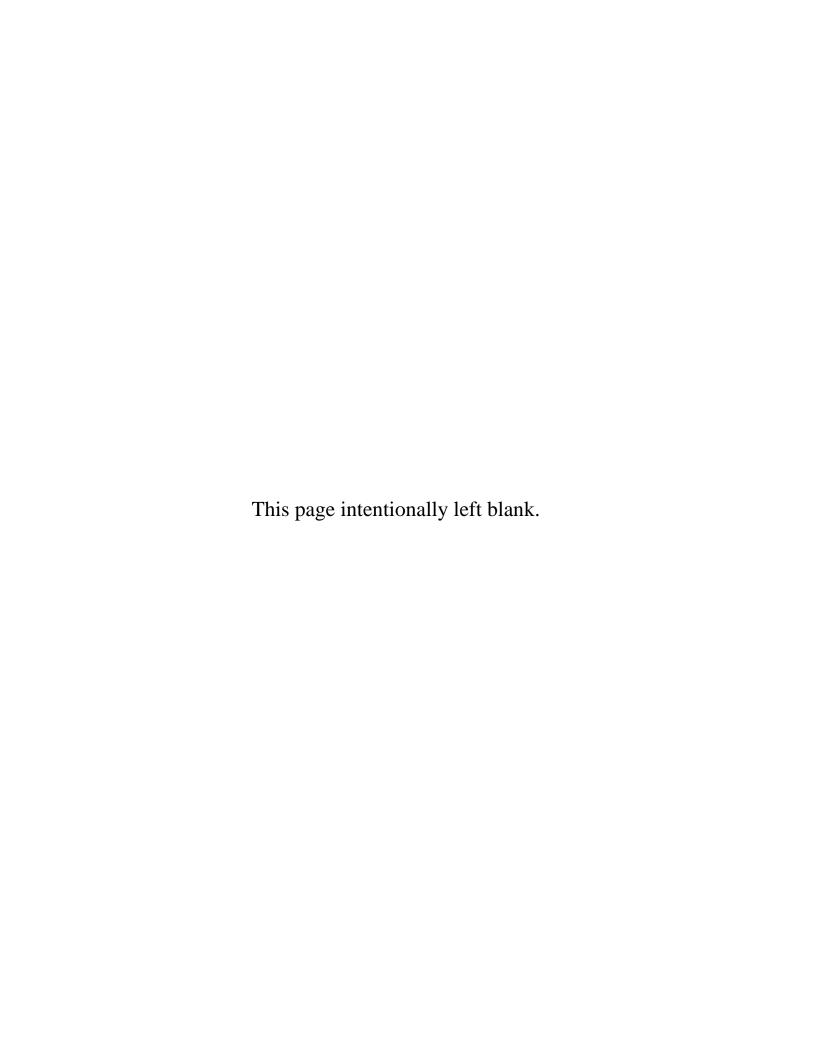
Trainers and educators throughout the Army will also use this publication. The principal audience for ATP 4-42 is all members of the profession of arms. Commanders and staffs of Army headquarters serving as joint task force or multinational headquarters should also refer to applicable joint or multinational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

Commanders, staffs, and subordinates ensure that their decisions and actions comply with applicable United States, international, and host-nation laws and regulations. Commanders at all echelons ensure that their Soldiers operate in accordance with the law of war and the rules of engagement. (See FM 6-27/MCTP 11-10C, *The Commander's Handbook On The Law Of Land Warfare*.)

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 Army 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 of ATP 4-42 is the United States Army Combined Arms Support Command. The preparing agency is the G-3/5/7 Doctrine Division, USACASCOM. Send comments and recommendations on a DA Form 2028, (*Recommended Changes to Publications and Blank Forms*) to Commander, United States Army Combined Arms Support Command, ATTN: ATCL-TDID (ATP 4-42), 2221 Adams Ave, Bldg 5020, Fort Lee, VA, 23801-1809; or submit an electronic DA Form 2028 by e-mail to: usarmy.lee.tradoc.mbx.leee-cascom-doctrine@mail.mil.



Introduction

This updated version of ATP 4-42 focuses on the Army's four strategic roles in support of the joint force. The updates reflect changes to sustainment doctrine due to the publication of FM 3-0 and FM 4-0. The major changes to this ATP involve adding a functional approach by describing the distribution management and materiel management process as it applies to all classes of supply. Providing supply support is similar to running a business, but with much higher stakes than financial profit. This updated version focuses on the business-like aspects of providing effective materiel and field services management.

Supply is everybody's responsibility because all personnel have stewardship for all Army equipment. Every unit has a unit supply function and nearly every Soldier is a hand receipt holder. ATP 4-42 provides supply personnel, logisticians, and leaders with information on supply support and field services functional principles. Supply support and field services consist of wide-ranging tasks that extend from determining requirements at the strategic level to delivering material to the user at the tactical level. References provided throughout this manual offer the reader applicable resources on the variety of topics addressed.

Materiel management involves identifying requirements, selecting supply sources, acquiring, scheduling deliveries, receiving, storing, and issuing all classes of supply. Field services units protect the force by providing the means for Soldier hygiene, reducing disease, and keeping Soldiers readiness and morale high. The field service functions are aerial delivery, field feeding, mortuary affairs, shower and laundry, and water purification. Support units should be capable of conducting continuous supply distribution and field services functions during combat operations.

Leaders and materiel managers should know the supply support process as it extends back from the battlefield in order to manage and mitigate choke points that could hamper delivering supplies to Soldiers. An enterprise approach assisted by information technology and an on-the-ground customer service presence provides visibility, accuracy, timeliness and availability to ensure the supply support process proceeds as smoothly as the situation allows. The Army adopted the enterprise approach to integrate supply support organizations and functions from the battlefield back to the suppliers, to include the commercial sector. Enterprise in this context refers to common operational picture. This manual describes the supply support process from an enterprise perspective.

ATP 4-42 provides detailed information on in-theater materiel and distribution management offering materiel managers information for planning, resourcing, and implementing actions to ensure all classes of supply are available at the point of need. It addresses materiel and distribution management from an operational approach. It describes the detailed integration of materiel and distribution management into the operations process.

The ATP provides information never previously covered in supply doctrine, such as, class VIII management, funds control, excess management, and reparables management. In the past, there was little need for supply personnel to know or understand how funds management affected providing for Soldiers. Now, requests for supplies and some turn-ins generate a financial transaction with an instant impact on the status of unit funds and budget availability. Leaders and materiel managers should know the financial terminology and processes because these influence their capability to provide internal and external supply support.

ATP 4-42 covers supply support at the strategic, operational and tactical level. This ATP addresses strategic level partners because strategic level personnel deploy, with their customers, at the operational and tactical levels. Knowing that customer service representatives are available and what they do is critical to the success of the supply support mission. This ATP also advises tactical supply support personnel to communicate with their customers.

From a supporting commander's perspective, ATP 4-42 provides information on the functions of supply support and field services to allow that commander to better understand how to execute support to the force. From a supported commander's perspective, identifies the types of support available in order to allow accurate planning.

ATP 4 42 contains three parts:

Part 1 provides a supply overview and defines the functions associated with each of the three components of distribution management process, organizational relationships, and the fundamentals of supply and supply operations.

Chapter 1 provides a general overview of supply support.

Chapter 2 describes the enterprise resource planning logistics information systems.

Chapter 3 discusses Army materiel management operations in terms of large-scale ground combat operations; supply and field services in the levels of warfare; and the roles and responsibilities of leaders and materiel managers.

Chapter 4 describes operations management planning as it relates to the distribution management process.

Chapter 5 describes the supply support functions in the distribution management terms used in chapter 1.

Part 2 provides a broad overview of field services, with the exception of shower and laundry. Shower and laundry are described in detail in part 3.

Chapter 6 briefly describes field services functions, planning considerations, and provides references that address these functions in detail.

Part 3 The focus of this section is on managing and planning shower and laundry operations to include personnel, equipment, reports, environmental impediments and viable solutions, and maintenance requirements in a deployed environment. Since Part 3 focuses on the shower and laundry field service it contains information from other parts of the manual because it is anticipated that the shower and laundry readers that use this section, will have a limited interest in the supply portion of the publication.

Chapter 7 provides an overview of the shower and laundry field service operations within the Army.

Chapter 8 discusses establishing a shower and laundry section in a developed and an undeveloped area.

Chapter 9 describes the actions required to conduct shower and laundry operations.

Appendix A provides a series of tables, by supply class, containing materiel management functions and their associated supply support tasks. Appendix A contains information condensed from other parts of the manual in order to be a stand alone ready reference for the reader.

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

PART ONE

Supply

The Army supply system is a network of supply, maintenance, transportation, and financial management organizations and staffs that acquires, delivers, and disposes materiel. Supply support involves materiel and distribution managers from the strategic to the tactical level working to maximize readiness while optimizing resources. Part 1 provides a supply overview and the fundamentals of supply, distribution, and materiel management.

Chapter 1

Supply Overview

Army supply support is critical to all operations. It is necessary to ensure personnel, equipment, weapon systems, and facilities are sustained and operational. Although the importance and priority of any one commodity varies by operation, all supplies are necessary for successful operations. Chapter 1 provides a general overview of the fundamentals of providing supply support for all classes of supply.

INTRODUCTION TO SUPPLY SUPPORT

1-1. Army supply support is a function of logistics. Logistics is one of the four elements of sustainment. Supply support operations include the basic functions of acquisition, receipt, storage, issue and retrograde of ten classes of supplies, also known as commodities. Materiel managers execute supply support by way of the Army distribution management process, which includes the materiel management, distribution integration, and transportation operations functions. The distribution management process is described throughout this ATP.

SUPPLY FUNDAMENTALS

- 1-2. Commanders determine the composition, frequency, and method of resupply to best support operations. Supply operations are time sensitive, preplanned pauses in the battle rhythm that allow combat forces to resupply. Supply operations are inseparable from tactical operations. The most brilliantly conceived and executed tactical plan will fail unless reinforced by a sound supply plan.
- 1-3. Supply personnel request, receive, issue, prepare and maintain detailed accounting records. A unit submits a request, which results in an obligation and eventual disbursement of unit funds for the required materiel. Unit leaders, materiel managers, and budget analysts supervise disbursements, cash, and credit card purchases.
- 1-4. Army health service support and force health protection depend upon specialized materiel and support services managed by medical logistics (MEDLOG) personnel. Medical logistics encompasses medical supply support, medical equipment maintenance and repair, optical fabrication and repair, blood storage and distribution, patient movement items, medical contracting, regulated medical waste, medical gases, and

medical facilities and infrastructure. This publication addresses the Army's medical services only to the extent that it clarifies the medical supply support process and the Army Health System (AHS) support to class I, management of class VIII, and to field services.

1-5. Routine resupply operations include regular resupply of items in classes I, III, V, VIII, and IX, and of any other items requested by units. Battalions plan routine resupply and it usually takes place at every opportunity. The logistics package (LOGPAC) contains company and battalion assets that transport supplies to the company. For example, a company supply sergeant assembles the LOGPAC in the brigade support area under the supervision of the headquarters and headquarters company commander or the battalion supply officer. Likewise, medical brigades plan routine resupply for field hospitals and other echelon above brigade medical formations. Class VIII resupply is usually integrated into LOGPACs provided cold chain storage requirements can be maintained. Figure 1-1 depicts a notional field site of forward support elements in a logistics resupply point.

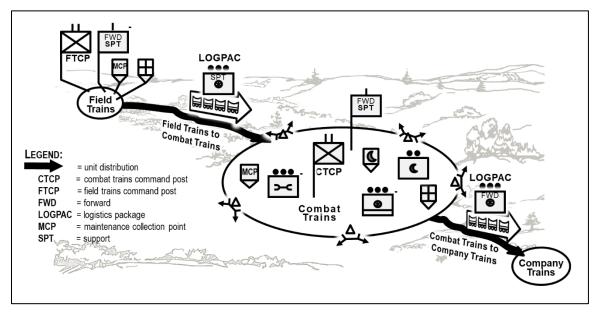


Figure 1-1. Resupply operations

- 1-6. Emergency resupply, usually involving class III (bulk), class V, and class VIII is executed when the platoon has such an urgent need for resupply that it cannot wait for the routine LOGPAC. For example, emergency resupply procedures start with immediate redistribution of ammunition in individual vehicles, followed by cross leveling ammunition within the platoon while awaiting ammunition to be brought forward. Cross-leveling ammunition refers to distributing equal amounts and kinds of ammunition throughout the platoon.
- 1-7. There are two standard methods of supply conducted in an operational environment: supply point distribution and unit distribution.
 - Supply point distribution requires the supported unit to move to a supply point to pick up supplies. The supply point issues materiel to the supported unit that transports their supplies back to the unit with organic transportation. Supply points include supply support activities (SSA) for all supply classes. A *supply support activity* is an activity assigned a Department of Defense activity address code and that has a supply support mission (JP 4-09).
 - When unit distribution is used, the supported unit receives supplies in its area. The logistics release point, established by the supported unit, may be any place on the ground where unit vehicles pick up supplies and then take them forward to their unit. See ATP 3-20.98, Scout Platoon, for information on how to establish unit distribution operations.
- 1-8. Throughput distribution bypasses one or more intermediate supply echelons in the supply system to avoid multiple handling. It leverages configured loads and containerization to deliver supplies directly to

units in forward areas. For example, engineer barrier materials may be shipped directly to the emplacing units, instead of their supporting sustainment units. Throughput is not automatic. It must be specified in appropriate plans and coordinated. For more information, see ATP 4-11, *Army Motor Transport Operations*.

- 1-9. Materiel managers push supplies to supported units or supported units pull supplies from the supply system.
 - Push supply flow. A process where supplies are pushed forward based on running estimates of the supported unit's consumption and anticipated requirements. The flow of supplies occurs without a request from the supported unit. Typically during the early stages of an operation, sustainment units, via unit distribution, push certain classes of supplies (I, III (bulk), VIII, and V) to subordinate sustainment units and to supported units. Commander priorities and other planning considerations dictate when and where supplies are pushed.
 - Pull supply flow. A process where the flow of supplies occurs after a request from the supported
 unit and based on the real consumption of the supported unit. As distribution capabilities expand,
 sustainment units implement the pull system where supported units and maintenance elements
 request supplies either manually or through automation.
- 1-10. Scheduled supplies are those for predicted requirements. Normally, scheduled supplies do not require a request for replenishment. Requirements are based on troop strength, equipment density, forecasts, and daily usage factors. Scheduled supplies are pushed to supported units based on planned distribution arrangements derived from the logistics status report (LOGSTAT). Subsistence, water, bulk fuel, and munitions are normally treated as scheduled supplies.
- 1-11. Demand supplies are those for which a unit submits a request. Items in supply classes II, III (packaged), IV, VII, VIII, and IX are typically demand supplies.
- 1-12. Command regulated supplies are those a commander has decided to closely control because of scarcity, high cost, or mission need. Commanders normally control supply classes II, III (bulk), IV, V, VII, and VIII. Only the commander who designated it for control can release regulated items for issue.
- 1-13. To sustain tactical operations for specific periods, all units, starting at the company level, determine their ammunition requirements and submit a required supply rate report to the next higher headquarters. The authorization and allocation of ammunition within an area of operations (AO) is determined by using the required supply rate and the controlled supply rate.
 - Controlled supply rate. The *controlled supply rate* is the rate of ammunition consumption that can be supported, considering availability, facilities, and transportation. It is expressed in rounds per unit, individual, or vehicle per day. (FM 4-30)
 - Required supply rate. The required supply rate is an estimated amount of ammunition needed to sustain tactical operations, without ammunition expenditure restrictions, over a specified time. The required supply rate is expressed as rounds per weapon per day, or as a bulk allotment per day or based on mission. (FM 4-30)
- 1-14. Aerial delivery is used for routine and urgent resupply to units in remote or forward locations where terrain limits access. Aerial delivery reduces the need for route clearance of ground lines of communications as it bypasses enemy activity. In order for aerial delivery to be effective, friendly forces must control airspace throughout the AO and enemy ground-based air defenses must be neutralized.
- 1-15. Refuel on the move is most often used to support extended moves to or from a tactical assembly area. When vehicles enter a refuel on the move site for refueling, they receive a predetermined amount of fuel (usually timed) and they move out to return to their convoy or formation.
- 1-16. Controlled exchange is the removal of serviceable components, assemblies, and subassemblies from unserviceable, uneconomically reparable equipment for reuse in restoring equipment to a serviceable condition. Controlled exchanges allow units to maintain combat readiness by repairing non-mission capable equipment with the use of serviceable parts from another non-mission capable vehicle. This process must be strictly controlled and documented or it becomes unauthorized cannibalization.
- 1-17. Consumable items are the expendable property that a unit needs to perform its mission. Consumable items, such as ammunition, fuel, cleaning and preserving materials, surgical dressings, drugs, medicines,

repair parts, building materials, and office supplies lose their separate identity in use. Expendable items require no formal accountability after issue from a stock record account. Shop stock, bench stock, authorized stockage lists, and unit supply lists contain consumable items. These items require proper use and safeguarding, but do not require formal accounting after issue to the user.

- 1-18. Nonexpendable property retains its original identity throughout its life cycle. Nonexpendable properties are material planning objects that are assigned a material planning objects number that includes the item's line item number (LIN). A LIN is a six-digit alphanumeric number assigned to a generic nomenclature to identify the line on which the generic nomenclature is listed. Standard LINs consist of one alpha character followed by five numeric characters. The material planning objects number remains with the equipment throughout its life cycle. Nonexpendable property requires formal property book and stock record accountability throughout its life cycle.
- 1-19. Durable property is an item of Army property that does not require property book accountability after issue from the stock record account. For example, hand tools, used over a relatively long period without being depleted or consumed, are typically controlled through hand receipts.

ARMY REGULATIONS AND DEPARTMENT OF THE ARMY PAMPHLETS

- 1-20. The employment of automation does not negate Army regulations (AR) governing supply support and Department of the Army (DA) pamphlets describing manual procedures. All personnel that are accountable and responsible for property should be familiar with the supply regulations because these ARs are the authoritative rules for managing the Army's materiel. Materiel management practitioners and information technology developers used the ARs and DA pamphlets as the foundation for the streamlined automated enterprise resource planning processes. The following list of publications contains materiel management information that applies until the Army revises the information or rescinds the publication.
 - AR 40-60, Army Medical Materiel Acquisition Policy.
 - AR 40-61, *Medical Logistics Policies*.
 - AR 710-1, Centralized Inventory Management of the Army Supply System.
 - AR 710-2, Supply Policy below the National Level.
 - DA Pamphlet 710-2-1, *Using Unit Supply System (Manual Procedures)*.
 - DA Pamphlet 710-2-2, Supply Support Activity Supply System: Manual Procedures.
 - DA Pamphlet 710-7, *Hazardous Material Management Program*.
 - AR 735-5; Property Accountability Policies.
 - DA Pamphlet 735-5, Financial Liability Officer's Guide.

SUPPLY CLASSES

1-21. The classes of supply divides materiel into ten major categories, within which to identify items to each particular class. This division into classes provides a common supply terminology; provides an improved management tool for logistics planning and operations; and enhances communications. There are similarities in all supply chains. However, each commodity possesses characteristics that are sufficiently distinctive that they require specially trained personnel. Each class of supply also contains subclasses that are grouped by the supply category material code. Sub-classifications within the specific classes of supply are based on specialized transportation requirements, specialized packaging requirements, storage and handling characteristics, commodity characteristics, intended usage, and chemical or radiological sensitivity hazards.

Class I

1-22. Class I supplies are consumed at an approximately uniform daily rate, irrespective of combat operations or terrain. Class I supplies consist of perishable and semi-perishable subsistence items. The category also includes rations that are packaged as individual or group meals, and gratuitous health and welfare items.

Class II, III (Packaged), and IV

- 1-23. Supply classes II, III (packaged), and IV represent a broad range of general supplies that normally have fewer demands than other supply classes. Nevertheless, they contribute significantly to mission accomplishment. Class II consists of common consumable items such as clothing, individual equipment, tentage, tool sets and kits, maps, administrative and housekeeping supplies, and chemical, biological, radiological, and nuclear (CBRN) protective equipment. Class III (packaged) consists of packaged petroleum, oils, and lubricants that can be handled in a manner similar to dry cargo. Class IV consists of fortification, barrier, and construction materials. Demand history and analysis of mission requirements are the most accurate tools for forecasting demand for these commodities.
- 1-24. Many of the class II, III (packaged), and IV items are used by other Services and the civilian sector, providing a broad base for acquisition and a capability to increase the production base. This flexibility allows the commodity commands to rely on readily available supply sources to satisfy normal and surge requirements. On the other hand, items, such as clothing and maps are unique to the military and perhaps to the Army. The management of these items is much different, and the maintenance of the production base is much more critical.

Class III (Bulk)

- 1-25. Class III (bulk) is petroleum products (fuels, lubricants) normally transported by pipeline, rail tank car, tank truck, tank rack, barge, or tanker and stored in tanks or containers having a capacity of more than 55 gallons.
- 1-26. The joint petroleum office, in coordination with the Service components and the Defense Logistics Agency-Energy Center (DLA-Energy), plans, coordinates, and oversees all phases of bulk petroleum support for United States (U.S.) forces in the theater.
- 1-27. Theater requirements for bulk fuel may be resourced from U.S. peacetime operating stocks or war reserves, through host nation support agreements, contracts, or from captured enemy stocks. The operational environment and degree of theater maturity affects how bulk petroleum is received, stored, and distributed throughout the joint operations area (JOA). Within a theater, supply management for class III (bulk) is usually a lead Service common-user logistics responsibility. In most scenarios, the lead Service responsibility for common-user logistics is an Army responsibility.
- 1-28. Petroleum supply planning falls into two basic categories logistics and operational.
 - Logistics planning requires the translation of such factors as troop strengths, numbers and types
 of fuel-consuming equipment and vehicles, and tactical objectives into specific fuel requirements
 and distribution plans. Planning of this nature begins well in advance of actual operations. This
 planning insures that products, distribution facilities, and operating units and personnel will be
 available when needed.
 - Operational planning includes planning for reaching the rated capacity of the distribution system
 and for maintaining that capacity to meet requirements placed upon it. This planning occurs during
 operations. Revisions may be necessary because of tactical developments, losses in handling
 capacity due to enemy action, and other factors that keep the system from operating as planned.

Class V

1-29. Class V is ammunition of all types (including chemical, radiological and special weapons), bombs, explosives, mines, fuses, detonators, pyrotechnics, missiles, rockets, propellants and other associated items. A *munition* is a complete device charged with explosives, propellants, pyrotechnics, initiating composition or chemical, biological, radiological or nuclear materials, for use in operations, including demolitions (FM 4-30). Conventional ammunition is an end item, complete round, or materials component charged with explosives, propellants, pyrotechnics, or initiating composition for use in connection with defense or offense (including demolitions) as well as ammunition used for training, ceremonial, or non-operational purposes. This includes inert devices that replicate live ammunition, commonly referred to as dummy ammunition, which contain no explosive materials.

Class VI

1-30. Class VI is comprised of personal demand items packaged as health and comfort packs. If available, health and comfort packs are issued in bulk from a supply support activity (SSA) or individually at shower points. Class VI includes items such as writing material; personal hygiene items; and nonmilitary sales items moved within class I supply channels. Initially, Soldiers carry their own personal items with them.

Class VII

1-31. Class VII supplies consist of major end items such as weapon systems and vehicles. Major end items are a final combination of end products that are ready to use. They represent a low percentage of total line items but a high percentage of the total dollar value of the Army inventory. Because of the high dollar cost and their overall importance to combat readiness, major end items are usually controlled through command channels; otherwise, the theater sustainment command (TSC) controls them at theater level. The requisitioning, distribution, maintenance, and disposal of these items are intensely managed to ensure visibility and operational readiness.

Class VIII

- 1-32. Class VIIIA and class VIIIB refers to medical materiel. Class VIIIA and VIIIB materiel managers perform the same basic functions used by managers of all supply classes; they execute materiel management as an integral element of AHS support, which is the exclusive driver of Class VIII demands. Medical materiel management requires a deep understanding of Food and Drug Administration, Drug Enforcement Administration, and other medical quality control requirements.
- 1-33. Medical materiel encompasses consumable, nonexpendable, durable, and expendable medical supply. Class VIII materiel is critical to force health protection and the care of deployed forces. Medical materiel management requires close coordination with clinical personnel, and may vary significantly across the range of military operations and with composition of the medical force, especially at echelons above brigade (EAB). Class VIII requirements are frequently not represented in unit loads designed for large-scale combat operations, but should be. Class VIII materiel distribution must be fully integrated with sustainment formations for distribution management.
- 1-34. Class VIIIA includes medical equipment and consumables (patient movement items, medical gases, pharmaceutical, medical-surgical, dental, medical laboratory, radiology, and optometry supplies; as well as preventive items, medical equipment, and repair parts peculiar to medical equipment). Class VIIIA encompasses the following subclasses of medical supply:
 - United States Army Medical Materiel Agency controlled sensitive items.
 - Controlled substances.
 - Tax-free alcohol.
 - Precious metal.
 - Nonexpendable medical items not restricted.
 - Expendable medical items not restricted.
 - Federal Supply Classification 6505 drugs and related items that are not otherwise restricted.
 - Commander-designated controlled items.
 - Medical repair parts.

1-35. Class VIIIB includes blood and blood components (whole blood, platelets, plasma, and packed red cells). While the Armed Services Blood Program provides national-level management, the Army Health System provides Class VIIIB storage and distribution in support of theater medical operations. See DODI 6480.04, *Armed Services Blood Program Operational Procedures* and ATP 4-02.1, *Army Medical Logistics* for more information about the management of blood and blood components.

Class IX

1-36. Class IX consists of repair parts and components to include kits, assemblies, subassemblies, reparable and nonreparable items required for maintenance support of all equipment. They support the maintenance

and repair functions performed throughout the theater on all materiel except medical. The military purchases reparables with the intent to overhaul and repair over time. For example, tank engines, radar components, electronics, ground vehicle transmissions and helicopter engines are typically reparable items.

- An assembly is a combination of components or modules and parts used as a portion of, and intended for, further installation in an equipment end item (for example, engine, transmission, rotor head, electronic chassis, rack, or cabinet).
- A component or module is a combination of parts mounted together during manufacturing that may be tested, replaced as a unit, or repaired (for example, starter, generator fuel pump, and printed circuit card).
- A module is an assembly containing a complete self-contained circuit or sub-circuit. It may consist
 of a single printed circuit board, in which case it is synonymous with a printed circuit board or
 may be comprised of two or more printed circuit boards mechanically attached to one another and
 removable from the next higher assembly as a single unit.

Class X

1-37. Class X items support nonmilitary programs such as agricultural and economic development. If civilian resources in the theater are inadequate, military sources provides class X items to the civilian population. In addition, civil agencies of the U.S. government and private charitable organizations provides supplies for civilian consumption that might be distributed through military channels.

Water

- 1-38. Hydration, food preparation, medical treatment, and hygiene require potable water. Potable water is a critical combat commodity that requires intensive management and control. Classification of the water function is somewhat different from other commodities; it is a supply function and a field service. Storage, quality surveillance, and distribution of potable water are supply functions. Water purification is a field service. Water supply support operations consist of treatment, storage, and issue of potable water in a theater of operations.
- 1-39. The water support mission is critical to maintaining health and readiness on the battlefield. The most important of these is human and military animal consumption of water. Drinking water must be potable or it may have adverse health effects. It must be palatable or Soldiers may choose not to drink the water or may choose to drink from unapproved sources that tastes better.
- 1-40. The lack of adequate quantities of potable water can produce significant numbers of casualties far more quickly than the lack of food, rest, combat stress, or operational stress. Water intended for drinking must be readily available and consumed in adequate quantities to prevent dehydration. Physical work, environmental stress, clothing, and equipment all increase body water losses and can lead to dehydration. Modest dehydration degrades physical and mental performance, while larger deficits can be catastrophic. Dehydration is one of the greatest nonbattle threats to combat force superiority.

SUPPLY DISCIPLINE

- 1-41. Supply discipline is the process used by commanders to ensure that subordinate elements comply with DA regulatory guidance. One of a commander's duties is to instill supply discipline in Soldiers. Commanders should provide a plan of action, in writing, for maintaining supply discipline. The plan should include a mechanism for the identification and the correction of deficiencies with emphasis placed on eliminating repeat discrepancies. Standard operating procedures (SOPs) are valuable tools to ensure accurate property accountability, especially during personnel changes and unit movement. Brigades and battalions should conduct periodic reviews of subordinate unit SOPs and provide training on developing and implementing unit level SOPs. Unit SOPs should include detailed systematic procedures for handling routine and recurring tasks associated with property responsibility. The SOPs should contain information on how to handle excess material and procedures for unit status reporting.
- 1-42. Commanders establish supply-training programs as a mechanism to make property responsibility a high priority interest item within their commands. Mentoring junior leaders on property responsibility roles

and responsibilities helps to enforce supply discipline. By establishing clear responsibilities from the beginning, the commander sets the command climate for supply discipline for the entire unit.

1-43. Every Soldier is responsible for all government property not just property listed on the unit property books. See AR 710-2, *Supply Policy below the National Level*, for the Command Supply Discipline Program guidelines. Some ways to implement sound responsibility practices and security measures include—

- Thoroughly examine supply operations, property responsibility, inventory procedures, and asset reporting to determine the effectiveness of unit supply policies and procedures.
- Make all Soldiers aware of the importance of preserving Army property.
- Correct any practices that waste, damage, or destroy property.
- Safeguard government property by controlling access to storage areas and by maintaining key control.
- Personally count all items when doing an inventory. Do not merely review hand receipts and subhand receipts. See the item. Touch it. Feel it. Do not let someone else do the inventory because it is each individual hand receipt holder's responsibility to inventory every item on the list.
- Emphasize control of hand tools, organizational clothing, individual equipment, and components of sets, kits, and outfits.
- Mark equipment and supplies with unit identification to show that they belong to the unit.
- Monitor consumption of expendable supplies to determine requirements and to take action when excessive consumption occurs.
- Train supply personnel on property responsibility procedures.
- Audit government purchase card purchases to ensure that any nonexpendable items purchased with the card are picked up on the property book record.

LOADS

- 1-44. During the initial phases of a deployment, supplies have to be at required levels for each individual unit. Deploying units must be self-sustaining until linking up with sustainment elements in theater. In the event of a contingency operation, units deploy with prescribed amounts of all classes of supplies. Loads combine durable and expendable supplies kept by units to sustain operations. Assault and follow-on echelons carry these loads. During the initial phase of deployment, this is the only source of supply. Emergency resupply will likely be limited to class I, class III (bulk), class V, and class VIII.
- 1-45. Basic loads are designated quantities of supplies that allow units to initiate combat operations. The quantity of each item of supply in a basic load depends on the number of days in combat the unit might expect to fight without resupply. The components of required medical equipment sets comprise the basic load for medical units. Items from the basic load will be used during peacetime only when no operational loads are available. Units must replace basic load items that are subject to deterioration or have a limited shelf life as required. Medical equipment sets and medical materiel sets at Role 3 comprise the basic load for medical units. Medical units usually do not have the capacity to carry more than the required medical equipment sets; therefore unit sustainment beyond the medical equipment sets must be built into the sustainment plan.
- 1-46. Operational loads are quantities of classes I through V (to include maps) and class VIII supplies that sustain peacetime operations for a specific time. Operational loads of class VIII are rare because Army medical units do not treat patients in peacetime beyond exercises or for range support. Typically the medical units uses the supplies in their medical equipment sets in support of these exercises because it is the only way to rotate potency and dated medical supplies.
- 1-47. Prescribed loads are quantities of maintenance significant class II and IV, class VIII repair parts, and IX organizational repair parts kept to support a unit's maintenance program and are based on command-designated items and demand history data.

ARMY PRE-POSITIONED STOCKS

1-48. Army pre-positioned stocks (APS) are stocks acquired in peacetime to meet increased requirements that occur during the early phases of major combat operations; small-scale contingencies and national

emergencies; peacetime emergencies and exercises. See ATP 3-35.1, *Army Pre-positioned Operations*, for more information on APS. These stocks support mobilization requirements and sustain operations until resupply can be established and expanded. An example is pre-positioned supply configured to unit sets maintained in overseas locations. APS are managed by USAMC and DLA. AR 710-1, *Centralized Inventory Management of the Army Supply System*, provides detailed supply management procedures for APS. AR 40-61, *Medical Logistics Policies*, and ATP 4-02.1, *Army Medical Logistics* describes medical materiel readiness programs that are not covered by the APS program. These include centrally managed medical potency and dated materiel, medical chemical defense materiel, and the medical materiel readiness program for Role 3 hospitals. The Army assistant chief of staff, logistics (G-4) coordinates all actions concerning APS.

- 1-49. APS consists of four categories: pre-positioned unit sets, operational projects stocks, Army war reserve sustainment stocks and war reserve stocks for allies. Army pre-positioned stocks are pre-positioned afloat, in overseas theaters, and in areas within the continental United States (CONUS). The APS and unit sets program positions critical unit sets and equipment along with the repair parts and unit basic loads that can be used anywhere in support of multiple commanders.
- 1-50. APS are managed via property book. AR 710-2, *Supply Policy Below the National Level*, provides policy on the process for controlling APS within the retail supply system.

ARMY PROPERTY

1-51. Property is categorized for financial accounting and reporting purposes as tangible property consisting of real and personal property. Personal property is items designed for personal use or performance of duty by a person and normally stored with the personal effects carried on the person. Examples are handguns, flashlights, some toolboxes, protective masks, and binoculars. Such items become personal equipment only when issued to the using person for personal use. Real property consists of lands and permanent structures. This ATP does not address real property.

Organizational Property

- 1-52. Organizational property is the materiel that a unit needs to accomplish its mission. It consists mostly of items required for a unit to conduct tactical operations and deploys with the unit. The modified table of organization and equipment (MTOE), the deployable table of distribution and allowances (TDA) and the common table of allowance prescribe the complement of organizational property according to unit mission.
- 1-53. Every organization and activity has an authorization document that prescribes the unit's organizational structure. Authorizations align the organizational structure with the mission, personnel, and equipment. As such, these documents are the basis for projecting the Army's funding, acquisition, distribution, and training requirements. In the enterprise resource planning (ERP) environment, every unit down to the lowest level is a force element assigned a unique number within the enterprise. The force element is the common thread that aligns materiel, personnel, and authorizations, thereby enabling organizational structures to be integrated for planning and controlling administrative, human resources, and logistics processes. See AR 71-32, *Force Development and Documentation*, for more information about authorization documents.

Property Accountability

1-54. Leaders, materiel managers, and tactical financial managers share the responsibility to maintain readiness and to understand the cost of readiness. All personnel in the Army have responsibility for the care and safekeeping of property issued to them and in their custody. Responsibility is based on possession of the property or the scope of the individual's duties or employment, regardless of whether or not they have a signed a hand receipt. When property becomes lost, damaged, or destroyed Soldiers should initiate adjustment documents to account for the property and to obtain relief from responsibility and accountability.

Note: Deployed operations do not relieve Soldiers of accountability or responsibility for Army property.

1-55. Accountability refers to maintaining formally prescribed records in the form of a property book or a stock record. Property accountability is the shared responsibility of the entire chain of command because it is critical to knowing shortfalls, on-hand, who has it, where it is, and where it needs to be. Property accountability is critical for accurate requirements determination, requirements validation, funding, resupply, and readiness.

Note: Poor accountability reduces readiness for every unit and every Soldier in the Army regardless of mission.

1-56. Accountability and each type of responsibility carry specific duties. Commanders may assess financial liability against any Soldier who fails, through negligence or misconduct, to perform those duties and where such failure is the cause of a loss to the government.

Stock Record

1-57. Stock control is the establishment and maintenance of formal records of material in stock reflecting such information as quantities and condition. The Army stock record accounting system is used to account for U.S. Government supplies and equipment. A stock record is required to stock and store materiel while it is awaiting issue, therefore, all classes of supply enter the Army inventory through a stock record and some items are returned through the stock record for maintenance and disposal. All classes of supply are accounted for on a stock record, but not all classes of supply are managed in the automated Army logistics enterprise environment. Subsistence and bulk fuel are managed are managed manually during deployed operations.

1-58. The stock record contains facts unique to an item and is the foundation of the stock control process used to account for materiel in the supply pipeline. Stock record management through the Army logistics enterprise enhances asset visibility and financial accountability, because tactical and national materiel managers use the same material master record to account for stock. The material master record is the title of the stock record that contains basic details (for example, item description, units of measure), classification, sales information (for example, forecasting, consumption), plant data (for example, purchasing, stock planning storage location), and valuation data (for example, costing). The material master record provides the information for materiel managers to identify materials that need replenishment, and the method and timeline for replenishment.

Property Responsibility

1-59. Command responsibility is the obligation of a commander to ensure all government property within the command is properly used and cared for, and that custody and safekeeping are provided. Command responsibility is inherent in command and cannot be delegated. It is evidenced by assignment to a command position and includes—

- Ensuring security for all property of the command, whether in use or in storage.
- Observing subordinates to ensure their activities contribute to the proper care, use, and safekeeping
 of all property within the command.
- Enforcing all security, safety, and accounting requirements.
- Taking administrative or disciplinary measures when necessary.

1-60. Custodial responsibility refers to the obligation of an individual for property in storage awaiting issue or turn-in. This responsibility requires individuals to exercise reasonable and prudent actions to properly care for, and ensure proper custody and safekeeping of the property. Custodial responsibility results from assignment as a supply sergeant, supply custodian, supply clerk, or warehouse person. These personal are rated by and answerable directly to the accountable officer or the individual having direct responsibility for the property. Custodial responsibilities include—

- Ensuring the security of all property stored within the supply room and storage annexes belonging to the supply room or SSA is adequate.
- Observing subordinates to ensure their activities contribute to the proper care, and safekeeping of all property within the supply room and storage annexes belonging to the supply room or SSA.

- Enforcing all security, safety, and accounting requirements.
- Reporting the problem(s) to one's immediate supervisor, when unable to enforce any of these.
- 1-61. Supervisory responsibility refers the obligation of a supervisor to ensure all Government property issued to, or used by subordinates is properly used and cared for, and that proper custody and safekeeping are provided. It is inherent in all supervisory positions, is not contingent upon signed receipts or responsibility statements, and cannot be delegated. It arises because of assignment to a specific position and includes—
 - Providing proper guidance and direction.
 - Enforcing all security, safety, and accounting requirements.
 - Maintaining a supervisory climate that facilitates the proper care and use of Government property.
- 1-62. Direct responsibility is the obligation of an individual to ensure applicable custody and safekeeping methods for all Government property. Direct responsibility results from assignment as an accountable officer, receipt of formal written delegation, or acceptance of the property on-hand receipt from an accountable officer. Commanders and supervisors assign, in writing, direct responsibility for property.
- 1-63. Personal responsibility refers to the obligation of an individual to exercise reasonable and prudent use and care for property in their possession. It applies to all government property issued for, acquired for, or converted to a person's exclusive use, with or without receipt.

FINANCIAL ACCOUNTABILITY

- 1-64. Supply support and materiel readiness depend upon knowledge of the financial process. During deployments, leaders and materiel managers often perform budget management responsibilities. This section provides basic information about each type of funding that materiel managers encounter. Leaders, down to the company level, and materiel managers routinely communicate with budget analysts and other financial personnel to manage unit budgets.
- 1-65. Funds management consists of funds control, funds distribution, and budget formulation. Funds management ensures that resources are available when and where needed. This holds true for every unit in the Army regardless of the unit mission, the logistics information system, or the commodity. All units manage and execute their budgets based on command guidance and the spend plan. The processes are similar across the Army in that commanders receive, allocate and distribute funds, record transactions, and prepare reports to support oversight, management, and decision-making. Commanders establish written procedures, with performance standards, to detail responsibility for financial readiness in support of materiel readiness. Funds availability controls prevents a user from processing a transaction that would over-obligate funds and cause an Section 665, Title 31, United States Code (section 3679, Revised Statutes) (31 USC 665 [RS 3679]), commonly known as the Antideficiency Act violation. Budget execution includes performing commitments and obligations, recognizing expenses, and generating payment against authorized and distributed funds. Daily, weekly, and monthly readiness reviews focus on materiel management coupled with financial management to ensure that commanders have the funds to cover unit requirements.

UNIT BUDGET

- 1-66. Army units execute their budgets as they purchase materiel for day-to-day operations. Army leaders at all levels need to make accurate, timely decisions that capitalize on the resources available to achieve their best readiness results. In order to do this, it is important to understand the difference between cost (how much it costs to own a piece of equipment) and spending (how much the organization spent on that piece of equipment).
- 1-67. Every unit in the Army, regardless of mission, purchases supplies and manages its budget. Daily materiel management workflows and interfund billing processing affects the status of unit funds and budget availability. The interfund billing system is an automated billing and fund transfer process prescribed by the Military Standard Billing System of the DLA. Managing the unit budget is a connected sequence of logistics events that have financial and budgetary impact on a unit. The budget management sequence is as follows: obligation, expense, and disbursement. The company commander is the first level of review for purchase of all classes of supply used in that unit. Battalion commanders approve supply purchases at the higher command level and provide the final review for supply purchases. The company executive officer or supply

sergeant typically assists the commander by overseeing the unit budget to ensure that expenditures and credits update as they occur. Commanders periodically review the budget to ensure projections and statuses remain in line with available funding.

Note: Face-to-face reconciliations with resource managers or budget analysts enable correction of errors detected during unit supply budget management or command review.

FEDERAL FUNDING PROCESS

1-68. The federal budget process is prescribed by law and supplemented by guidance from the General Accounting Office and the Office of Management and Budget. The Army Budget Office distributes budget authority to the Army commands, where resource managers issue budget guidance to the execution level. Budget allotments are distributed according to functional area funds centers, such as maneuver units, land forces operations support, and other activities in support of operations. A fund center is an Army unit that is authorized to receive and distribute funds and execute the budget. Budget execution is the use of budget authority to resource the Army. The operations and maintenance, Army (OMA) fund resources the daily operational costs of the Army. The OMA funds typically represent a one-year appropriation for a specific fiscal year.

1-69. Congress establishes working capital funds to control and account for the cost of Department of Defense (DOD) programs. The working capital fund is a revolving fund that operates much like a commercial business, in that sales revenues purchase Army inventory and pay for business unit operating expenses. In other words, working capital funds rely on sales rather than direct appropriations to generate revenue to cover the cost of operations without fiscal year limitations. The financial mechanisms of the fund provide cost visibility, full cost recovery, and provide customers with reasonable and consistent charges for goods or services. The revolving fund helps to maintain mission readiness through stabilized billing rates, meaning rates do not fluctuate during the year of execution. Additionally, under the principles of cost visibility and cost recovery, customers are charged for the actual cost of goods and services, with no hidden costs.

1-70. Appropriated funding is synchronized with the working capital fund workload forecast during budget development. During the year of execution, appropriated fund customers submit funded orders for services (repair, overhaul, or manufacturing) and supplies. This process obligates appropriated funds, allowing materiel managers to purchase inventory for resale to supported units. After receiving the product or service, the supported unit pays the working capital fund.

Defense Working Capital Fund

1-71. The primary source of financing DLA operations is its revolving fund, the Defense Working Capital Fund (DWCF). The Defense Logistics Agency is the Department of Defense's combat logistics support agency. DLA provides the Army, Marine Corps, Navy, Air Force, other federal agencies and partner nation armed forces with a full spectrum of logistics, acquisition and technical services. By design, the DWCF fosters a consumption-driven, cost-based relationship between customers and industry suppliers. The expected outcome of this relationship is the efficient delivery of goods and services. Since the financial structure of the DWCF allows for the identification of the cost to produce goods and services and subsequently set prices, an Army unit can use this pricing and delivery information in its decision-making process.

Army Working Capital Fund

1-72. Each of the Services has a working capital fund. The United States Army Materiel Command (USAMC) manages the Army Working Capital Fund (AWCF), giving it sole obligation authority for Army managed items and for non-Army managed items (fuel, subsistence, clothing, engineer supplies and medical items). Obligation authority refers to permission to procure or spend money on goods and services. The AWCF consists of two activity groups. The AWCF consists of two activity groups—

- The supply management activity group buys and manages spare and repair parts for sale to its customers, primarily Army operating units. The activity group is committed to supporting and building readiness for present and future challenges.
- The industrial operations activity group provides the Army an organic industrial capability to conduct depot level maintenance, repair and upgrade; produce munitions and large caliber weapons; and store, maintain, and demilitarize material for all branches of DOD. This ATP does not address the industrial operations activity group.

1-73. USAMC uses the AWCF - Supply Management Army obligation authority to purchase materiel from DLA and industry for resale to Army units and then uses a percentage of the earnings to buy more supplies. It also funds the repair of Army-managed reparables at depots, non-depot activities, and by contractors.

1-74. AWCF - Supply Management Army consists of four major commodity groups: aviation and missile, communications-electronics, tank-automotive and armament, and non-Army managed items. Supply management activity groups, controlled by the USAMC life cycle management commands (LCMC), are responsible for Army managed items, non-Army managed items, and war reserve secondary items. Each commodity group consists of consumable supplies and spare parts for weapon systems.

Procurement Appropriations

1-75. Procurement appropriations finance investment items and cover the costs necessary to supply end items. The Army budget includes the following five procurement appropriations—

- Weapons and Tracked Combat Vehicles Appropriation covers tracked combat vehicles, weapons, other combat vehicles and repair parts.
- Ammunition Appropriation covers ammunition end items, ammunition production base support, and ammunition demilitarization.
- Aircraft Appropriation includes procurement of aircraft, aircraft modifications, spares, repair parts, and related equipment and facilities.
- Missile Appropriation covers missiles, missile modifications, spares, repair parts, and related support equipment and facilities.
- Other Procurement, Army covers tactical and support vehicles; communications and electronics equipment; other support equipment and initial spares.

Operations and Maintenance Appropriations

1-76. OMA funds day-to-day operations for all Army units. It funds supplies; maintenance of equipment; certain equipment items; equipment and facilities rental; food; clothing; fuel and other expenses. All Army units execute OMA funds to purchase supplies and services from the AWCF, the DWCF, and from commercial sources. Deploying units receive the project code and funding guidance to begin the supply requisition process. During pre-deployment activities property book offices and units apply for and update their deployment Department of Defense Activity Address Code (DODAAC). The DODAAC contains the billing information that is critical to ensuring that reimbursable supplies are paid for with the appropriate funds.

Military Personnel Appropriations

1-77. Military personnel, appropriations is a centrally managed, single-year appropriation that funds Soldier pay and allowances, recruiting and retention incentives, subsistence-in-kind (food rations), permanent change of station costs, death gratuity and unemployment compensation benefits, Reserve Officer Training Corps and West Point cadet stipends. This funding source is discussed because theater food advisors ensure that appropriate DOD funding codes are used for field feeding, special (ethnic or religious) meals, and enemy prisoners of war meals.

DISTRIBUTION MANAGEMENT PROCESS

1-78. Distribution management is a logistics function used to develop an executable plan to distribute supplies from the source of supply throughout a theater of operations. To be effective, distribution

management must be integrated into all phases of the operations process. The distribution management process applies to all commodities and at all echelons. The distribution management process includes materiel management, transportation management, and distribution integration functions.

- 1-79. The process begins with identifying a materiel requirement and ends at the time the materiel is either consumed or disposed. The distribution management process is a methodology for ensuring that materiel reaches supported units. Approaching distribution as an enterprise takes into consideration the integration of organizations and functions associated with distribution from the battlefield back to the suppliers, to include the industrial base. It is a complex process in which materiel managers should understand the supported commander's priorities and requirements to plan, prepare, integrate, and distribute within the operational environment. The effectiveness of the overall distribution system is diminished by inefficiency in any of the supporting networks. Distribution management includes—
 - A number of independent and mutually supporting networks (Physical, Communications, Information, and Financial).
 - A complex of joint and service military organizations, civilian sector, working groups, sections, facilities, methods, and procedures.
 - The broad range of activities, described below, affect effective and efficient provision of materiel and personnel:
 - Procure, store, maintain, and issue materiel to equip and sustain the force from deployment through combat operations and redeployment.
 - Synchronize multi-nodal, multi-modal, inter-theater, and intra-theater transportation operations for moving materiel and troops in the assigned area.
- 1-80. Materiel managers determine and validate materiel requirements for distribution to supported units, obtain materiel to be distributed by appropriate commodity and quantity, and coordinate its distribution according to command priorities. Transportation managers identify units with adequate modes of transportation to meet distribution requirements and verify routes suitable for the distribution plan. Distribution integrators use the information provided by the materiel and transportation managers to develop a distribution plan that will satisfy the materiel requirement by commodity, quantity, priority, recommended mode, routes, and nodes. This information is communicated to the unit operations office for inclusion in the operation order (OPORD) concept of operations.
- 1-81. The distribution management plan must be synchronized with the supported headquarters operation and across all warfighting functions. Failure to achieve this synchronization may result in an un-executable distribution plan that is not realized until the operation begins.
- 1-82. The process described in this ATP describes fundamental materiel management, distribution integration, and transportation operations functions that apply to all supply classes and are executable at any echelon. The process may be supported by an automated sustainment information system, but is not system dependent; it may be executed in absence of automation. This is advantageous during periods of degraded communications. Distribution managers, materiel managers, and transportation managers should understand the entire process and all associated functions as it extends from the division close area to the strategic support area. This is important because effective execution of the process captures materiel requirements (by commodity, quantity, and priority) from tactical units at the lowest level. The process compiles supply demands and requirement forecasts at each echelon and either directs materiel distribution from theater supply stocks or communicates an actionable demand signal to strategic providers.
- 1-83. Distribution management synchronizes and optimizes transportation, its networks, and materiel management with the warfighting functions to move personnel and materiel from origins to the point of need in accordance with the supported commander's priorities. In order to satisfy materiel requirements distribution managers continuously assess distribution capabilities to develop strategies for mitigating issues as they arise.
- 1-84. When deployed, sustainment leaders materiel managers, and transportation managers operate in complex environments. By executing the functions within the distribution management process, leaders and materiel managers ensure supply support through a higher degree of accuracy and timeliness in potentially ever-changing operations. The TSC is the distribution manager that plans distribution operations to resupply the theater. If an ESC is deployed, it is the distribution manager for its specified joint operations area. The

ESC plans for resupply of the joint operations area. Sustainment brigades plan distribution throughout an area of responsibility (AOR) or JOA based on command relationships with an ESC or TSC. Division sustainment brigades (DSB) plan distribution to resupply division operations. The medical formations, medical brigades, and multifunctional medical battalions task-organize, control, and execute AHS support through an integrated, end-to-end Army Health System. The medical command (deployment support) (MEDCOM (DS)), is the senior medical command and control element, providing liaison to the TSC or ESC through a forward team of the medical logistics management center. The combat sustainment support battalion (CSSB), division sustainment support battalion (DSSB), and BSB execute distribution in their respective areas. The distribution managers—

- Synchronize materiel and movement management operations by maintaining a common operational picture.
- Ensure visibility of distribution assets to include aerial delivery platforms and palletized loading system flatracks.
- Enforce priorities established by the supported headquarters.
- Maintain continuous liaison with medical formations at echelon, to ensure Class VIII distribution enables uninterrupted execution of AHS support.
- Maintain continuous liaison with supported units to ensure the uninterrupted flow of materiel, units, personnel, mail, and other goods.
- Coordinate directly with the theater aviation command or designated theater aviation brigade G-3 or S-3 to move commodities via rotary or fixed-wing aircraft.
- Advise the commander on the use of air movement to support distribution operations.

1-85. Figure 1-2 on page 1-16 illustrates the four components of the distribution management process. Distribution management center (DMC) and support operations office (SPO) logisticians integrate materiel management and transportation management functions to execute the distribution management process. This figure lists materiel, distribution integration, and transportation management functions. The functions are not executed by a single staff section or organization. There is a division of responsibility that varies by organization. Materiel management functions are on the left. Materiel managers control end-to-end supply support through the monitoring and managing of receipts, storage, and issue of all supply classes. Transportation management functions are listed on the right. Transportation managers allocate transportation assets and regulate movements according to command priorities and battlefield conditions, Materiel managers and transportation managers engage in the details associated within their specialty independently of one another. The middle oval lists the combined activities of materiel and transportation managers to integrate and synchronize schedules to align personnel, materiel, and movement to fill the requirements of supported units. Distribution managers integrate the functions of transportation and supply to move cargo from the source of supply to the supported unit. The triangle represents distribution managers working closely and consistently with supported units' operations and logistics staff offices. These functions are discussed throughout this publication.

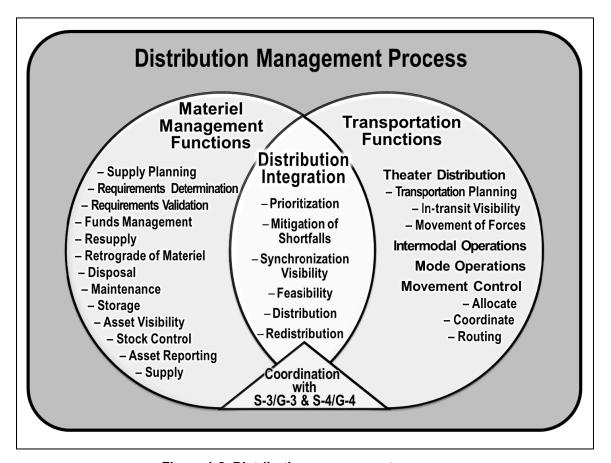


Figure 1-2. Distribution management process

MATERIEL MANAGEMENT FUNCTIONS

1-86. Materiel management is the continuous situational understanding, planning, and execution of supply and maintenance capabilities to anticipate, synchronize, and direct all classes of supply to maximize combat power, and enable freedom of action in accordance with the supported commander's priorities. Materiel management is executed during all four Army strategic roles to support the range of military operations. The materiel management component of the distribution process—

- Is executed in the TSC, expeditionary sustainment command (ESC) material management branch of the distribution management center.
- Is executed by the sustainment brigade and DSB SPO materiel management branch.
- Is executed in the combat sustainment support battalion (CSSB) and brigade support battalion (BSB) support operations office.
- Is executed by the MEDCOM (DS), medical brigades, multi-functional medical battalions, hospital centers, combat support hospitals, and medical logistics companies.
- Requires coordination between the MEDCOM (DS, medical brigade (MEDBDE), medical battalion (multifunctional) (MMB), and sustainment headquarters for integration of class VIII into the supply planning process.
- Encompasses coordination between the supported units, the supporting units, materiel managers, distribution managers, and operations staff at all echelons to synchronize with all warfighting functions.

1-87. In the interest of administrative and operating efficiency, materiel management is divided into the functions described below. All of these functions contribute to the application of the fundamentals of supply

and taken together comprise the supply support mission. The functions of feeding, clothing, equipping, and arming the Army brings materiel managers into close relationships with practically every organization in the DOD as well as other federal agencies, host nations, and the industrial base.

- 1-88. Materiel management is divided into the functions described below—
 - Supply planning is forecasting to establish supply stock levels at each support echelon to meet
 mission requirements. Supply planning translates an operating force's composition and mission
 into specific supply requirements. Planning ensures that adequate supplies and transportation
 assets are available.
 - Requirements determination is all activities necessary to develop, consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating force. It is based upon requirements communicated from operating forces and forecasted by sustainment organizations supporting these forces.
 - Requirements validation is the confirming of requirements and the prioritizing of available
 materiel assets against an established or forecasted requirement. Requirements validation is
 critical to avoid excess materiel, not enough materiel, and to avoid misuse of logistics
 transportation and maintenance assets. It ensures that no requests for logistics support are passed
 to a higher headquarters until it is determined on-hand assets are insufficient to meet the
 requirement. Requirements validation also includes establishing controlled rates of supply if
 necessary.
 - Funds management is the managing of obligations, expenses, and disbursement of funds by contracting officers with warrant authority, finance officers, and Army leaders at all levels in support of supply operations.
 - Resupply is obtaining supplies to meet operational requirements through acquisition, the
 requisition process, cross-leveling, contracting, and local purchase. Resupply is executed by
 supply support organizations and activities.
 - Retrograde of materiel is an Army logistics function of returning materiel from the using unit back through the distribution system to the source of supply, directed ship-to location, or point of disposal. (ATP 4-0.1). Retrograde of materiel is executed by supply support organizations and activities.
 - Disposal is the systematic removal of uneconomically repairable or obsolete materiel through the
 process of demilitarizing, transferring, donating, selling, abandoning, or destroying materiel. It is
 normally directed through program management channels, but may also be a command decision
 if the operational environment dictates.
 - Maintenance is all actions necessary for retaining an item in or restoring it to a specified condition
 to support the supply system. Supply points maintain stocks through quality surveillance and
 control measures in accordance with commodity specific requirements.
 - Storage is the organizing, sorting, and safeguarding of materiel. Storage includes warehouse
 management, receiving, storing, issuing, securing, inventory management, and accounting for
 materiel. Warehousing does not imply the use of fixed facilities. Tents, containers, and open areas
 also serve as warehouses.
 - Asset visibility provides materiel managers with information on the location, movement, status, and identity of materiel, which facilitates the capability to act upon that information to improve overall performance of the Army supply system. Asset visibility through asset reporting is monitored by the medical logistics management center, TSC and ESC materiel management branches and in the sustainment brigade, DSB, CSSB, DSSB and BSB support operations office.
 - Stock control is the maintaining of the proper location and identification of materiel within storage
 locations regardless of class of supply. Materiel managers need correct identification and location
 of materiel stored in warehouses to ensure the proper item of supply is issued to meet requirements.
 Unidentified, improperly stored items result in excess or shortage of items being ordered by
 materiel managers.
 - Asset reporting is the vertical and horizontal reporting of on-hand assets and is a critical
 component for asset visibility, requirements determination, and requirements validation. Asset
 reporting occurs from unit supply, property book office (PBO), and from all commodity's supply

- points in accordance with the frequency and by commodities directed by the command. Asset reporting is executed by the TSC, ESC, sustainment brigade and DSB materiel management branches and in the in the CSSB, DSSB and BSB support operations office.
- Supply is the provision of materiel to supported units by supply support organizations and activities. It involves requesting, receiving, storing, issuing, maintaining, and establishing accountability of all classes of supplies required to execute a unit's assigned mission.

DISTRIBUTION INTEGRATION FUNCTIONS

1-89. Distribution integration aligns personnel, equipment, and materiel requiring distribution (in terms of commodity, quantity, and priority) with adequate transportation capabilities to synchronize distribution to support the concept of operations. Distribution integrators in the various support operations staffs develop the distribution plan for inclusion in the G-3 or S-3 OPORD. This includes, but is not limited to assistance with course of action development and analysis. This function queues materiel requirements in accordance of priority and ensures transportation modes with adequate haul capacity are allocated to distribute the materiel. Distribution integration efforts provide the transportation personnel with commodity, quantity, priority, and recommended mode.

1-90. The distribution integration branch (DIB) develops the distribution plan for the supported higher headquarters and contributes information towards the development of the headquarters' movement plan. The DIB integrates the transportation assets anticipated to be available (by mode and node provided by the transportation operations branch) with the forecasted materiel and service requirements (provided by the materiel management branch). By integrating the transportation assets anticipated to be available, against the forecasted materiel, service, and movement requirements, the DIB can develop a distribution plan that; 1) satisfies the future requirements by priority, 2) identifies shortfalls, and 3) informs the supported headquarters G-4 or battalion or brigade logistics staff officer (S-4) of the risk associated with the shortfalls. This enables the G-4 or S-4 to justify requesting additional transportation while in the mid-range planning horizon. The DIB supports the G-4 or S-4 by significantly contributing to the development of the division movement plan. This branch receives all transportation requirements for prioritization and integration into a movement plan. The DIB must receive all transportation requirements for personnel, equipment, unit movement, or resupply in order to determine all movement requirements for the next planning horizon and to begin forecasting movement requirements for a future planning horizon.

1-91. Effective distribution integration synchronizes materiel management and transportation operations by maximizing containerization; increasing standardized transportation and material handling equipment; integrating aerial resupply as a routine method of delivery; synchronizing and integrating retrograde operations across all available transportation modes; reducing storage; reducing transportation mode transfer handling requirements; and increasing in transit visibility. The distribution integration component of the distribution process is—

- Executed in the TSC or ESC materiel management branch of the DMC.
- Executed through coordination among the MEDCOM (DS), MEDBDE, and MMB for Class VIII priorities.
- Executed through collocation of the medical logistics management center (MLMC) forward team
 with the TSC or ESC DMC to ensure that medical requirements are fully integrated into theater
 distribution operations.
- Executed by the sustainment brigade and DSB SPO distribution integration branch.
- Executed in the CSSB and BSB support operations office.
- Executed by transportation organizations.
- 1-92. The following functions shape allocation decisions:
 - Prioritization is executed by the DIB in the TSC, ESC, sustainment brigade, and DSB. It is
 executed by the support operations office in the CSSB, DSSB and BSB. This function ensures
 commodities to be distributed are organized and queued in order of priority as determined by the
 command. Priority is expressed as both commodity and unit priority.
 - Mitigation of shortfalls is executed by the DIB in the TSC, ESC, sustainment brigade, and DSB. It is executed by the support operations office in the CSSB, DSSB and BSB. This function links

- materiel management to transportation in terms of commodity, quantity, and priority. It ensures that adequate transportation assets are identified and obtained against the requirement deficiency.
- Synchronization is executed by the DIB in the TSC, ESC, sustainment brigade, and DSB. It is
 executed by the support operations office in the CSSB, DSSB and BSB. This function ensures that
 distribution is synchronized with transportation operation cycles to ensure modes with sufficient
 capacity are available when commodities are positioned for movement. It also synchronizes
 distribution with operational tasks, phases, and objectives.
- Feasibility determination is executed by materiel management branches in the TSC and ESC. It is executed by the support operations office in the sustainment brigade, DSB, CSSB, DSSB and BSB. It is also executed by transportation organizations. This consideration determines whether the capability exists to move forces, equipment, and supplies from the point of origin to the final destination within the time required. If transportation is not feasible, this fact is reported from the DIB to the materiel management branch.
- Distribution is the integration of the logistics functions of transportation and supply. It is dependent on materiel management and movement control. The operational process of synchronizing all elements of the logistics system to deliver the "right things" to the "right place" at the "right time" to support the commander. Distribution is planned by the DIB in the TSC, ESC, sustainment brigade, and DSB. It is planned by the support operations office in the CSSB, DSSB and BSB. It is executed by transportation organizations.
- Redistribution is the reallocation excess materiel to other locations in theater using all transportation assets available. Managers may use excess materiel in theater to fill shortages and meet operational requirements.
- Visibility is executed by the DIB in the TSC, ESC, sustainment brigade, and DSB. It is executed by the support operations office in the CSSB, DSSB and BSB. It is also executed by transportation organizations. This provides the materiel manager current status of commodities that are queued, prioritized, and have transportation allocated for movement.

TRANSPORTATION OPERATIONS FUNCTIONS

1-93. The transportation operations branch supports G-4 or S-4 by significantly contributing to the development of the movement plan. This branch assesses the transportation system to determine the workload capacity of each route by mode and the capabilities at each node. Information on transportation capabilities at each node must include available transportation assets, loading and unloading capability (materials handling equipment, ramps) storage capability, and any other factors that affect transportation services. As required, this branch produces transportation overlays that display the transportation nodes and routes by mode available to support transportation requirements. The transportation operations branch updates the transportation assessment provided in operation orders with new information (if available) prior to developing the next movement plan. If required, the branch will recommend additional checkpoints and critical points be added to main supply routes and alternate supply route if they are necessary to execute movements. These additions should be coordinated up the chain of command all the way to the theater Army to maintain a common list of all checkpoints along all main supply routes and alternate supply routes. This branch determines transportation capabilities available at each node, to operate by each mode for each applicable planning horizon. Transportation capabilities may include Army trucks, aircraft, and watercraft as well as available joint, host nation, multi-national partner, and contracted transportation platforms (to include rail) that are tasked or contracted to support division operations. Transportation managers use the information provided by the distribution integration or support operations staff to coordinate for and allocate modes by commodity, quantity, and priority to ensure timely distribution of the materiel.

1-94. Transportation management is planning, prioritizing, directing, and executing associated functions to transport materiel and personnel by air, ground, and water assets, based on situational understanding of operational requirements and resources, in accordance with commander's priorities. The transportation component of the distribution process—

- Is executed in the TSC, expeditionary sustainment command (ESC) DMC transportation operations branch.
- Is executed by the sustainment brigade and DSB SPO transportation operations branch.

- Is executed in the combat sustainment support battalion (CSSB) and brigade support battalion (BSB) support operations office.
- Is executed by transportation organizations.
 - The theater movement control element provides movement management, container management, highway regulation and coordination for personnel and materiel movements. It provides: staff augmentation to establish and refine distribution networks during operations; manage containers (commercial, unit, and DOD); and develop movement programs for the distribution of sustainment stocks within the AO or JOA, as required.
 - The movement control battalion provides command, control, and supervision of assigned and attached movement control detachments; ITV of tactical and non-tactical vehicle movements; and asset visibility throughout the theater.

1-95. In the interest of administrative and operating efficiency, transportation management is divided into the following functions:

- Theater distribution is the flow of equipment, personnel, and materiel within the theater to meet the geographic combatant commander's mission. The TSC, ESC, and DSB transportation operations branches typically establish movement boards to manage transportation policies, priorities, lines of communications status, convoy protection and synchronization, and transportation asset allocation to support theater distribution operations. The SPO mobility section of the sustainment brigade, CSSB, DSSB, and BSB oversees the execution of movements and has direct oversight of movement control operations that includes the flow of personnel, equipment, and materiel within a theater to meet the geographic combatant commander's (GCC) missions.
- Transportation planning is a logistics function that includes movement control and associated activities to incorporate military, commercial, and multinational motor, rail, air, and water mode assets in the movement of units, personnel, equipment, and supplies in support the concept of operations. When planning motor transportation operations, managers should compare capabilities versus requirements, which will identify excesses or shortfalls. When excess or shortfalls exist, planners can mitigate these by changing vehicle types to maximize carrying capacity.
- In transit visibility is executed by transportation operations branches in the TSC, ESC, sustainment brigade and DSB. It executed by the support operations office in the CSSB, DSSB and BSB. The ability to track the identity, status, and location of materiel, equipment, personnel, and forces from origin to either consignee or destination. This includes force tracking and status of convoys, unit cargo and equipment, containers and pallets, and transportation assets. In transit visibility provides transportation planners and executors with the capability to anticipate and manage transportation flow over lines of communication.
- Movement of forces is planned by transportation operations branches in the TSC, ESC, sustainment brigade and DSB. It is planned by the support operations office in the CSSB, DSSB and BSB. It is executed by transportation organizations. The operational movement of units within an operations area to quickly and efficiently shift forces and deliver them in a high state of readiness to the desired destination. Transport units move units in an operational area as far forward as mission and operational variables permit.
- Intermodal operations is the process of using multiple modes and conveyances to move troops, supplies and equipment through expeditionary entry points and the network of specialized transportation nodes to sustain land forces. TSC, ESC, sustainment brigade and DSB Intermodal operations is planned by transportation operations branches in the. The CSSB, DSSB and BSB support operations offices plan intermodal operations.
- Mode operations is the execution of movements using various conveyances (truck, railcar, aircraft)
 to transport materiel, equipment, personnel and forces planned by transportation operations
 branches in the TSC, ESC, and DSB and in the sustainment brigade, CSSB, DSSB and BSB
 support operations offices.
- Movement control is the dual process of committing allocated transportation assets and regulating
 movements according to command priorities to synchronize distribution over lines of
 communication to sustain land forces. Movement control, as a transportation subordinate function,
 provides commanders a mechanism to synchronize movements for deployment, redeployment,

and distribution operations to support unified land operations and provides them situational understanding to effectively influence the movement in their area of responsibility. Movement control is inherently joint allowing other Services access to Army common user transportation and is a medium for the Army to utilize joint transportation to enhance military operations. Movement control includes—

- Allocate. The identification and commitment of specific transportation modes to meet a specific distribution requirement based on commodity and priority.
- Coordinate. The interface with other components of the distribution management process to ensure the commodities, modes, routes, and times are brought together to ensure effective and timely distribution.
- Routing. The planning, routing, and scheduling of movements on supply routes, which provide order, prevent congestion, and enforce movement priorities in the operational area.

1-96. Figure 1-2 on page 1-16 introduced the materiel management, transportation management, and distribution integration functions and subsequent text defining each function. Figure 1-3 provides a visualization of the complexity of the distribution management process. The distribution management process involves data pulls from multiple automated systems, manual requests for information, and coordination among many different elements. This process applies from the strategic to the tactical levels of warfare and for all supply classes. Materiel and transportation planners work to provide the supply support required to initiate and sustain large-scale combat operations and to resupply despite developments on the battlefield. The distribution management plan is a success only when this is accomplished. Each of the functions, depicted in the flowchart, contain many details and planning considerations that materiel, transportation, and distribution managers work independently and together to ensure supply reaches supported units anywhere on the battlefield.

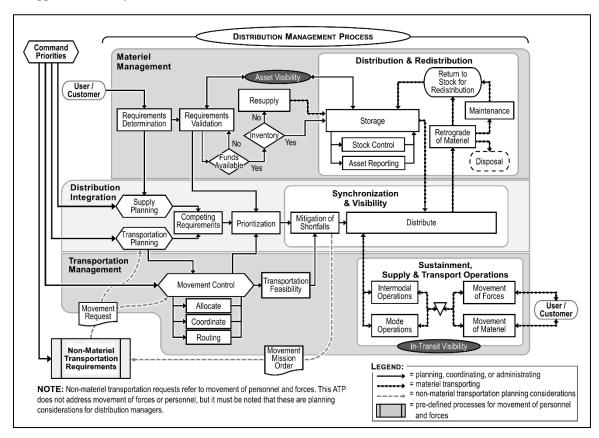


Figure 1-3. Distribution management process flowchart

MATERIEL MANAGER RESPONSIBILITIES

1-97. Effective, efficient materiel management is critical to meet supply support requirements adequately and on time. Materiel management is anticipatory and flexible to meet unforeseen supply requirements that invariably arise during large-scale combat operations. Materiel managers identify, plan, resource, and implement management actions to ensure that all classes of supply are available for distribution. Materiel managers engage in detailed, methodical planning, synchronized with the supported operation and across all warfighting functions. Materiel managers anticipate supply requirements, where supplies are needed, and how supplies will be distributed to the supported unit. Failure to achieve synchronization may lead to mission failure.

1-98. Throughout the theater, materiel managers receive requirements, determine where the materiel is available, and direct materiel release based on command guidance and priority. Materiel managers continuously analyze stock status to manage workload and control potential backlogs or bottlenecks generated by competing requirements and priorities. Near real-time situational awareness of the operational environment and supported commander's requirements drive the distribution, redistribution, and reprioritization of materiel.

1-99. Materiel managers frequently evaluate supply support, through supply operations assessments to determine trends, isolate deficient areas, and correct deficiencies. Materiel managers use management indicators and supply performance indicators to measure the effectiveness of supply support. For example, management indicators include the adequacy of policies and procedures, placement of supply points on the battlefield, responsiveness to supported unit needs, management controls, and operating practices. Supply performance indicators are standards used to evaluate performance to ensure a plan is meeting the commander's intent and to determine if future operations are supportable. Materiel managers alter plans that do not meet operational requirements or commander's intent.

1-100. Materiel managers analyze information to identify existing and potential problems, trends that may change support requirements, and other information requiring staff or command attention. They resolve current problems and prevent potential problems from developing. These include—

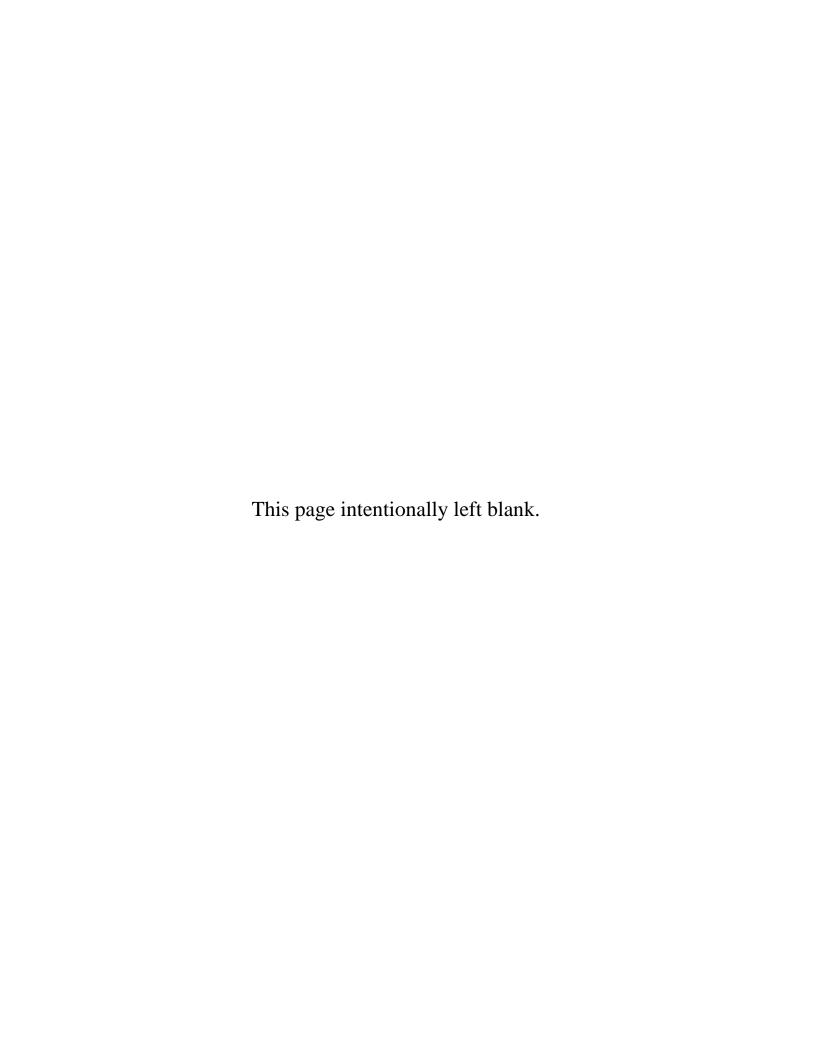
- Low supply stockage levels that influence the readiness of subordinate and supported units.
- Trends that dictate modification of support plans or procedures.
- Health threats, changes in medical capabilities, distribution and criticality of patients, changes in patient movement plans, and other factors that drive medical materiel requirements.
- Information indicating the need for training or emphasis on technical assistance.
- Any information suggesting the need for investigative action, changes in policies or procedures, or modifications.

1-101. Situational awareness of the operational environment gives leaders information on where to locate supply and transportation units to enable effective distribution. Materiel managers and transportation managers engage in the details associated within their specialty independently of one another. However, the combined activities of materiel and transportation managers align personnel, materiel, and movement to fill the requirements of supported units. Materiel managers coordinate the transportation mode selection based upon type, weight and cube, and destination of the materiel. Materiel managers rely upon movement control managers to synchronize multi nodal, multi modal transportation operations to move materiel around the battlefield. Materiel and transportation managers consider the following when selecting the mode (air, land, pipeline, or sea) of transportation, the supply route, and the nodes (warehouses, hospital centers and other patient treatment locations, depots, ammo SSAs, fuel SSAs, water SSAs, multi-class SSAs, and medical materiel SSAs:

- Supported unit mission.
- Support priorities.
- Threat level.
- Road networks and competing road priorities.
- Distance from source of supply to supported unit when deciding where to establish warehousing operations and supply points.

- Evacuation policy, available patient bed and operating room capacity, and special handling requirement (such as cold chain management).
- Availability of personnel and equipment (for example, trucks, helicopters, and material handling equipment).
- 1-102. The type, amount, availability of transportation assets, and resupply method depend on the location of supply points in relationship to the supported units. Coordination for transportation, ground and air, involves determining the time required for local haul and line haul round trips between supported and supporting units.
- 1-103. Units dispose of equipment according to each materiel life cycle sustainment plan. As a rule, however, unit supply and property book personnel need only turn in the serviceable, unserviceable (includes battle damaged materiel), or obsolete materiel to their supporting supply point. Supply point personnel follow the disposition instructions provided by national level materiel managers.

Note: Materiel management tasks are similar for all classes of supply and at all echelons. Manual and information technology business processes inherently feature decision support procedures used for informed supply planning and decisions.



Chapter 2

Logistics Information Systems

Information systems are the equipment and facilities used to collect, process, store, display, and disseminate information. These include computer hardware and software as well as policies and procedures governing information management processes. Information systems greatly enhance the ability to communicate status, monitor near-term capabilities, and anticipate requirements. This chapter describes the enterprise resource planning logistics information systems.

ENTERPRISE RESOURCE PLANNING

2-1. The key to effective decision making during large-scale combat operations is information management. All information generated by automated and manual systems have one overriding purpose, to enable the commander to make timely decisions during the turmoil and confusion of battle. A logistics information system utilizing enterprise resource planning technology and an on-the-ground customer service presence provides visibility, accuracy, timeliness, and availability to ensure responsive supply support process. The Army and its national suppliers employ an enterprise approach for several supply classes where logistics information systems rely upon a single database, communicated through a hub, from the tactical to the national level. This database containing all relevant data for each item in the inventory provides the Army with a way to identify the location of property from acquisition, through operation, to disposal.

Note: Successful sustainment leaders, planners, and materiel managers know the physical and the automated supply processes from foxhole to factory to manage and mitigate bottlenecks that could hamper supply support to Soldiers.

2-2. Information technology increases precision in the supply mission because it facilitates more accurate budgeting, planning and forecasting. Too often, however, leaders and supply personnel do not understand the supply system or the logistics information systems designed to streamline the supply support process. An ERP application allows integration of basic business processes (taking orders and processing requisitions, monitoring inventory levels, financial accounting, and human resource management) from the foxhole to the factory. Properly employed, automation arms commanders and their staffs with critical decision-making information in real time and near real time.

ARMY LOGISTICS ENTERPRISE

- 2-3. Materiel management functions in the Army logistics enterprise enable decision making versus simple data gathering. Figure 2-1 on page 2-2 illustrates how the Army logistics enterprise enables materiel and resource managers to order, move, track, account for, and maintain materiel. Tactical and strategic level logistics information systems work together in a web-based environment to provide leaders and materiel managers at all echelons with:
 - Timely and accurate asset visibility, because location, quantity, condition and movement of materiel are recorded in one database.
 - Readiness reporting capability, through real-time maintenance and supply status.
 - Control of property and financial resources, to include the capability to track and monitor costs.

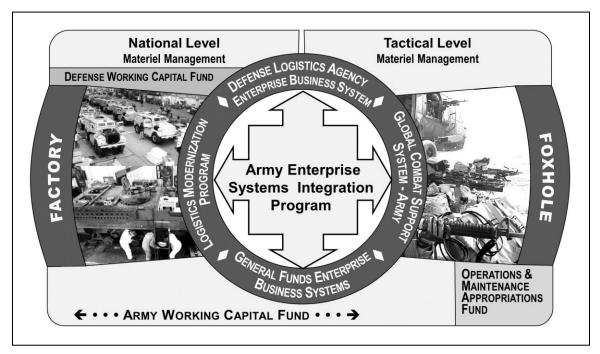


Figure 2-1. Army logistics enterprise

- 2-4. Class V and class VIII are managed in separate logistics information systems that interface directly with DLA's Enterprise Business System (EBS) and with General Fund Enterprise Business Systems (GFEBS).
- 2-5. Army MTOE units manually manage—
 - Class I rations during deployed operations.
 - Class III (bulk) during deployed operations.
- 2-6. Class X, comprised of material for nonmilitary programs such as agriculture and economic development (not included in classes I through IX), is managed according to its source of supply.

RELATED AUTOMATION

- 2-7. Automatic identification technology devices facilitate visibility beginning at the point where materiel enters the distribution system until it reaches the end user. AR 710-2 dictates that the source of supply attach automatic identification technology devices (such as radio frequency identification tags, memory buttons, smart cards, and barcode readers). Automatic identification technology is not an automated information system, but rather a peripheral of other technology. Its devices interact with ERP information systems to provide accurate and timely in-transit information, in near real-time. Automatic identification technology devices provide the ability to view the contents of shipments, enhancing the capability to track and redirect unit equipment and supplies that are in route.
- 2-8. Strategic, operational, and tactical level materiel managers use automated information systems and automated identification technology to integrate and synchronize the worldwide distribution management process. The Army goals for on-going research and development include synchronizing logistics information systems with tactical command and control systems. Current information systems undergo improvements and emerging information systems are under development to meet the objective of consistently providing timely and accurate information on the location of materiel as it moves around the battlefield. Automated information systems coupled with automated identification technology, includes the ground and satellite transmission stations, provides maneuver and sustainment leaders, transportation managers, and materiel managers with vital decision-making information.

- 2-9. The Combat Service Support Automated Information Systems Interface commonly referred to as CAISI provides network connectivity in deployed environments. It provides connectivity to user computers, computer devices, and voice over the internet protocol phone communications. The Combat Service Support Automated Information Systems Interface allows logistics information systems to network and transact in real-time, when connected to VSATs.
- 2-10. VSATs provide worldwide voice, video, and data communications capability for forward operations. Combat service support VSAT provide internet protocol router network access during deployed operations. Deployed materiel managers use the combat service support VSAT to connect to national materiel managers via satellite. It allows sustainment planners, materiel managers, and supported tactical units to share documents, collaborate and conduct meetings, and make voice over the internet protocol telephone calls.
- 2-11. Movement tracking is a transportation function that provides the real time capability, through satellite technology, to track the location of vehicles, communicate with vehicle operators, support in transit cargo identification and redirect movements based on battlefield requirements. This capability allows materiel managers to identify hazards, inform drivers of unit location changes, and improve efficiency of the supply process. Using positioning and communication satellites, transportation movement control and mode operators can determine the location of and communicate with transportation assets. This transportation technology enhances the supply system by providing real time positioning of vehicles and allowing communication between the vehicle operators and their leaders.

SINGLE ARMY LOGISTICS ENTERPRISE

2-12. Information management is the provision of relevant information to the right person, at the right time, in a usable format to facilitate situational awareness and decision-making. Leaders use procedures and information systems to collect, process, store, display, and disseminate information. Each transaction code tells a story by itself or with other transaction codes when viewed as a report. Logistics information systems enable sustainment decisions.

ARMY ENTERPRISE SYSTEM INTEGRATION PROGRAM

- 2-13. The Army Enterprise System Integration Program (AESIP) provides a single view of supply and financial transaction data for use in logistics decision making. AESIP serves as a hub that integrates materiel management functionality by linking business processes across the Army logistics enterprise. (Business processes are similar to critical tasks.) AESIP houses and enables the material master (stock record) to provide a single authoritative source for information for all material in the Army inventory.
- 2-14. The material master is based on the Federal Catalog System, commonly known as FEDLOG, and the Standard Study Number-Line Item Number Automated Management and Integrating System, commonly known as SLAMIS. The Federal Catalog System and the Standard Study Number-Line Item Number Automated Management and Integrating System are the authoritative sources for high level National Item Identification Number, commonly referred to as NIIN, information. Material master records contain the item description, budgeting, accounting, financial reporting, and performance-based supply management information for every item in the Army inventory. Unit supply, PBOs, SPOs, national suppliers, resource managers, and budget analysts use the same material master. AESIP allows material managers to trace every transaction associated with a single item throughout the life cycle of the item.

LOGISTICS MODERNIZATION PROGRAM

2-15. The USAMC Logistics Modernization Program supports the Army national-level logistics mission to develop, acquire, field and sustain the Army's equipment and services. The Logistics Modernization Program is a system, applications, and products based commercial-off-the-shelf ERP solution that manages and tracks orders and delivery of materiel from the Army Materiel Command to end users. It delivers an enterprise system for USAMC with a fully integrated suite of software and business processes, providing streamlined data on maintenance, repair and overhaul; planning; finance; acquisition; and on-weapon systems supplies, spare parts, services and materiel. The Logistics Modernization Program interfaces with the Army's financial and accounting system as well as 70 other DOD systems.

GLOBAL COMBAT SUPPORT SYSTEM - ARMY

- 2-16. GCSS-Army is the automated system used to execute the materiel management functions in multiclass supply support activities, unit supply rooms, property book offices, and maintenance supply rooms. Effective materiel managers relate each materiel management function with a GCSS-Army system task. Understanding this relationship between the functions and GCSS-Army transaction codes is critical and necessary to allow successful materiel management in the event of inoperable automated systems or degraded communications.
- 2-17. GCSS-Army is an integrated system allowing users to perform their missions regardless of their position in the Army structure or location throughout the world. Its core functionality is based upon Army Regulations, DA Pamphlet, field manuals, technical manuals, circulars, and bulletins, directives, policies, and procedures governing supply support activities, unit supply rooms, shop supply rooms, and PBOs. Materiel management personnel should be familiar with the ARs because these regulations apply in peace, in war, and in the ERP environment.
- 2-18. Enterprise-wide forecasting, planning, and scheduling tools provide the capability to track transactional data to link customers and suppliers for more efficient supply pipeline management. GCSS-Army functionality provides the ability to drill down within reports to display originating and supporting documentation. Commanders can verify operations readiness in real time and near real time by tracing logistics information originating with the supported unit's purchase order, through the entire supply pipeline until the unit receives the requested items. Materiel managers monitor and process on-hand stocks, forecasts, procurement, maintenance of stock, maintenance, disposal, retrograde, and distribution of materiel.

Two Plant Structure

- 2-19. GCSS-Army uses the concept of "plant" to manage materiel stocked by the SSA, the property book, maintenance activity, and the unit. In this instance, plant does not refer to a physical location; instead, a plant is an organizational unit for dividing an enterprise according to production, procurement, maintenance, and materiel planning. See figure 2-2.
- 2-20. There are two plants in GCSS-Army and each distinguishes how the materiel is funded—
 - The OMA fund provides funding for Plant 2000 for managing organizational supply in a unit, property book, and maintenance activity. Plant 2000 consists of the following supply business areas:
 - The property book business area is used for formal accounting for nonexpendable and durable unit property.
 - The unit supply business area is used to maintain and administer records for all classes of supply maintained within a given unit.
 - The AWCF funds Plant 2001 for managing materiel in an SSA.
- 2-21. Plant 2000 and Plant 2001 have separate materials requirements planning areas, commonly known as MRP. Material requirements planning is a requirements determination functionality and inventory control process used to manage sustainment and maintenance operations. Material requirements planning enables a common operating picture of materiel availability for leaders, material managers, and tactical finance managers.
- 2-22. Within the material requirements planning process, planned and exact requirements quantities trigger a net requirements calculation. Future requirements estimates follow from analysis of historical consumption. The system calculates net requirements for all requirement quantities. The system compares available warehouse stock or the scheduled receipts from purchasing and maintenance with planned independent requirements, and material reservations. In the case of a material shortage, the system creates procurement proposals.

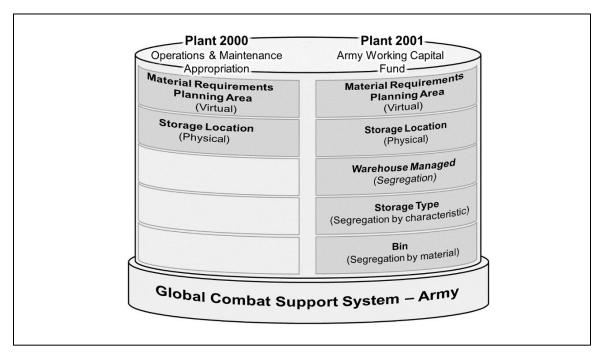


Figure 2-2. Two plant structure

- 2-23. Plant 2000 and Plant 2001 each contain storage locations. The storage location is a sub-location of the plant that carries a unique number that identifies the specific unit.
- 2-24. Plant 2001 has a warehouse management functionality that allows for further segregation of stock into storage type and bin. The storage type is a specific storage area that is consistent with the stored materiel, for example, bulk, rack, or yard storage. A bin is the actual physical location of any given materiel within the storage type. See ATP 4-42.2, *Supply Support Activity Operations*, for more information about storage types and bins.

Roles And Permissions

- 2-25. User roles are divided vertically between management and clerical and horizontally between inventory management and warehouse management responsibilities. Each user role can execute a specific combination of transactions and only those transactions relevant to that user's responsibility. Some users have interactive permission meaning they can change data in the system. Other users have view-only permissions, which allows them to view data but not change anything. Some users perform duties that require multiple user roles and permissions.
- 2-26. User assigned duty positions must be properly identified in the Electronic Military Personnel Office human resource system. The key to ensuring users receive access and proper authorization is to assign them to the correct paragraphs and line numbers. Each business area, or example, S-4, unit supply, or SSA, has its own set of roles. Roles are simply lists of transaction codes, such as reports, materiel movements, or finance functions that a system user has permission to execute. Roles have built-in authorizations that specify the units against which the user can execute transactions.

Force Element

2-27. A force element is an Army, Army Reserve, or Army National Guard organization, such as a brigade, regiments, troop, battery, company, or resource management office that is represented as an organizational unit in the GCSS-Army organizational structure. Every force element has a name, a system-generated, eight-digit identification number, and a unit identification code (UIC) based unit abbreviation. GCSS-Army downloads MTOE and TDA authorizations information for personnel and equipment directly from the Army

Force Management Support Agency. See AR 71-32, Force Development and Documentation, for more information about authorization documents.

Defense Forces and Public Security

2-28. The Defense Forces and Public Security module within GCSS-Army offers a multi-level system architecture that allows authorized users to review MTOE information relevant to logistical functions. The Defense Forces and Public Security module integrates Force Elements, authorized personnel, authorized materiel, accounting and funds management, materiel management and maintenance management. It also provides an automated trigger and control of business processes (purchase orders, maintenance tasks, budgeting) and an automated tool for adjusting logistical requirements and support relationships to support mission requirements.

Type Unit Code

2-29. Maintenance, property book, tactical SSA, unit supply, and installation SSAs are assigned a type unit code that restricts which classes of supplies can be ordered by the functional activities. The intent of these restrictions is to enforce supply discipline in an automated fashion.

Manager Review Tools

2-30. Reports serve as manager review tools. Commanders and materiel managers can filter and tailor any GCSS-Army report to meet specific needs. The following is a sample listing of tailorable, near-real time reports with recommended use of the report for monitoring supply and maintenance operations:

- Brigades can use an equipment status report to aggregate supply and maintenance data to give commanders readiness perspective.
- Battalions, using a maintenance dashboard, can reference equipment readiness data consisting of supply status, shop stock posture, fault management, and work order management to make critical materiel decisions.
- Commanders, unit supply sergeants, and property book officers can trace supply transactions
 through a daily activity report. Using the daily activity report capability, commanders can trace
 whether assets increased or decreased, serial number changes, reason for change, type of
 movement, beginning dates, ending dates, closed transaction dates, document numbers, form
 number and document identification codes.
- Commanders, property book officers, unit supply sergeants, the S-4, and G-4 use the unit equipment readiness listing to analyze equipment readiness for unit status reporting. Users can tailor this report to view equipment shortages, excess, supply status, document number and planned ship dates.
- SSA accountable officers and SPOs can use the customer satisfaction report to monitor compliance with Army performance metrics and to perform analytics for monitoring SSA performance.
- SSA accountable officers and SPOs can monitor SSA daily performance using the supply
 performance report. It displays supply statistics for one or more storage locations of supply support
 activities.
- SSA accountable officers and SPOs manage overage reparables using the overage reparable and recoverable management report.

AMMUNITION LOGISTICS INFORMATION SYSTEMS

2-31. The Army employs a separate group of information systems to manage ammunition. Like other commodity managers, ammunition materiel managers coordinate with transportation managers for the same limited resources and supply routes.

NATIONAL LEVEL AMMUNITION CAPABILITY

2-32. National Level Ammunition Capability commonly known as NLAC, provides web-based total asset visibility. The National Level Ammunition Capability receives its data from the Services' ammunition

management and visibility systems and the Department of Defense transportation and document tracking systems. The Army Deputy Chief of Staff, G–4 Ammunition Directorate, manages the National Level Ammunition Capability program. The National Level Ammunition Capability has decision support tools offering ammunition materiel managers information on the worldwide ammunition stockpile by location, serial number, lot number, condition code, Service ownership, and location within the transportation pipeline. For further information on the National Level Ammunition Capability, refer to DA Pamphlet 700-16, *The Army Ammunition Management System*.

TOTAL AMMUNITION MANAGEMENT INFORMATION SYSTEM

- 2-33. The Total Ammunition Management Information System (TAMIS) is a real-time, web-based enterprise information system that processes data defined by the Army as "unclassified but sensitive." TAMIS is the enterprise information system of record for establishing, maintaining, and managing requirements, authorizations, forecasts, requests, and expenditures of ammunition for the Army. TAMIS generates requirements and reports for annual training, operational loads, combat loads, sustainment loads, testing requirements, command stockage objectives, deploying units, readiness assessments, and Army, joint, and DOD studies.
- 2-34. TAMIS is a hierarchical based, internet-accessible system available from anywhere in the world. Each command level organization that has munitions requirements must have a TAMIS account and manager for its organization. For further information on TAMIS, refer to AR 5-13 *Total Army Munitions Requirements and Prioritization Policy*.

WORLDWIDE AMMUNITION REPORTING SYSTEM-MUNITIONS HISTORY PROGRAM

- 2-35. The Worldwide Ammunition Reporting System, commonly known as WARS, is a web-based, class V database. The Worldwide Ammunition Reporting System provides ammunition data used for budget estimates, supply control studies, munition allocations, testing requirements, distribution planning, procurement initiation, scheduling, readiness assessments, maintenance programs, stockpile reliability, ammunition serviceability, and various other logistical factors for conventional, missile, and rocket ammunition. The Worldwide Ammunition Reporting System—
 - Is the category I ammunition unit item tracking database that ensures category I ammunition items are accounted for from the factory to the target.
 - Provides data on ammunition stored at Army locations but owned by the other military Services.
- 2-36. The Worldwide Ammunition Reporting System is the single source of retail ammunition data for the Army financial statement. All ammunition supply points and ammunition transfer holding point s must communicate daily with the Worldwide Ammunition Reporting System and TAMIS servers. Ammunition materiel managers must establish accounts by providing the Worldwide Ammunition Reporting System S and TAMIS system administrators with the internet protocol address from either their local area network or very small aperture terminal system.

MUNITIONS HISTORY PROGRAM

- 2-37. The Munitions History Program, commonly known as MHP, is a subset of the Worldwide Ammunition Reporting System application. It supports the Army's ammunition surveillance mission. Surveillance ensures that the ammunition stockpile is safe to use and will function as designed. All organizations with an ammunition surveillance mission use Munitions History Program to maintain depot surveillance record information.
- 2-38. Munitions History Program provides ammunition materiel managers with a universal data management system that is fully deployable, easy to use, and maximizes flexibility for a true train-once-deploy-anywhere system Munitions History Program uses public key infrastructure authentication, which requires a DOD-approved certificate. Users request access from the headquarters' joint munitions command administrator.
- 2-39. The Munitions History Program provides the following core ammunition business processes—
 - Inspection module.
 - Ammunition surveillance information system module.

- Notices module.
- Ammunition condition report module.
- Worldwide ammunition repository program module.
- Ammunition stockpile reliability program module.
- Defense Ammunition Center application module.
- Joint hazard classification system.

2-40. The MHP application has an online help module explaining how to use the various modules and functionality within MHP. See also DA Pamphlet 700-16. *The Army Ammunition Management System*.

DEFENSE MEDICAL LOGISTICS ENTERPRISE SOLUTION

2-41. The Defense Medical Logistics - Enterprise Solution is the DOD medical logistics information technology portfolio used by the Military Health System in support of peacetime (at fixed medical treatment facilities) and operational medical support. Currently, this collection includes the Defense Medical Logistics Standard Support, Theater Enterprise Wide Logistics System, and the Joint Medical Asset Repository. The Defense Medical Logistics - Enterprise Solution is currently undergoing a technical refresh into single, webbased application (LogiCole) designed to support all DOD medical logistics functions. The Army will use LogiCole to execute theater-level materiel management for Class VIII and serve as the entry point for joint forces to pass Class VIII requests.

GENERAL FUND ENTERPRISE BUSINESS SYSTEMS

2-42. GFEBS is the financial asset and accounting management system that provides real time visibility of accounting data across the active Army, the Army National Guard and the Army Reserve. GCSS-Army receives budget distribution from GFEBS for budget execution within the GCSS-Army system. GFEBS interfaces with the Army logistics and strategic partner ERPs, through AESIP, to create the federated financial system of record. Under the federated approach to accounting, GCSS-Army coupled with GFEBS allows the Army to integrate logistics, financial, maintenance, property book and accounting data. Standardized transactional input and business processes across the Army enable common cost management activities through accurate and reliable budget execution.

DEFENSE LOGISTICS AGENCY INFORMATION SYSTEMS

2-43. Integrated logistics information systems provide DLA materiel managers the tools with which to respond to Army supply challenges. Since the Army and DLA share the same material master through AESIP, Army leaders and materiel managers can query DLA's stock status for planning and execution purposes.

ENTERPRISE BUSINESS SYSTEM

2-44. DLA employs the EBS, an ERP technology solution, to execute supply support to customers regardless of whether the action is performed in-house or by DLA suppliers. The EBS interfaces with the Army logistics enterprise and the Army's financial system through the AESIP hub to maintain oversight of DLA owned inventory. Army bulk fuel management is not automated at the Army level; therefore, bulk fuel requirements manually enter the EBS except for air, sea, and ground government purchase card transactions. All Army purchases contain billing information through the DODAAC that ensures the transaction is accounted for in GFEBS, through the EBS interface.

SUBSISTENCE TOTAL ORDER AND RECEIPT ELECTRONIC SYSTEM

2-45. The Subsistence Total Order and Receipt Electronic System enables dining facility managers to order subsistence items through DLA Troop Support directly from subsistence prime vendors for the AO. Army Food Management Information System accounts are created in the Subsistence Total Order and Receipt Electronic System to establish class I management and accountability. Dining facilities and class I SSAs fill their entire grocery list, without having to request milk, bread, and other grocery items from different vendors. Vendors update catalogs weekly with stock item numbers, item descriptions, item prices, and other item data.

Vendors fill orders and ship to the customer's delivery location (dining facility, warehouse, depot, hospital, or ship). All price, item, and receipt information passes to the customer's food management system and the Defense Subsistence Offices to adjust inventory and financial records.

ENTERPRISE EXTERNAL BUSINESS PORTAL

2-46. The Enterprise External Business Portal is the single point of access for DLA customers and business partners of defense fuel supply points and service control points. Bulk fuel customers gain access to the Enterprise External Business Portal through the Account Management and Provisioning System, the method used by DLA to grant internal and external users access to DLA applications.

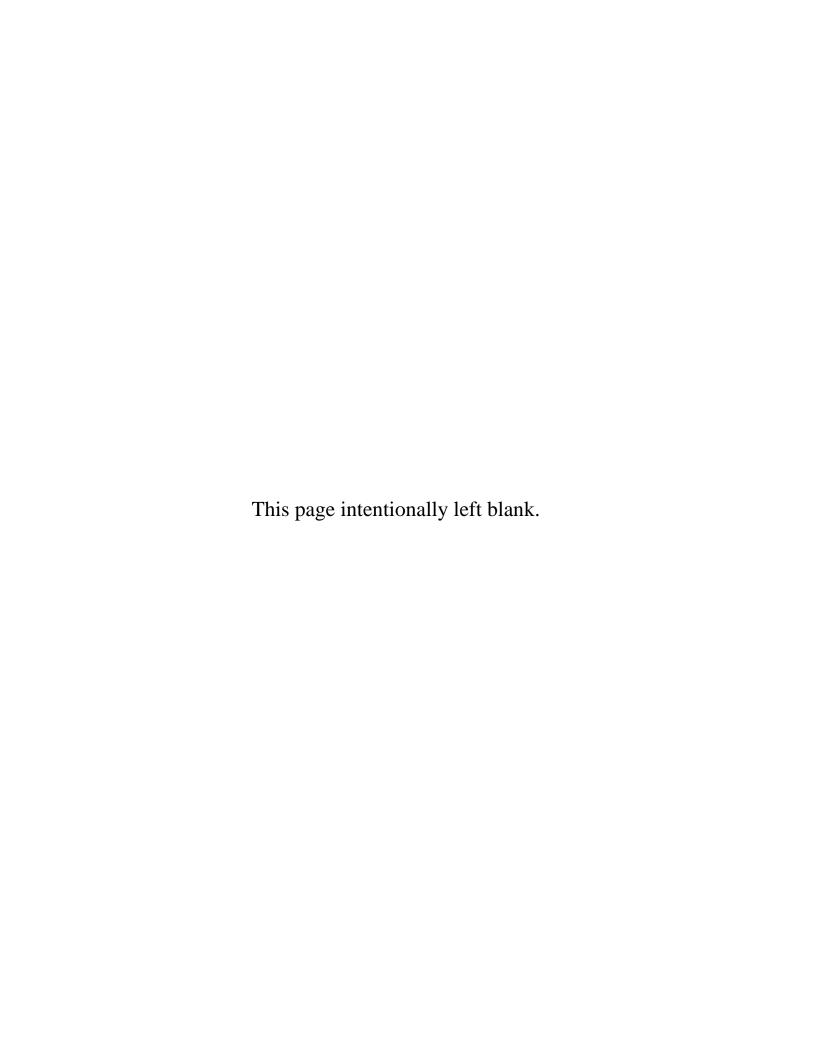
2-47. Army units receives bulk fuel from the vendor under the direct vendor delivery process or directly from DLA. In either case, Enterprise External Business Portal allows supported units to update delivery location conditions, place customer direct sales orders and view reports. Supported units require access to the Procurement Integrated Enterprise Environment formerly known as Wide Area Work Flow to execute the goods receipt. Tactical financial managers require access to the Enterprise External Business Portal to view and update line of accounting information. Supported units using the Enterprise External Business Portal contact the DLA-Energy help desk to add, remove, and change their DODAAC, as necessary, to ensure timely delivery and accurate billing for bulk fuel.

SHIPS' BUNKERS EASY ACQUISITION CARD ORDER MANAGEMENT SYSTEM

2-48. The ships' bunkers easy acquisition card is the solution to DLA's search for an efficient marine fuel procurement process. It is designed to ensure quality fuels are globally available to its valued customers. The ships' bunkers easy acquisition card applies a technologically advanced, web-based solution to the marine fuel industry. It allows for efficient transaction processing as well as quicker reimbursements for merchants. The web-based program allows secure ordering, receipt, and invoice mechanism for vessels to initiate fuel requests online. The web-based process is the first electronic marine fuel procurement system that eliminates paper without sacrificing documentation. Customers and merchants receive 24-hour customer support, detailed management reports, and real-time transaction data.

DEFENSE FINANCE AND ACCOUNTING SERVICE INFORMATION SYSTEM

2-49. Soldiers assigned to order bulk fuel from DLA or as contracting officer representatives (COR) would use Procurement Integrated Enterprise Environment. It provides the technology for government contractors and authorized DOD personnel to generate, capture, and process receipt and payment-related documentation, via interactive web-based applications. Authorized DOD users are notified of pending actions by e-mail and are presented with a collection of documents required to process the contracting or financial action. Procurement Integrated Enterprise Environment helps to mitigate interest penalty payments due to lost or misplaced documents and highlights vendor offered discounts so that the DOD benefits on both fronts while streamlining the whole process.



Chapter 3

Army Operations

The levels of warfare are strategic, operational, and tactical. Levels of command, size of units, types of equipment, or types of forces do not define the levels of war; the effect or contribution of actions on achieving strategic, operational, or tactical objectives define those levels. This chapter provides a general overview of Army operations and the delivery of supply support during large-scale combat operations.

LARGE-SCALE COMBAT OPERATIONS

- 3-1. Populations influence and are influenced through interactions that are unpredictable and potentially uncontrollable. Army operations take place on land among humans with fundamental disagreements. Propaganda, deception, disinformation, and the ability of individuals and groups to influence disparate populations through social technologies reflect the increasing speed of human interaction. Leaders should consider all factors that make up their operational environment, including the social factors that initiate and sustain a conflict. Failure to do so leads to faulty plans that do not address the desired end state.
- 3-2. Gaining support requires a combination of coercion and incentives, the exact mix of which is unique to each case. During operations to shape operational environments and prevent conflicts, the scale is weighted heavily towards incentivizing desired behavior. However, in large-scale combat operations, coercion may play a larger role. *Large-scale combat operations* are extensive joint combat operations in terms of scope and size of forces committed, conducted as a campaign aimed at achieving operational and strategic objectives (ADP 3-0). Regardless of the context, U.S. forces always operate consistently with international law and its rules of engagement.
- 3-3. Threats to U.S. interests throughout the world are countered by the ability of U.S. forces to respond to a wide variety of challenges along a conflict continuum that spans from peace to war. U.S. forces conduct a range of military operations to respond to these challenges. The conflict continuum does not proceed smoothly from stable peace to general war and back. For example, unstable peace may erupt into an insurgency that quickly sparks additional violence throughout a region, leading to a general war. (See JP 3-0, *Joint Operations*, for the specific types of joint operations conducted across the conflict continuum.)

OPERATIONAL FRAMEWORK

- 3-4. An *operational framework* is a cognitive tool used by commanders and staffs for visualizing and describing the application of combat power in time, space, purpose, and resources in the concept of operations (ADP 1-01). The operational framework provides a logical architecture for visualizing and describing operations, by echelon, within the context of an AO, area of influence, and area of interest. Commanders decide subordinate echelons' responsibilities, permissions, and restrictions by thinking through the operation. Using operational framework in conjunction with operational graphics, commanders develop shared visualization among subordinate echelons by ensuring an understanding of commander's intent necessary for the exercise of initiative at every echelon.
- 3-5. The operational framework has four components. First, commanders are assigned an AO for the conduct of operations, from which, they assign AOs to subordinate units based on their visualization of the operation. Units should be assigned AOs commensurate with their ability to influence what happens within that AO. Second, within their assigned AO, commanders designate deep, close, support, and consolidation areas to describe the physical arrangement of forces in time, space, and purpose. Third, commanders establish decisive, shaping, and sustaining operations to further articulate an operation in terms of purpose. Finally, commanders designate the main and supporting efforts to identify the shifting and prioritization of resources.

When establishing their operational framework, commanders and staffs consider the physical, temporal, virtual, and cognitive aspects of their own AO, their higher echelon's AO, and subordinate AOs. The aspects of an operational framework vary in terms of focus and priority depending upon the echelon, force capabilities, and the operational environment.

CLOSE, DEEP, SUPPORT, AND CONSOLIDATION AREAS

- 3-6. Commanders designate close, deep, support, and consolidation areas to describe the physical arrangement of forces in time and space. Commanders designate a close area and a support area for every decisive action. They designate a deep area and consolidation area as required.
- 3-7. The *deep area* is where the commander sets conditions for future success in close combat (ADP 3-0). Operations in the deep area involve efforts to prevent uncommitted enemy forces from being committed in a coherent manner. A commander's deep area generally extends beyond subordinate unit boundaries out to the limits of the commander's designated area of operations. The purpose of operations in the deep area is often tied to setting conditions for future events in time and space.
- 3-8. The *close area* is the portion of the commander's area of operations where the majority of subordinate maneuver forces conduct close combat (ADP 3-0). Operations in the close area are within a subordinate commander's area of operations. Commanders plan to conduct decisive operations using maneuver and fires in the close area, and they position most of the maneuver force in it. In the close area, depending on the echelon, one unit may conduct the decisive operation while others conduct shaping operations to fix a specific enemy formation or defeat remnants of by-passed or defeated enemy forces.
- 3-9. A *support area* is the portion of the commander's area of operations that is designated to facilitate the positioning, employment, and protection of base sustainment assets required to sustain, enable, and control operations (ADP 3-0). It is where most of the echelon's sustaining operations occur. Within a division or corps support area, a designated unit such as a brigade combat team (BCT) or maneuver enhancement brigade provides area security, terrain management, movement control, mobility support, clearance of fires, and tactical combat forces for security.
- 3-10. The *consolidation area* is the portion of the land commander's area of operations that may be designated to facilitate freedom of action, consolidate gains through decisive action, and set conditions to transition the area of operations to follow on forces or other legitimate authorities (ADP 3-0). Commanders establish a consolidation area, during offensive operations, as the friendly force gains territory, to exploit tactical success while enabling freedom of action for forces operating in the other areas. A consolidation area has all the characteristics of a close area, with the purpose of consolidating gains through decisive action once large-scale ground combat has largely ended in that area of operations.

PHYSICAL CONSIDERATIONS

3-11. Physical considerations include geography, terrain, infrastructure, populations, distance, weapons ranges and effects, and known enemy locations. They also include other related factors that influence the use of friendly or enemy capabilities, such as climate and weather. When considering physical aspects, commanders and staffs look beyond the land domain. They look into each domain for relevant physical aspects and pay particular attention to the physical dimension of the information environment.

TEMPORAL CONSIDERATIONS

3-12. Temporal considerations relate to those things related to time, including when capabilities can be used, how long they take to generate and employ, and how long they should be used to achieve desired effects. Temporal considerations largely inform commanders and staffs about when to start necessary movement, activities, or requests for effects at each echelon. Temporal considerations cross the physical domains and the dimensions of the information environment. For example, understanding the cognitive dimension of the information environment helps commanders determine operational tempo to prevent an enemy from making timely decisions.

VIRTUAL CONSIDERATIONS

3-13. Virtual considerations are those pertaining to activities, capabilities, and effects relevant to the layers of cyberspace. When not addressed, virtual capabilities provide a form of sanctuary for adversaries and enemies. Commanders assign responsibilities, priorities, and desired effects across the operational framework. They consider what entities are present, what requires protection, what should be attacked, and the effects they want to generate. Friendly examples include the availability and methods of employment for offensive and defensive cyber capabilities, as well as other capabilities that can be used to target a threat. Threat examples include the identification of virtual systems, entities, formations and persons for targeting or countering in order to enable friendly freedom of action. Virtual entities or activities can include banking, virtual organizations, and recruiting that generate effects in the physical world.

COGNITIVE CONSIDERATIONS

3-14. Cognitive considerations relate to people and how they behave. They include unit morale and cohesiveness, as well as perspectives and decision making. Cognitive considerations should account for the current situation and desired outcomes to ensure tasks, purpose, and end state are aligned. Commanders consider the personal capabilities of their subordinates and adversaries and the attitudes of civilian populations relevant to operations. Physical, virtual, and information related capabilities all influence friendly, adversary, and enemy behavior. Cognitive considerations relate to decision making, friendly and enemy, and the perceptions and behavior of populations and the enemy.

JOINT OPERATIONAL AREAS

- 3-15. Army forces are assigned AOs within a joint organizational construct. As such, it is important that Army commanders and staffs understand the options joint force commanders (JFCs) have in organizing operational areas. Joint operational areas include:
 - AORs.
 - Theater of war.
 - Theater of operations.
 - JOA.
 - Joint special operations area (JSOA).
 - Joint security area (JSA).
 - Amphibious operational area.
 - AO.

AREA OF RESPONSIBILITY

- 3-16. The Unified Command Plan that defines geographic responsibilities for a GCC establishes an AOR. AOR is synonymous with the term theater and should not be confused with other operational area terms such as theater of operation or AO. Only a GCC is assigned an AOR. Within an AOR, the combatant commander exercises command authority over assigned forces. All U.S. forces within an AOR (assigned, attached, operational control (OPCON), or in transit through the region) fall under the control of that GCC for as long as they remain in the AOR.
- 3-17. GCCs conduct operations in their assigned AORs. When warranted, the President, Secretary of Defense, or GCCs may designate a theater of war or a theater of operations for each operation. GCCs can elect to control operations directly in these operational areas, or may establish subordinate joint forces for the purpose, while remaining focused on the broader AOR.

THEATER OF WAR

3-18. A theater of war is a geographical area established for the conduct of major operations and campaigns involving combat. A theater of war is established primarily when there is a formal declaration of war or it is necessary to encompass more than one theater of operations (or a JOA and a separate theater of operations) within a single boundary for the purposes of command and control, sustainment, protection, or mutual

support. A theater of war does not normally encompass a GCC's entire AOR, but may cross the boundaries of two or more AORs.

THEATER OF OPERATIONS

3-19. A theater of operations is an operational area defined by the GCC for the conduct or support of specific military operations. A theater of operations is established primarily when the scope of the operation in time, space, purpose, and employed forces exceeds what a JOA can normally accommodate. More than one joint force headquarters can exist in a theater of operations. A GCC may establish one or more theaters of operations. Different theaters will normally be focused on different missions. A theater of operations typically is smaller than a theater of war, but is large enough to allow for operations in depth and over extended time periods. Theaters of operations are normally associated with major operations and campaigns and may cross the boundary of two AORs.

JOINT OPERATIONS AREA

3-20. For operations somewhat limited in scope and duration, or for specialized activities, the commander can establish a JOA. A JOA is an area of land, sea, and airspace, defined by a GCC or subordinate unified commander, in which a JFC (normally a joint task force conducts military operations to accomplish a specific mission). JOAs are particularly useful when operations are limited in scope and geographic area or when operations are to be conducted on the boundaries between theaters.

JOINT SPECIAL OPERATIONS AREA

3-21. A JSOA is an area of land, sea, and airspace assigned by a JFC to the commander of special operations forces to conduct special operations activities. It may be limited in size to accommodate a discreet direct action mission or may be extensive enough to allow a continuing broad range of unconventional warfare operations. A JSOA is defined by a JFC who has geographic responsibilities. JFCs may use a JSOA to delineate and facilitate simultaneous conventional and special operations. The joint force special operations component commander is the supported commander within the JSOA.

JOINT SECURITY AREA

3-22. A JSA is a specific surface area, designated by the JFC as critical that facilitates protection of joint bases and supports aspects of joint operations such as lines of communication, force projection, movement control, sustainment, command and control, airbases and airfields, seaports, and other activities. JSAs are not necessarily contiguous with areas actively engaged in combat. JSAs may include intermediate support bases and other support facilities intermixed with combat elements.

AMPHIBIOUS AREA OF OPERATIONS

3-23. An amphibious AO is a geographic area within which is located the objective(s) to be secured by the amphibious force. This area must be of sufficient size to ensure accomplishment of the amphibious force's mission and to provide sufficient area for conducting necessary sea, air, and land operations.

SUPPLY AND FIELD SERVICES SUPPORT STRATEGIC ROLES

3-24. Supply support and field services play a critical role in supporting the Army's primary mission to organize, train, and equip its forces to conduct prompt and sustained land combat to defeat enemy ground forces and seize, occupy, and defend land areas. The Army accomplishes its mission by supporting the joint force through four strategic roles: shape operational environments, prevent conflict, conduct large-scale ground combat, and consolidate gains. Across all four strategic roles, materiel managers ensure materiel is available and mission capable because Combat power is reflected in the assets commanders have to employ. Accountability for and maintenance of materiel directly correlates to combat power.

SHAPE THE OPERATIONAL ENVIRONMENT

- 3-25. Shaping the operational environment consists of long-term military engagements, security cooperation, and deterrence missions, tasks, and actions intended to assure friends, build partner capacity and capability, and promote regional stability. Operations to shape support the GCC's theater campaign plan or the theater security cooperation plan. These operations help counter actions by adversaries that challenge the stability of a nation or region.
- 3-26. Army operations to shape bring together all the activities intended to promote regional stability and to set conditions for a favorable outcome in the event of a military confrontation. During operations to shape, the Army provides trained and ready forces to GCCs in support of their theater campaign plans. The theater army and subordinate Army forces also assist the GCC in building partner capacity and capability and promoting stability across the AOR. Army operations to shape are continuous throughout a GCC's AOR and occur before, during, and after a joint operation within a specific operational area.
- 3-27. Sustainment and maneuver leaders build organizational readiness during operations to shape. Senior leaders reinforce and verify sustainment practices by conducting rigorous emergency deployment readiness exercises and periodic logistics terrain walks. An organization's readiness increases through an effective Command Supply Discipline Program. Standard battle rhythm events, such as brigade logistics synchronization meetings, sustainment readiness reviews, and theater logistics working groups are tools for tracking readiness.
- 3-28. The Army pre-positions equipment in areas to allow national leaders to respond quickly to contingencies. As part of this effort, materiel managers develop supply support plans using the following planning considerations:
 - Requirements and capabilities according to troop strength, types of equipment, and numbers of each type of equipment.
 - Amount and type of each supply class to be distributed.
 - Facilities, equipment, and units required to support distribution and storage operations.
 - Suitable terrain for each supply class's distribution operations.
 - Potential storage locations.
 - Potential transportation modes (air, pipeline, rail, motor, boat).
 - Requirements for terminals, offshore unloading facilities, and distribution points.
 - Support for construction, maintenance, repair, and rehabilitation of terminals, tank farms, pump stations, and pipelines for bulk petroleum distribution operations.
 - Availability of units and personnel capable of constructing, installing, and maintaining supply points (per commodity).
 - Applicable national, state, local, and host nation environmental and labor laws.
 - Army and joint health service capabilities, endemic health threats, availability of host nation or coalition medical facilities.
 - Identify and validate sister services and allied nations water requirements.
 - Consider the requirement for individual and small unit purification systems, and commercial offthe-shelf systems to support non-conventional units.
 - Consider geospatial requirements and identification of water sources to include surface and ground water (wells) within geographical area.
 - Identify probable daily water production based upon time-phased force deployment data and region.
 - Identify preventive medicine requirements
 - Account for limited petroleum, oil, and lubricants active duty force structure to support early entry operations.
 - Identify and validate sister services and allied nations fuel requirements.
 - Identify petroleum, oil, and lubricants storage and distribution units required to support mission.
 - Identify over-the-shore requirements.

3-29. Supply support organizations may deploy with special operations forces, civil affairs, or BCT conducting operations to shape. The type and quantity of deployed supply organizations depends on specific mission requirements.

PREVENT CONFLICT

- 3-30. Operations to prevent conflict deter adversary actions contrary to U.S. interests are typically conducted in response to activities that threaten unified action partners and require the deployment or repositioning of credible deterrent forces. Operations to prevent conflict are tailored in scope and scale to achieve a strategic or operational level objective. These operations may be a stand-alone response to a crisis, as in a non-combatant evacuation operation, or as part of a larger joint operation. The ability of an Army force to prevent stems from an adversary's realization that further escalation would result in military defeat.
- 3-31. Army operations to prevent conflict include all activities to deter an adversary's undesirable actions. As an extension of operations to shape, these operations raise the potential costs of continuing activities to adversaries that threaten U.S. interests. Prevent activities are generally weighted toward actions to protect friendly forces, assets, and partners, and to indicate U.S. intent to execute subsequent phases of a planned operation. As part of a joint force, Army forces may have a significant role in the execution of directed flexible deterrence options. Army prevent activities may include mobilization, force tailoring, and other predeployment activities; initial deployment into a theater, to include echeloning command posts; employment of information collection assets; and development of intelligence, communications, sustainment, and protection infrastructure to support the JFC's concept of operations. Army operations to prevent correspond to the deter phase in a joint operation.
- 3-32. Sustainment priorities in support of operations to prevent emphasize operational readiness, but also extend to projecting sustainment assets forward. Additional planning considerations and synchronization of assets are required for sustainment capabilities that reside in the Army Reserve and National Guard component. Sustainment planners working on setting the theater consider the following:
 - Requirements and available resources.
 - Research and experimentation on the design of supplies and equipment.
 - Procurement, through purchase or manufacture, of supplies and equipment.
 - Provision for and operation of storage for all commodities.
 - Maintenance, repair, and disposal of all classes of supply.
 - Transportation of materiel and personnel.
 - Operation of ports.
- 3-33. Concurrent with actions intended to confront and deter an adversary, the theater army commander sets the theater to enable land power to exert its full capabilities. This task includes extending the existing signal and network infrastructure to integrate the land component command and its supporting units. Setting the theater may include negotiation and contracting through the GCC with adjacent nations to establish tactical staging bases and realignment of security cooperation efforts based on emerging threats. The theater army requests forces to conduct prevent activities and employs theater-level units required to support prevent activities.

PREVAIL IN LARGE-SCALE COMBAT

- 3-34. Large-scale combat operations executed through simultaneous offensive, defensive, and stability tasks require continuously generating and applying combat power, often for extended periods. Combat power is the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time.
- 3-35. During large-scale combat operations, commanders rely on supply support to provide the materiel for building and sustaining combat power. Distribution managers at echelon meet requirements and priorities by managing the distribution infrastructure to optimize the supply pipeline flow. Materiel managers analyze data and reports to project the distribution pipeline volume, flow rate, contents, and port requirements. They verify the efficiency of supply operations to identify trends in order to adjust pipeline flow and respond to changing operational requirements. Materiel managers coordinate retrograde of materiel, redirection, frustrated cargo,

pre-planned and configured loads and work to establish theater-specific, time-definite delivery schedules. Materiel managers ensure effective cross leveling, efficient retrograde, and redeployment of materiel by identifying problem areas in the distribution pipeline. Materiel managers work with transportation managers to identify receiving and shipping backlogs due to having to re-routes, transportation shortages, maintenance problems, and transportation personnel shortages. Materiel managers have the capability to track the movement of all commodities with radio frequency identification technology, see chapter 2.

3-36. The Army Health System provides operational management of an integrated system of task-organized medical capabilities to ensure uninterrupted health service support across all roles of care from point of injury to definitive care. See ATP 4-02.3, *Army Health System Support to Maneuver Forces* for medical planning considerations for AHS support to unified land operations.

Offensive Operations

3-37. Bulk fuel and ammunition are the most important supplies in the offense. After receiving the mission, materiel managers analyze the commander's intent to find constraints and risks that may affect materiel distribution. They forecast requirements for all classes of supply to develop the distribution plan and establish a distribution system that yields the highest amount of control, capacity, and visibility possible. As they analyze the AO materiel managers develop courses of action, prepare updates to the distribution plan, and synchronize the distribution plan with the operational plan. Planning considerations include—

- Battle rhythm. Priority of support is to the main effort with plans made to support follow-on actions.
- Inconsistent or inaccurate LOGSTAT reporting from supported units.
- Requirement to support to allies.
- Severe climate.
- Aerial resupply of critical items to the exploitation force securing deep objectives.
- Throughput of obstacle breeching and bridging materiel.
- Priority of field services during movement. Mortuary affairs, aerial delivery, and food service are critical field services even during a movement.
- Supply points and maintenance activities dispersed on the battlefield.
- Mobile supply points and maintenance activities to enable the expeditionary force.
- Preplanned and preconfigured push packages of essential items.

3-38. If offensive momentum is not maintained, the enemy may recover from the shock of the first assault, gain the initiative, and mount a successful counterattack. Materiel managers support the offensive by anticipating that priorities and requirements may change. The following techniques add flexibility to the concept of support—

- Planning refueling and resupply operations based on anticipated support needs of each subordinate unit.
- Integrating refueling and resupply operations with the scheme of maneuver to ensure accurate timing and to avoid interfering with likely or planned maneuver actions.
- Planning locations for refueling and resupply operations in covered and concealed locations as far forward as possible.
- Planning triggers for activating and deactivating logistics release points based on the maneuver unit's movement and execution.
- Coordinating the locations, displacements, and routes for supply support units to maintain responsive support.
- Ensuring tactical plans include main supply route security.
- Ensuring that all forward stocks are built up and the class III (bulk) supply point is prepared to move forward rapidly and set up tactical refueling points.
- Planning refueling operations based on the consumption estimates for each individual supported unit
- Planning fuel pushes synchronized with the supported commander's intent.
- Ensuring supported units are fully supplied with class V prior to the operation.

- Plan for resupply during the operation to reduce the distance that supporting units must travel for resupply.
- Planning for ammunition resupply to arrive at designated location during tactical pauses.
- Planning for rapid repair and return of nonmission capable equipment to support the operation.
- Maintaining reliable connectivity (or means to communicate) to rapidly replenish class IX stockage levels.

Defensive Operations

- 3-39. The primary purpose of defensive operations is the defeat of an enemy attack. The defense must create conditions that permit the survival of the initial shock of an attack. Emphasis with the defense is to halt the enemy, and then exploit the initiative and go on the offensive. Sustainment considerations are significant in support of defensive operations. Support of the defense has several characteristics:
 - Supply activity is greatest in the preparation stage.
 - Supply points and maintenance activities positioned far enough in the rear to be out of the flow of battle and relatively secure.
 - Emphasis on keeping supply and evacuation routes open.
- 3-40. During defensive combat operations, commanders need a robust network of supply support organizations extending from the ports of debarkation to the forward line of troops. All sustainment echelons involved in the operation are responsible for commanding and controlling these supply organizations and for conducting materiel distribution management because the demand and priority for each commodity vary with each operation. Effective materiel managers—
 - Anticipate increased consumption of ammunition and bulk fuel.
 - Anticipate emergency ammunition resupply requirements to replenish and provide ammunition stocks.
 - Anticipate that the demand for decontaminates and chemical protection equipment may also increase.
 - Estimate the requirements for class IV (obstacle material) and push materials forward early to facilitate defensive preparations.

CONSOLIDATE GAINS

- 3-41. Army operations to consolidate gains include activities to make enduring any temporary operational success and to set the conditions for a transition of control to legitimate civil authorities. Consolidation of gains is an integral and continuous part of armed conflict, and it is necessary for achieving success across the range of military operations. Army forces deliberately plan to consolidate gains continually during all phases of an operation. In some instances, Army forces will be in charge of integrating forces and synchronizing activities to consolidate gains. In other situations, Army forces will be in support. Army forces may conduct stability tasks for a sustained period over large land areas. While Army forces consolidate gains throughout an operation, consolidating gains becomes the focus of Army forces after large-scale combat operations have concluded. Army operations to consolidate gains correspond with stabilize and enable civil authority phases of a joint operation.
- 3-42. Throughout consolidation of gains operations, deep and close operations are ongoing; close, combined arms maneuver may even be ongoing in the consolidation area as Army units engage bypassed enemy forces. All such operations require extensive supply support. Materiel managers continue to conduct supply distribution management to build and sustain combat power. Once all strategic objectives are met and combat operations are completed, consolidation of gains may become the priority effort. Consolidation of gains activities may encompass a lengthy period of post conflict operations prior to redeployment.

SUPPLY SUPPORT AND THE LEVELS OF WARFARE

3-43. The tactical level of warfare involves the employment and ordered arrangement of forces in relation to each other using the art and science of tactics. Tactics includes the planning and execution of battles, engagements, and activities to achieve military objectives assigned to tactical units. Small-unit leaders use a

methodology termed troop-leading procedures for detailed planning and preparation. The operational level links the tactical employment of forces to national and military strategic objectives, with the focus being on the design, planning, and execution of operations. Leaders and staffs use skill, knowledge, experience, creativity and judgment to understand and visualize approaches to developing detailed plans. Detailed planning involves the scheduling, coordination, and technical problem resolution associated with moving, sustaining, and synchronizing the actions of the force. At the strategic level, national leaders develop an idea or set of ideas for employing the instruments of national power (diplomatic, informational, military, and economic) to achieve theater, national, and multinational objectives. Strategic leaders use skill, knowledge, experience, creativity, and judgment to understand and visualize approaches to solving problems.

3-44. Strategic, operational, and tactical distribution integrators ensure systems and processes are in place to monitor the flow of materiel, equipment, and personnel. They evaluate the distribution process for responsiveness, efficiency and robustness. Responsiveness is measured as the ability to meet supply requirements by the required delivery time and location in support of decisive action operations. Efficiency is measured as the ability to optimize the distribution system with the assets available to support mission requirements. Robustness is measured by the ability to continue to provide support to units in a changing operational environment. Figure 3-1 depicts notional support operations in a developed joint operations area.

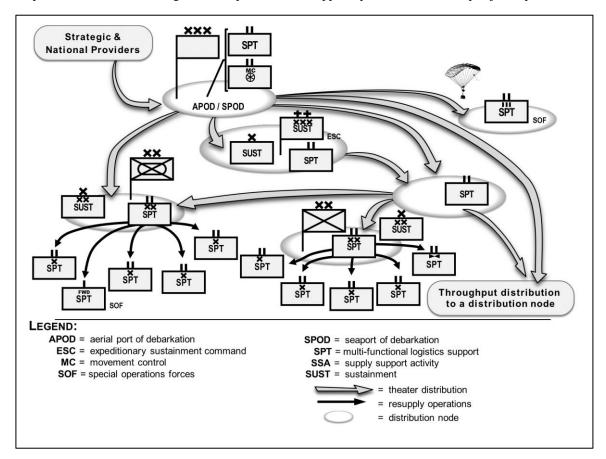


Figure 3-1. Notional theater distribution

3-45. The levels of warfare model the relationship between national objectives and tactical actions. There are no fixed limits or boundaries between these levels, but they help commanders visualize a logical arrangement of operations, allocate resources, and assign tasks to appropriate commands. Echelon of command, size of units, types of equipment, and types and location of forces or components may often be associated with a particular level, but the strategic, operational, or tactical purpose of their employment depends on the nature of their task, mission, or objective. See ADP 1-01, *Doctrine Primer*, for more information about the levels of warfare.

SUPPLY SUPPORT

3-46. In the context of large-scale combat operations, a campaign is a series of related major operations achieving strategic and operational objectives within a given time and space. A major operation is a series of tactical actions, such as battles, engagements, and strikes, and it is the primary building block of a campaign. Effective supply support enables the Army forces to meet worldwide challenges from a full range of threats. The levels of warfare define and clarify the relationship between strategic, operational, and tactical elements. Despite advances in technology, the levels of warfare remain useful because decisions at one level always affect the other levels. Figure 3-2 illustrates the often-blurred lines between strategic, operational, and tactical warfare. The figure is not all inclusive of a potential battlefield because the intent is to highlight the levels of supply support as having no finite limits or boundaries.

3-47. DSBs, CSSBs, division sustainment support battalions (DSSB), and BSBs provide tactical supply support for battles and engagements. Supply support at the operational level integrates with the strategic echelon through the sustainment brigade, ESC, and TSC. These organizations, working in concert, link all levels of supply from the tactical to strategic to meet mission requirements.

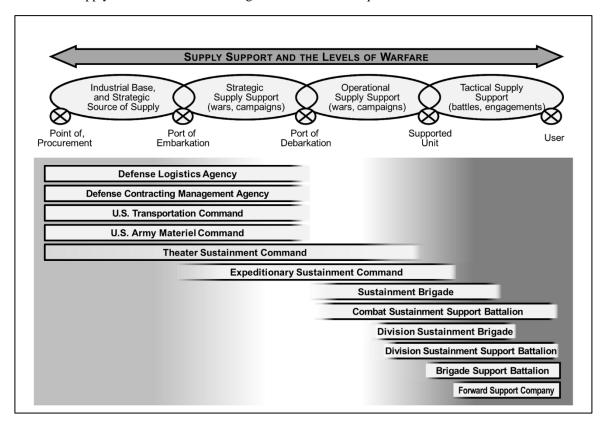


Figure 3-2. Supply support and the levels of warfare

STRATEGIC SUPPLY

3-48. The strategic level is that level at which a nation, often as one of a group of nations, determines national and multinational security objectives and guidance, and develops and uses national resources to accomplish them. The GCC has a strategic perspective and is responsible for unified actions that integrate joint, multinational, and interagency activities. The theater strategy links national strategy to operational activities within the theater.

3-49. Strategic supply includes the management activities of commercial, civilian, and military suppliers, depots, arsenals, plants, and factories. The USAMC LCMCs and the DLA business units manage supplies at the strategic level. Strategic supply links the economic base (people, resources, and industry) to military

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operations in a theater. At the strategic level, materiel management focuses on determining realistic, supportable resource requirements; acquiring, packaging, managing, and positioning of supplies; and coordinating movement of materiel into, within and out of the theater.

- 3-50. The TSC is the primary sustainment headquarters linking materiel management executed at the strategic level with the operational level force. The TSC, focused on supporting the AOR, works in concert with strategic partners, such as United States Transportation Command (USTRANSCOM), DLA and USAMC, to align national capabilities and resources to achieve strategic objectives within a specific theater.
- 3-51. Quartermaster supply companies operate in the joint security area and support the strategic supply and theater distribution system while in theater. Supply companies operating at ports of debarkation receive, store, and distribute supplies received from strategic providers to inland supply units. These companies are normally attached to a CSSB operating in the joint security area.

OPERATIONAL SUPPLY

- 3-52. The operational level is the level at which campaigns and major operations are conducted and sustained to accomplish strategic objectives within theaters or areas of operations. The operational level links the tactical employment of forces to strategic objectives. Commanders of Army Service component command (ASCC) and Army forces commanders within joint task forces normally operate at this level. Operational supply links strategic supply to tactical supply on the battlefield ensuring success at the tactical level. Operational supply strives to balance strategic planning requirements with the needs of tactical operations in joint and combined campaigns, major operations, and other military operations.
- 3-53. Materiel managers at the operational level play an integral role in linking strategic resources to tactical requirements. The ESC and the sustainment brigade are the primary sustainment headquarters focused on executing materiel management at the operational level of war within an AOR or AO. Materiel management at the operational level involves requisitioning or acquiring, receipt, storage, protection, maintenance, distribution, and salvage of supplies. Effective materiel managers understand the JFC's requirements and priorities for supporting combat operations.
- 3-54. Quartermaster supply companies and medical logistics companies operate within the joint security area, corps support area, and division support area to provide operational supply support. These companies support the overall theater distribution mission and provide supply support to echelons above division units conducting corps operations and to units undergoing reception, staging, onward movement, integration. Quartermaster supply companies providing operational supply support are normally attached to a CSSB supporting the corps. Medical logistics companies are normally attached to medical battalions (multifunctional) or medical brigades providing AHS support on a direct or area support basis.
- 3-55. The Brigade Medical Supply Office is an element of the brigade support medical company in the BSB. The Brigade Medical Supply Office carries a basic load of critical class VIII items as a brigade safety level for release to the brigade support medical company or maneuver battalion medical platoons when routine replenishment operations do not meet mission requirements. The medical logistics company is the routine class VIII SSA. The Brigade Medical Supply Office is key element of tactical-level class VIII supply support to Role 1 and 2 medical capabilities of the BCT. The medical logistics company is the class VIII tactical SSA, normally attached to a multifunctional medical battalion in support of the division. See FM 4-02, *Army Health System*, ATP 4-02.1, *Army Medical Logistics*, and ATP 4-02.3, Army Health System Support to Maneuver Forces for detailed planning considerations.

TACTICAL SUPPLY

- 3-56. Tactical supplies are those items provided to and carried by maneuver units to support tactical operations, normally at division level and below. Tactical level supply focuses on maximizing the supported commander's combat power. Materiel managers work to ensure required supplies are available when and where the supported unit needs them.
- 3-57. The DSSB and brigade support battalion (BSB) execute materiel management and supply support at the tactical level. The DSSB is organic to the DSB assigned to the division headquarters. The DSSB has an organic composite supply company that supports units operating in the division support and consolidation

areas. The DSSB also supports the BSB in the brigade area. The BSB organic distribution and forward support companies (FSCs) provide supply support to BCT units. Based on supported the commander's priorities and anticipated requirements, materiel managers ensure responsive supply replenishment to combat forces.

SUSTAINMENT ORGANIZATIONS

3-58. Commercial, DOD, and Army organizations provide supply support from the strategic to the tactical level. These organizations work in close collaboration with one another, parent headquarters, and supported units to ensure supply support meets operational requirements.

STRATEGIC PARTNERS

3-59. Leaders, logistics staff officers, and the SPO develop a comprehensive understanding of the roles and missions of the Army's strategic suppliers. They must be involved on a daily basis with the strategic suppliers to effectively provide supply support.

Industrial Base

3-60. The industrial base consists of privately owned and government-owned industrial capability and capacity for manufacture, maintenance, modification, and overhaul of materiel. It includes the production base and the maintenance base.

Defense Contract Management Agency

3-61. The Defense Contract Management Agency provides contract administration services to the DOD to ensure delivery of quality products and services. It assists the Army with the development of supply and services requirements documentation.

United States Transportation Command

3-62. USTRANSCOM is the functional combatant command responsible for strategic distribution of all classes of supply within an AOR. It provides and manages strategic common-user airlift, sealift, and terminal services worldwide. USTRANSCOM's deployment distribution operation center is the single focal point for all combatant command and major shipping customers. Quartermaster organizations and other logistics managers coordinate with the USTRANSCOM's deployment distribution operation center for visibility of strategic distribution. USTRANSCOM may also provide strategic theater opening enablers to assist in setting sustainment conditions when establishing areas of operations, and may play a key role in logistics over the shore operations when required.

Military Surface Deployment And Distribution Command

3-63. The Military Surface Deployment and Distribution Command (SDDC) is the ASCC of USTRANSCOM, and is DOD's single port manager at the seaport of embarkation and the seaport of debarkation. SDDC performs single port manager functions necessary to support the strategic flow of the deploying forces' equipment and supplies to and from the theater, including logistics over the shore operations when required. In carrying out this responsibility, SDDC works closely with quartermaster and other Army sustainment managers to coordinate the arrival, discharge, or loading of vessels in accordance with GCC priorities. SDDC and Army sustainers work together to establish a seamless strategic or theater interface and provide for the efficient reception, staging, onward movement, and integration of supplies, equipment, and units to and from the theater.

Defense Logistics Agency

3-64. DLA is the DOD's combat support agency and the strategic materiel integrator for all of the Services, other government agencies, and those allies who have a foreign military sales case. DLA sources and provides almost every consumable item used by Soldiers. It manages nearly six million separate line items of spare parts for aviation, land and maritime weapon systems, bulk fuel, and critical troop support items involving

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food, clothing and textiles, medical, industrial hardware, and construction equipment. Additionally, DLA provides a broad array of associated supply pipeline services that include storage and distribution, enabling the reutilization or disposal of excess military assets, managing the defense national stockpile of strategic materiel, providing catalogs and other logistics information, and document automation and production services.

3-65. DLA Logistics Operations consists of five organizations that are collectively responsible for supply pipeline management of DLA's nine supply chains, providing logistics and material process management, policy, guidance, oversight, and monitoring of supply pipeline performance. DLA Logistics Operations is the principal strategic, operational, and tactical planner for DLA business operations, championing best business practices and value-added logistics solutions for the warfighter.

3-66. DLA support teams activate when the joint commander requires dedicated DLA support to an operation. These teams report to the joint staff's logistics directorate to provide regional coordination and support. The DLA support team consists of multi-commodity, distribution, and disposal management personnel. DLA support team personnel, imbedded in the joint staff logistics directorate (J-4), provide support to the TSC and the ESC. DLA support team personnel also assist with theater planning in order to:

- Tailor equipment and support packages to the combatant commander's requirements.
- Standardize and ensure compatibility of equipment to support joint and multinational operations.
- Project accurate and timely sustainment requirements for classes I, II, III (bulk and packaged), IV, VIII, and IX.
- Maximize use of in-country civilian or host-nation support facilities and service contracting.

3-67. DLA Disposition Services is the activity responsible for the disposal of excess DOD personal property, foreign excess personal property, scrap, hazardous waste, and demilitarization required property generated by activities. Disposal of this property by a means other than DLA requires approval of the combatant commander and concurrence from DLA. The disposition services element is typically attached to a DLA support team.

United States Army Materiel Command

3-68. USAMC is the Army's materiel integrator providing national-level sustainment, acquisition integration support, contracting support, and selected logistics support to Army forces. It also provides related common support to other Services, multinational, and interagency partners. The capabilities of USAMC are diverse and are accomplished through its various major subordinate commands and other subordinate organizations. USAMC synchronizes, integrates and operationalizes the capabilities of ten major subordinate commands, providing materiel and sustainable readiness to meet today's requirements and prepare for the next contingency. The command's complex missions range from manufacturing and maintenance to transportation and logistics. From managing the Army's installations, arsenals, depots and ammunition plants, to maintaining APS, USAMC assures supply. USAMC touches multiple phases in the materiel life cycle, including contracting, distribution, refurbishment and resale. USAMC oversees ten major subordinate commands. These organizations provide materiel life-cycle management for USAMC and the Army. Together, these organizations encompass the backbone of USAMC's materiel readiness mission, helping to synchronize and integrate the collective might of the army materiel enterprise.

Army Contracting Command

3-69. The Army Contracting Command (ACC) enables Army readiness through contracting to ensure Soldiers have what they need to be successful, from food and clothing to bullets and bombs. ACC has the capability to deploy anywhere in the world on short notice to provide operation contract support planning, contract policy and oversight, contract execution, contract administration, and contract surveillance in support of deployed forces. See ATP 4-92, *Contracting Support to Unified Land Operations*, for additional information.

3-70. ACC provides expeditionary contracting and contract administration to deployed Army forces through its subordinate contracting support brigades (CSB), and systems contracting support to Army program executive officers and program managers, including the Logistics Civil Augmentation Program (LOGCAP) executive director. It also provides contracting support supplies, services, and minor construction to garrison

- operations through its subordinate command: the Mission and Installation Contracting Command CONUS and the ACC, Deputy Commanding General for Outside the Continental U.S. (OCONUS) Operations for forward CSBs. In addition, the ACC provides OCONUS reach back contracting support from its CONUS based contracting centers. ACC CSBs, contracting battalions (CBNs), and contracting teams also perform the contingency contract administration services mission during expeditionary force operations.
- 3-71. CSBs serve as the Army's primary theater support and contingency contract administration services contracting headquarters. The brigade executes theater support contracting actions and contract administration of external support contracts, for example LOGCAP in support of Army forces. The CSB commander also serves as the primary contracting support advisor to the ASCC. Allocation of CSBs is one OPCON to an ASCC and one OPCON to a corps. CSBs provide command and control over a number of CBN and contracting teams as determined during the mission planning process.
- 3-72. The CBN provides command and control over subordinate contracting teams that write, award, and administer contracts to include Contingency Contract Administration Services of external support contracts. CBNs are normally placed under the direct command of the deploying CSB or, in small-scale operations, may deploy separately from the CSB headquarters. In major sustained operations, the CBN may be combined with contracting teams and contracting elements from other Services to form a regional contracting center.
- 3-73. Contracting teams normally deploy under the command and control of a CBN and provide theater support contracting, on a direct support or general support basis; and Contingency Contract Administration Services of external support contracts. In long-term operations, contracting teams may be combined with other contracting teams to form regional contracting centers and regional contracting offices as required.

Installation Management Command

- 3-74. The Installation Management Command (IMCOM) integrates and delivers base support to enable readiness for a globally responsive Army. IMCOM manages 75 installations and over 122 sub-installations in 12 countries.
- 3-75. IMCOM's broad range of responsibilities enable installation readiness by providing: infrastructure management, sustainment, installation protection, and training support services. These responsibilities also provide resilient Soldier and Family Programs. All tools facilitate pre-deployment, deployment and redeployment activities in support of large-scale combat operations.
- 3-76. IMCOM-managed Power Projection Platforms (PPP) are Army installations capable of deploying one or more Army brigades or larger formations in accordance with combatant command's requirements. Installations designated as PPPs perform power projection functions together with designated strategic sea and aerial ports in support of national strategy. IMCOM provides capabilities to operate and manage bases in support of Army and JFCs while providing the capabilities to support unit deployment, redeployment and reintegration. The minimum installation capabilities for PPP designation include adequate infrastructure, services, equipment, utilities support and planned installation surge capability to support mission requirements.
- 3-77. IMCOM-managed mobilization force generation installations are Army installations designated to provide mobilization support for both current and contingency operations. Mobilization force generation installations provide pre- and post-mobilization readiness support, and deployment preparation in support of combatant command requirements. Primary mobilization force generation installations are capable of providing continuous pre and post mobilization training, combat preparation, and sustainment. Contingency mobilization force generation installations are utilized when mobilization force generating requirements exceed primary mobilization force generation installation operational capacity.
- 3-78. The Army Environmental Command is a major subordinate command within IMCOM. The Army Environmental Command provides technical expertise to ensure sustainable Army bases worldwide and advises commanders in support of operations in environmentally constrained conditions.

Army Security Assistance Command

3-79. The U.S. Army Security Assistance Command leads the USAMC Security Assistance Enterprise. It enables security cooperation, military engagement and other activities conducted to build partner capacity,

support and strengthen U.S. global partnerships. The command acts as the primary entry point for Army materiel, service-related, and non-institutional foreign military sales and security assistance requirements as requested by partner nations to enable combatant command strategic priorities for the region.

Army Sustainment Command

3-80. The Army Sustainment Command (ASC) integrates and synchronizes the delivery of USAMC and materiel enterprise capabilities at echelon from the strategic to the tactical level. ASC delivers materiel readiness, force generation, power projection, and sets the conditions for future readiness at home station. ASC forward stationed capabilities provide command and control to all USAMC assets in theater and shape the logistics environment and help set the theater to accelerate force reception into theater. Deployable logistics support elements provide expeditionary corps and divisions the ability to rapidly integrate into the theater delivery of USAMC capabilities at echelon for responsive support to warfighter priorities. ASC serves as the Army's lead materiel integrator, identifying excess and obsolete major end items, then providing disposition instructions to units. It is responsible for integrating logistics support with strategic partners and links the national sustainment base with the expeditionary Army. Major mission areas include logistics synchronization in support of Army Sustainment Readiness Model, Army pre-positioned stocks (APS), materiel management, and the LOGCAP. Mission execution is through a global network of organizations to include the ASC staff, Army field support brigades (AFSBs), Army field support battalions (AFSBns), logistics readiness centers, and logistics support elements embedded in units from brigade to corps. For additional information on the ASC, and its subordinate units, and operations see ATP 4-91, Army Field Support Brigade, for additional information.

3-81. LOGCAP is a performance-based program that provides broad, contracted sustainment support to GCC joint operations, coalition partners, and other federal agencies to address ASCC regional and country planning requirements, where a military capability is not readily available, in support of setting the theater and theater sustainment. Pre-awarded task orders are regionally aligned for rapid response to emerging events. Planning elements are embedded within the AFSB to coordinate annex W development, integrate and synchronize LOGCAP capabilities into operation plans (OPLAN) and concept plans, with focus on operational contract support (OCS) related analysis of the operation, APS, Army PPP, mobilization force generation installations, theater opening, sustainment, theater distribution, stability operations, noncombatant evacuation operations, and defense support of civil authorities. LOGCAP is designed to support operations to shape and sustainment preparation of the operational environment. LOGCAP is designated as a preferred source for logistics support, and must be considered by requiring activities as part of OCS market research before establishing a new contract. For additional information regarding utilization of LOGCAP, see AR 700-137, Logistics Civil Augmentation Program, and ATP 4-10.1, Logistics Civil Augmentation Program Support to Unified Land Operations.

3-82. Army Field Support Brigades (AFSB) integrate and synchronize delivery of USAMC strategic capabilities and enablers to the operational and tactical points of need in support of ASCCs and corps during large-scale combat operations. The AFSB also synchronizes acquisition, logistics and technology systems contracted support with sustainment maintenance support for the theater Army. Senior command representatives from each USAMC LCMCs are OPCON to each AFSB and enable integrated delivery of USAMC capabilities. The representatives provide a built in forward technical presence in the tactical environment and anticipate requirements for logistics assistance representatives throughout each Army strategic role. Forward stationed AFSBs are OPCON to the ASCC, and U.S. stationed AFSBs deploy a corps logistics support element that is OPCON to their supported corps during large-scale combat operations. AFSBs are augmented with additional staff or capabilities to meet expanded and unique operational requirements, particularly where redistribution property assistance teams may be used to facilitate the turnin of equipment for redistribution or retrograde. Key functions of the AFSB include—

- Maintaining accountability of specified Army contractors authorized to accompany the force and other theater designated contractor personnel, through OCS contractor management.
- Coordinating support from the national sustainment base to include expert advice and call forward assistance regarding readiness and sustainment.
- Coordinating Army science and technology functions as well as all materiel fielding organizations providing new equipment training.

- Integrating and synchronizing LOGCAP set the theater planning with GCC and ASCC planning staffs, developing requirements to fill identified capability gaps, assisting with operational phase transitions to manage cost, schedule, and performance tradeoffs and mitigate risk.
- Integrating and synchronizing LOGCAP and Enhanced Army Global Logistics Enterprise support at the strategic, operational, and tactical level.
- Managing APS to include off-loading and property accountability.
- Managing logistics assistance program through attached Army field support battalion, logistics support elements, and other USAMC logistics organizations called forward.
- Commanding sustainment maintenance organizations deployed to the theater. These organizations
 include forward repair activities, component repair companies, combat vehicle evaluation teams,
 and equipment support activities.
- Identifying, storing, and coordinating the distribution and redistribution of designated theater provided equipment, and excess non-theater provided class VII equipment in accordance with theater policies and procedures.
- Integrating (in coordination with the CSB and TSC commander) the ASCC developed annex W (operational contract support) plan into the overall AFSB support plan. The annex W's three appendices of 1-Contracting Capabilities and Capacities Support Estimate; 2-Contractor Management Plan, and 3-Summary of Contractor Support Estimate are key in plans to ensure OCS from requirements to contracting support to contractor management.
- Maintain the theater provided equipment property book, operating the redistribution property
 assistance team site in the AOR, and operating the theater retrograde consolidation site and
 perform agricultural cleaning in preparation to ship equipment out of theater, and supporting
 Foreign Military Sale operations by providing a consolidation site and performing transportation
 preparations as a reimbursable mission.
- Provide contractor supplemental maintenance capability for tactical units' equipment in the AOR
 with maintenance support teams in forward areas. Normally, this is in an AOR with uniformed
 boots on the ground limitations.
- Provide ASCC, joint and combined services with reimbursable contracted maintenance support.
- 3-83. The Army Field Support Battalion (AFSBn) mission sets vary from supporting strategic to tactical elements. Stationed at CONUS and OCONUS locations, the AFSBn (APS) is responsible for the physical management of APS, both on-shore and afloat, operational project stocks, and Army War Reserves. The AFSBn (APS) conducts receipt, storage, maintenance, and issue of the essential equipment sets required for expeditionary operations.
- 3-84. Direct-Support and General-Support Readiness AFSBns enable materiel and deployment readiness of divisions, brigades, and special operations forces through logistics readiness centers (LRC), LCMC logistics assistance representatives, and equipment Program Executive Officers. Direct-Support Readiness AFSBns are allocated to divisions, and General-Support Readiness AFSBns support units on an area basis. Readiness AFSBn can be found in both CONUS and OCONUS locations. Readiness AFSBns are organic to the ASC which assigns the AFSBn to a parent AFSB in garrison. The AFSBn deploys a division logistics support element OPCON to the division to which it is allocated, and coordinates support with the forward-stationed AFSB. The composition of the division logistics support element depends on operational variables, but generally includes AFSBn senior leadership and the LCMC senior service technical representatives. The remaining portion of the CONUS based AFSB continues to deliver material readiness, force generation, power projection, and mobilization force generation installation. The division commander may OPCON the division logistics support element to the DSB.
- 3-85. LRCs, located on installations worldwide, directly enable readiness, sustainment and power projection to individual Soldiers and units. LRCs of varying size and capabilities are located on almost all Army installations and exercises authority over and develops plans and policies for all installation level logistics activities, supply, services, logistics automated systems, maintenance and transportation. On installations where a Readiness AFSBn is located the AFSBn commands the LRC. The AFSBn assumes responsibility for installation wide readiness, sustainment, and power projection, providing commanders a central organization for all USAMC capabilities on the installation. Otherwise, the AFSB assumes command and

control of LRCs located on non-divisional installations within the AFSB's area of responsibility. Key functions and responsibilities of the LRC include—

- Installation SSA.
- Installation Transportation Office.
- Transportation Motor Pool.
- Supply and Service.
- Installation Property Book.
- Ammunition Supply Point (U.S. LRCs only).
- Central Issue Facility.
- Mobilization Force Generation Installations and Power Projection Platforms.
- Supplemental maintenance and reset support (U.S. LRCs only).
- Personal Property Office and Household Goods.
- Freight operations.
- Unit movement support (U.S. LRCs only).
- Dining facility and food service management and operations.
- Installation laundry services (U.S. LRCs only).

USAMC Lifecycle Management Commands

3-86. The USAMC provides logistics; technology, acquisition support, and selected logistics support to Army forces as well as USAMC related common support to other Services, multinational and interagency partners. This is accomplished principally through national-level maintenance and supply programs managed and executed by the LCMCs who are OPCON to AFSBs when deployed. LCMCs are the AMC organizations that have the responsibility to mobilize and deploy sustainment level maintenance forward repair activities from CONUS LCMC depots and arsenals. LCMCs conduct theater level contingency planning with USAMC, ASC, and TSCs during set the theater deliberate planning. These USAMC LCMCs include USAMC staff as well as related Assistant Secretary of the Army, Acquisition, Logistics and Technology program executive office and program management offices. Together, these LCMC USAMC and Assistant Secretary of the Army, Acquisition, Logistics and Technology elements work to ensure support for fielded weapon systems and equipment for their entire life cycle. Program executive office and program management staffs often work in the same office or on the ground in the field along with USAMC LCMC item managers and other technical support personnel. The LCMCs are—

- U.S. Army Communications-Electronics Command. The Communications-Electronics LCMC develops, acquires, fields and sustains Army communications systems. It provides significant technical support capabilities to deploying and deployed Army forces.
- U.S. Army Tank-Automotive Command. This command develops, acquires, fields, and sustains Soldier and ground systems for the operational Army through the integration of effective and timely acquisition, logistics, and cutting-edge technology.
- U.S. Aviation and Missile Command. This command develops, acquires, fields, and sustains
 aviation, missile and unmanned vehicle systems, ensuring system readiness with seamless
 transition to operations. The LCMC transitions science and technology into aviation, missile and
 unmanned vehicle systems.
- The Joint Munitions and Lethality LCMC. This command develops, acquires, fields and sustains ammunition for the joint force. Core competencies include—
 - Research, development, and engineering.
 - Acquisition and program management.
 - Logistics management.
 - Industrial operations.
 - Contracting.
 - Serving as the Single Manager for Conventional Ammunition Executor and Field Operating Activity.
 - Performing demilitarization and disposal of unserviceable stocks.

- Conducting industrial base management and executing transformation.
- Providing real time munitions readiness reporting.
- Maintaining worldwide asset visibility.
- Centrally managing ammunition.
- Providing integrated lethality solutions.
- U.S. Army Medical Logistics Command. This command is the USAMC LCMC for medical logistics. The Army Medical Logistics Command delivers medical solutions (on behalf of the Army Medical Program Executive Office), manages, and sustains medical programs for operational forces in the Total Army. The command manages medical materiel and logistics services required to generate and deploy ready medical forces and sustain Army and joint health services. Core competencies include management of medical supply (class VIII), medical equipment and repair parts, medical logistics operations that include theater-level medical logistics support operations, medical equipment maintenance and recapitalization, optical fabrication, and the Army's globally employed centralized medical materiel readiness programs. Theater medical materiel centers assigned to the Army Medical Logistics Command, in partnership with DLA, provide theater-level class VIII materiel management and supply support to Army and joint forces in their AOR

SUSTAINMENT HEADQUARTERS

3-87. Sustainment headquarters are the primary organizations where materiel managers reside. Materiel managers determine the materiel requirement from the supported units, determine materiel availability, obtain the materiel, and coordinate its distribution according to command priorities. The materiel management branch within the TSC, ESC, and sustainment brigade distribution management center (DMC) executes materiel management. The SPO office within the CSSB, DSSB, and the BSB execute materiel management. Materiel managers coordinate with transportation managers for allocation of transportation modes to move the materiel to supported tactical units.

THEATER AND EXPEDITIONARY SUSTAINMENT COMMANDS

- 3-88. The TSC is the senior sustainment headquarters operating in a theater. It exercises mission command over task organized sustainment units executing theater opening, theater distribution, sustainment and theater closing in support of the ASCC. See figure 3-3.
- 3-89. The TSC sets the theater conditions for successful sustainment operations. A theater is considered set when actions taken produce the conditions necessary for the supported command to conduct operations. These conditions include sustainment capabilities to conduct theater opening, port and terminal operations, reception, staging, onward-movement and integration, and managing the intra theater distribution networks. The TSC shapes distribution for all defined areas of operations and provides guidance to the strategic partners when priority conflicts exist between operational areas.
- 3-90. The TSC assists the ASCC planners in identifying all lead Service support requirements (including joint, multinational, and interagency requirements) so that resources can be distributed throughout the force. The TSC synchronizes all Army support responsibilities with the AOR distribution plan. The ESC ensures that support is synchronized with the distribution plan of an operational area within an AOR.

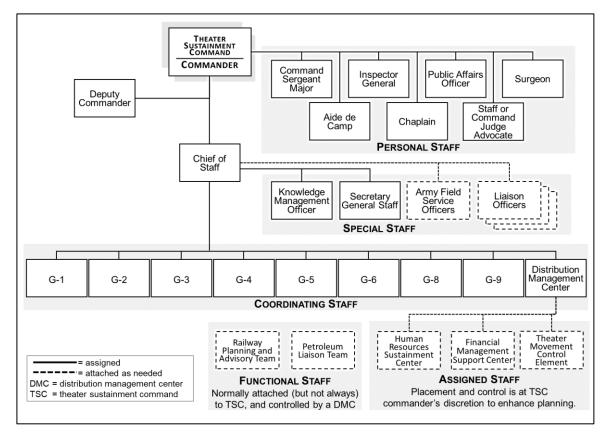


Figure 3-3. Theater sustainment command

- 3-91. The ESC is the senior sustainment headquarters exercising mission command over task organized sustainment units executing theater opening, theater distribution, sustainment and theater closing in support of the Army forces, corps or a joint task force.
- 3-92. The G-4, as principal logistics advisor to the commander, oversees logistics operations internal to the TSC and ESC. The G-4 provides technical supervision, collects, assesses, and prioritizes food management, property book management, maintenance management, and deployment planning for the command. The G-4 provides supervision and direction to all subordinate sustainment sections.
- 3-93. The ESC manages Army theater distribution in an operational area within an AOR in support of decisive action. Theater distribution enables operational reach by integrating and synchronizing Army and joint capabilities to prolong the operational endurance while maintaining sufficient support to ensure freedom of action. Specifically, by synchronizing and coordinating a complex of networks (physical, communications, information, and finance) and the sustainment functions (logistics, financial management, personnel services, and health service support) to meet operational requirements.
- 3-94. The TSC and ESC DMCs manage sustainment functions within a joint and multinational operational framework. The DMC manages the theater distribution network linking the strategic and operational levels of logistics operations. This staff section supervises supply, maintenance, hazardous waste management, field services, transportation, and movement control activities that support the force. It integrates transportation and movement of units, supplies, and materiel into, within, and out of the AOR. Specific functions of the TSC DMC are below—
 - Establishes and maintains the sustainment common operational picture.
 - Develops, coordinates and manages the theater distribution plan.
 - Manages transportation operations to include (mode, terminal and movement control) and common-user land transportation support.

- Provides materiel management for all classes of supply.
- Integrates OCS into sustainment operations.
- Performs integrated materiel management for automotive equipment, tactical wheeled vehicles, general-purpose vehicles, construction equipment, materiel handling equipment, electronic maintenance, and aviation maintenance.
- 3-95. The DMC is the operational center within the TSC for managing distribution across the AOR. The SPO officer leads the DMC, a coordinating staff section unique to TSCs and ESCs. The DMC staff is responsible for providing the technical supervision for the external logistics mission of the TSC. The staff focuses on detailed planning for operational area opening, distribution, sustainment, and operational area closing functions. The DMC coordinates with entities from the Army, the unified action partners, and host nation partners to sustain the force in accordance with the theater Army priorities.
- 3-96. This staff section manages distribution by synchronizing and integrating the functions of distribution planning, transportation, and materiel management, as well as the logistics services of field services, maintenance, and OCS for the AOR. The staff also coordinates for hazardous waste management. It synchronizes and integrates transportation and movement of units, supplies, and materiel into, within, and out of the AOR. It provides this support through four internal sections: the distribution plans and integration branch, the transportation operations branch, the materiel management branch (and its four subordinate sections), and the fuel and water branch. The headquarters section includes the DMC deputy SPO officer, OCS branch, and the Sustainment Automation Systems Management Office (SASMO).
- 3-97. Figure 3-4 depicts the TSC DMC organization. See ATP 4-94, *Theater Sustainment Command*, for detailed information.

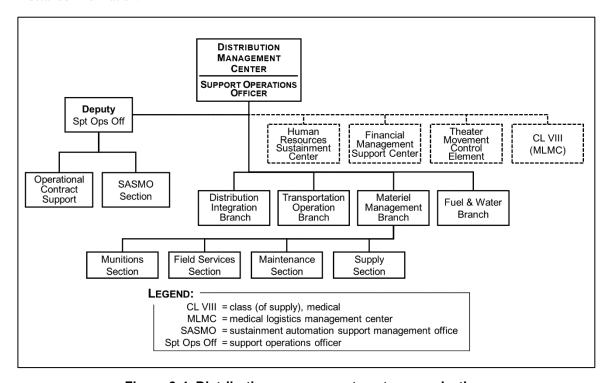


Figure 3-4. Distribution management center organization

3-98. The DIB coordinates and synchronizes the movement of personnel, equipment, and supplies into and out of the AOR. To do this job effectively, the distribution integration branch relies on coordination and information exchange between the materiel management, fuel and water and transportation branches. A complete awareness of the logistics status of subordinate and supported units enables the DMC to optimize resources and task subordinate organizations in support of ongoing and future operations.

- 3-99. The materiel management branch develops plans, policies, programs, and procedures involving supply activities; maintains liaison with supported and supporting units; and recommends allocation of resources and materiel management functions to support mission requirements. There are four subordinate sections: supply, munitions, field services and maintenance. (Maintenance is not included in this discussion. See ATP 4-33, *Maintenance Operations*, for in-depth information about maintenance.)
 - Supply Section. The supply section provides staff supervision over all supply operations except class V and class VIII. It performs materiel management of classes I, II, IV, VI, VII, IX and X and related services necessary to sustain Army forces in the quantities and at the time and place needed. It also develops the necessary stockage levels in staging areas for conducting an operation and collecting, providing, and processing in-transit data.
 - Munitions Section. The munitions section provides staff supervision and visibility of conventional ammunition and determines munitions requirements, manages supply capability and conducts materiel management for supported units.
 - Field Services Section. The TSC plans, resources, monitors, and analyzes field services support to deployed Army forces. The type and level of field services provided differs depending upon a supported commander's requirements and the existing infrastructure in the operational area. TSC field services section oversees field laundry, showers, force provider, mortuary affairs, and coordination with DLA for hazardous waste removal. The field services section, usually in coordination with the GCC J-4 joint mortuary affairs office, determines the requirement for and placement of Army theater mortuary affairs assets.
- 3-100. The Fuel and Water Branch manages bulk fuel and water distribution throughout the theater by using military, contracted, and locally procured resources. It coordinates with other branches in the DMC and with DLA to monitor and manage theater stocks.
- 3-101. The Transportation Operations Branch executes the controlling function for the physical movement of supplies. This branch maintains liaison with Joint Deployment Distribution Operations Center, contract transportation providers, mode operators, and supported units. Please note that the Transportation Operations Branch does not engage in materiel management or supply support functions. Rather the Transportation Operations Branch and the Materiel Management Branch work together with the DIB to plan, prioritize, direct, and execute the transporting of materiel by air, ground, and water to the supported units in accordance with commander's priorities.
- 3-102. The TSC surgeon advises the commander on the health of the command and is responsible for the planning for and monitoring of the execution of AHS support for TSC subordinate units. The TSC surgeon develops policies, protocols, and procedures pertaining to the treatment of sick, injured, and wounded personnel and has a small staff section to assist in planning, coordinating, synchronizing, and integrating the AHS support to plans within the TSC. Among the many duties associated with AHS support, the TSC surgeon section monitors and coordinates preventive medicine operations.
- 3-103. The TSC coordinates with the medical command MEDCOM (DS) as the theater medical command responsible for integration, synchronization, and execution of AHS support to the deployed force. The medical logistics management center forward team collocates with the DMC of the TSC to serve as the liaison to the MEDCOM (DS). The MEDCOM (DS) is responsible for integrating and executing medical operations.

SUSTAINMENT BRIGADE

3-104. The sustainment brigade is a multifunctional headquarters that integrates and employs all assigned and attached units while planning and synchronizing sustainment operations. It is the Army's primary brigade level sustainment headquarters. See figure 3-5. The sustainment brigade supports Army forces at the tactical and operational levels, providing support multifunctional and functional support brigades, deployed self-contained division and corps headquarters, and other units operating in its assigned support area. Depending upon operational and mission variables, the sustainment brigade commands two to six additional CSSBs or functional battalions (petroleum support, movement control and terminal) executing logistics and personnel services in addition to the organic special troops battalion. The sustainment brigade and its attached units will normally have a general support relationship with supported organizations.

3-105. The sustainment brigade conducts distribution integration, transportation operations, materiel management, operational contract support, human resources, and financial

Sustainment Brigade

- Role: Command and control assigned, attached, and OPCON sustainment units.
- Capability: A flexible headquarters that is task organized to support unified land operations and command subordinate sustainment organizations.
- Parent: Can be task organized to an expeditionary sustainment command (ESC) or theater sustainment command (TSC).
- Command relationship: Assigned or attached to a TSC or ESC.
- Support relationship: Varies.
- Span of operations: theater, corps, or division AO based on parent organization.

management. The sustainment brigade may be tasked organized to conduct sustainment functions associated with theater opening, theater distribution, sustainment, and theater closing missions.

- 3-106. The sustainment brigade is agile, expeditionary, and interoperable. The sustainment brigade can deploy task organized forces on short notice to austere locations and conduct sustainment operations immediately upon arrival. The sustainment brigade rapidly organizes and integrates joint, interorganizational and multinational requirements and capabilities. The sustainment brigade can also transition sustainment support across all decisive action tasks.
- 3-107. The sustainment brigade is task organized with units required to execute logistics, financial management, and personnel services. Logistics includes; supply, maintenance, transportation, field services, distribution, and operational contract support. Personnel services and financial management are sustainment functions that fund and man the force.
- 3-108. When attached to a corps ESC, a sustainment brigade is normally task-organized a CSSB. The CSSB is the sustainment brigade's primary means to accomplish its support mission, for additional information on the CSSB see ATP 4-93.1, *Combat Sustainment Support Battalion*. Other functional logistics battalion may be attached to sustainment brigade.
- 3-109. Sustainment brigade staff sections perform common staff responsibilities. The staff develops internal sustainment brigade policies and plans in their respective technical areas and provides guidance, priorities, and allocations to subordinate commands. The sustainment 1 section includes the staff elements that are internal brigade support, and sustainment 2 focuses on support external to the brigade. They also review the plans of counterpart staffs in subordinate units. This publication provides a brief discussion about Sustainment 1 the S-4 section and a more in-depth discussion about the Sustainment 2 support operations staff. Please see ATP 4-93, *Sustainment Brigade*, for in-depth discussion about the sustainment brigade's staff sections.

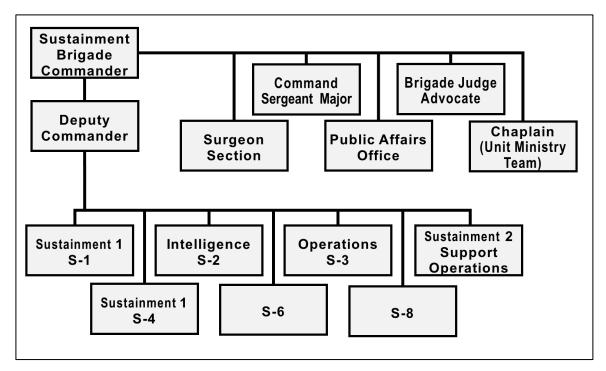


Figure 3-5. Sustainment brigade

Sustainment 1 S-4

3-110. The S-4 is the principal staff officer for internal sustainment and readiness. The brigade S-4 primary tasks include sustainment operations, plans, supply, maintenance, transportation, and field services internally for the brigade. The S-4 advises the commander and staff on all internal logistics issues, coordinates estimates, plans, annexes, and orders for internal sustainment operations. The S-4, in coordination with the SPO, conducts sustainment preparation of the operational environment. The S-4 tracks the current operation and provides staff oversight of food service operations, property book operations, and maintenance operations for the sustainment brigade and its subordinates. The brigade S-4 coordinates with the brigade S-3 to plan the deployment and redeployment processes of the sustainment brigade and its subordinate units. The S-4's mobility section oversees the administrative requirements for deployment and redeployment.

Sustainment 2 Support Operations

3-111. Support operations is the staff function of planning, coordinating, and synchronizing sustainment in support of units conducting decisive action in an AO (ATP 4-93). The SPO is the principal staff office responsible for coordinating sustainment for all units within the sustainment brigade's assigned operational area. The SPO advises the commander on balancing sustainment support requirements with sustainment capabilities. The SPO office conducts distribution operations, maintenance management, operational contract support and commodity management of general supplies, ammunition, fuel and water. See figure 3-6 on page 3-24. The following text contains an overview of the SPO's responsibilities concerning the distribution management process as it relates to supply support. The following text does not discuss the sustainment automation support management office or human resources operations because these are not directly involved with the supply and field services support mission. For a detailed description of the sustainment brigade SPO, see ATP 4-93, Sustainment Brigade.

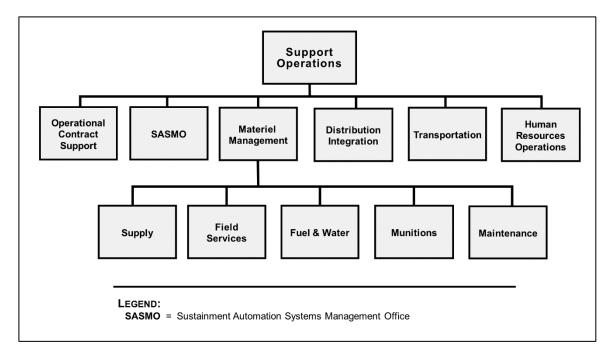


Figure 3-6. Sustainment brigade support operations

- 3-112. Operational contract support branch conducts contract support integration-synchronizing operational planning, requirements development and contracting in support of the deployed military forces and other designated organizations in their assigned support area.
- 3-113. The distribution integration branch plans, coordinates and synchronizes distribution requirements and operations. The DIB develops the distribution plan for the brigade. The distribution plan describes how sustainment flows from the sustainment brigade to the BSBs. The plan outlines who, what, when, where and how distribution will be accomplished in accordance with the concept of support and priorities established by the commander. It is continually updated to reflect changes to infrastructure, support relationships and unit locations. The planning horizon for the distribution plan at the sustainment brigade is 72-120 hours. See FM 6-0, Commander and Staff Organization and Operations, for information about command and support relationships.
- 3-114. The transportation operations branch—
 - Exercises staff oversight for transportation operations.
 - Determines transportation requirements for supported units.
 - Manages transportation capability.
 - Coordinates movement control to the brigade.
 - Coordinates transportation modes to meet the supply distribution requirement.
 - Balances transportation capabilities with requirements to meet mission requests.
 - Develops the movement plan. The movement plan is provided to the distribution integration branch to be included in the distribution plan.
 - Manages common-user transportation assets allocated by the sustainment command. Common-user land transportation assets are DOD-controlled land transportation assets and facilities designated for common use in theater. The sustainment command may delegate the authority to allocate common-user land transportation assets if the sustainment brigade is the senior sustainment headquarters in the joint operations area or if there is no movement control battalion.
 - Maintains liaison with host nation transportation agencies, mode operators, and supported units.
- 3-115. The material management branch manages the distribution of class I, II, III (packaged and bulk), IV, V, VI, VII, and IX, and water supplies to supported units. It maintains visibility of on-hand and in-transit

supply stocks using automated logistics systems. This section also coordinates field service support for supported units.

- Supply. The supply section coordinates and supervises supply management for water, class I, II, III, IV, VII, and IX supplies for the brigade's operational area. This branch plans and determines the requirements and recommends priorities for the allocation and distribution control of supplies. The section monitors requisition of commodities and makes recommendations on redistribution within the operational area. It maintains visibility of on-hand and in-bound materiel using automated logistics systems.
- Field services. The field services section coordinates field services for units within the sustainment brigade's support area. Field services involve laundry, shower, mortuary affairs, and aerial delivery support. During combat operations, military personnel provide most of the field service support in forward areas, with support from host nation and contractors.
- Fuel and water. The fuel and water section plans, coordinates, and manages the bulk fuel and water supply to the supported units within the sustainment brigade's support area. This section directs the receipt, storage, inspection, testing, issue, distribution, and accountability of the bulk fuel and water stocks for the operational area.
- Munitions. The munitions section coordinates and supervises supply management of all ammunition operations for the operational support area. The section maintains asset visibility of all munitions, maintains the munitions portion of the common operating picture through total asset visibility and in transit visibility, and conducts munitions reach operations for supported units. The munitions section intensively monitors and manages critical munitions and controlled supply rates as per higher headquarters guidance.
- Maintenance. The maintenance section determines maintenance requirements for supported units; manages maintenance capability and conducts maintenance management for the brigade. This section conducts trend analysis, fleet management and coordinates sustainment maintenance requirements with the AFSB. It prepares all maintenance plans and annexes for support plans and orders and provides status reports.

DIVISION SUSTAINMENT BRIGADE

- 3-116. The DSB is assigned to a division. The DSB commander is the senior advisor to the division commander and the deputy-commanding general (support) for the sustainment warfighting function. The commander is responsible for the integration, synchronization, and execution of sustainment operations at echelon. The DSB employs sustainment capabilities to create desired effects in support of the division commander's objectives. The DSB develops a concept of operations based on the division OPORD and the G-4 concept of support. The DSB has an organic DSSB that includes organic companies with the capability to support division operations.
- 3-117. Depending upon task organization, the DSB commands up to seven battalions. Figure 3-7 on page 3-26 depicts a notional task-organized DSB in support of an armored division. The DSB and its subordinate units provides direct support to all assigned and attached units in an operational area as directed by the division commander. The DSB provides general support logistics, personnel services, and financial management to non-divisional forces operating in the division AO. A task-organized DSB assigned to a division includes an organic division sustainment troops battalion and an organic DSSB to support tactical sustainment operations. The DSB coordinates and synchronizes tactical sustainment operations to meet current and future operations. The DSB depends on the division staff for long-range planning capability. The DSB and its subordinate units must be able to move and displace at the pace of large-scale combat operations. Additional modular CSSBs and companies may be attached to the DSB to sustain large-scale combat operations.

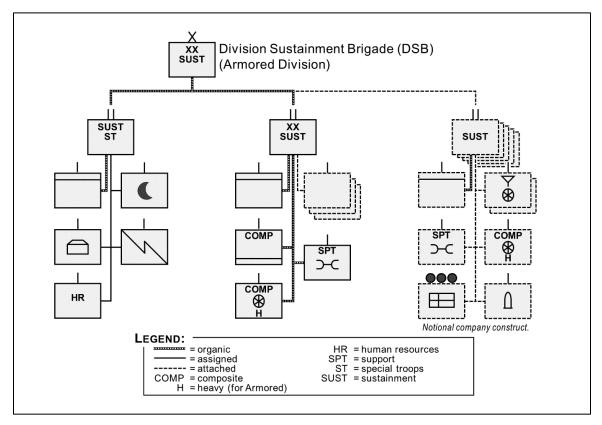


Figure 3-7. Division sustainment brigade (armored division)

DIVISION SUSTAINMENT SUPPORT BATTALION

3-118. The DSSB is employed using various task-organizations. The DSSB is organic to DSBs assigned to divisions. The DSSB and its subordinate units must be able to move and displace at the pace of large-scale combat operations. The DSSB commands and controls all organic, assigned, and attached units. As directed by the DSB commander, the DSSB conducts maintenance, transportation, supply, and distribution. DSSBs have an organic composite supply company, composite truck company, and support maintenance company. Other capabilities are task organized by the division commander in accordance with requirements. The DSSB synchronizes and executes logistics support to BCTs and multifunctional brigades attached to the division and non-divisional units operating in the division AO.

COMBAT SUSTAINMENT SUPPORT BATTALION

3-119. The CSSB is a multifunctional logistics headquarters with the flexibility to control and synchronize execution of all logistics functions. The deployed CSSB is normally attached

Division Sustainment Support Battalion

Role: Exercises command and control tactical units executing logistics operations.

Capability: Controls and synchronizes the logistics operations of four organic companies and up to two additional companies as task organized by the division.

Parent: DSB.

Command relationship: Organic to the DSR

Support relationship: General support to all units in the division area of operations.

Span of operations: Division rear boundary to brigade support area.

Mobility Index: Capable of 83% mobility in one lift using organic assets.

to a sustainment brigade operating at echelons above the division. The task organized CSSB commands and controls all assigned and attached units in an operational area as directed by the sustainment brigade commander. Task-organized CSSBs normally include a composite supply company, support maintenance

company, modular ammunition company, palletized load system truck company, inland cargo transfer company, and a field feeding company (FFC).

3-120. The CSSB synchronizes and executes logistics support to functional brigades and multifunctional support brigades attached to the corps. CSSBs operate in various locations to include the joint security area and corps support area. In some instances, CSSB may operate in the division consolidation or support area as required. The CSSB is capable of supporting any type of unit to include multifunctional brigades (maneuver enhancement brigade, field artillery brigade, and combat aviation brigade), functional support brigades (military police, signal, and engineer brigades), and BCTs. The CSSB establishes a command post, executes the operations process, and synchronizes logistics operations in support of mission requirements. It may be task organized to support theater of operations opening, sustainment, theater distribution, and theater closing operations. The functions of a CSSB include transportation operations (mode, terminal), maintenance operations, supply, field services, and mission command

tasks. See figure 3-8 for a graphic depiction of the CSSB

headquarters.

Combat Sustainment Support Battalion

Role: Exercises command and control for task organized companies, teams, and detachments executing logistics operations.

Capability: Controls and synchronizes the logistics operations for up to six functional companies.

Parent: Sustainment brigade, ESC.

Command relationship: Normally attached to a sustainment brigade, may change based on mission requirements.

Support relationship: General support to all units in its area, unless otherwise directed.

Span of operations: JSA up to the field trains.

Mobility: Capability to transport 100% of its TOE equipment and supplies in a single

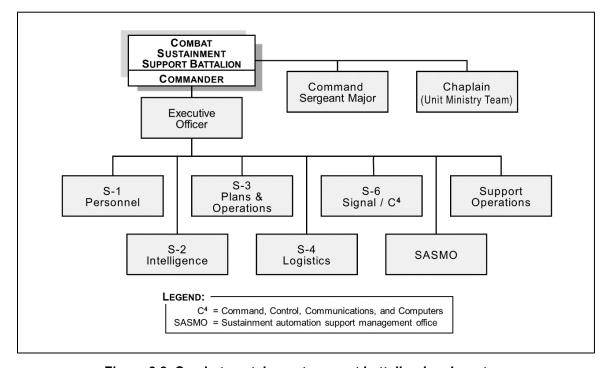


Figure 3.8. Combat sustainment support battalion headquarters

3-121. The CSSB SPO office synchronizes supply and services, fuel, ammunition, maintenance, health service support, mortuary affairs, and transportation operations for the assigned support area and supported units. The CSSB SPO office includes transportation, maintenance, supply, fuel, and ammunition officers and NCOs. See ATP 4-93.1, *Combat Sustainment Support Battalion*, for detailed information about the CSSB.

CLASSIFICATION AND INSPECTION COMPANY

3-122. The classification and inspection company is attached to a CSSB and operates at the corps or theater level. The Company supports USAMC by rapidly returning reparable components to the repair facility and serviceable materiel back into the supply system for redistribution. The classification and inspection company receives, temporarily stores, classifies, inspects, and gains accountability of retrograde materiel, including

supply classes II, III (packaged), IV, VII, and IX. Figure 3-9 depicts the classification and inspection company organization and battlefield array. The following text discusses the supply support portion of the classification and inspection company's mission; see ATP 4-33, *Maintenance Operations* for information regarding the company's maintenance operations.

3-123. The property book office establishes property accountability of accountable items for return to the supply system. The property book office transfers the equipment from the losing unit's books to maintain visibility and accountability of the items while they are in temporary storage, until hand-off to a gaining unit, or for disposal through the Defense Reutilization Management Office.

3-124. The transportation section plans, controls, and manages the movement of materiel as directed through disposition instructions.

Classification and Inspection Company

Role: Corps or Theater level asset that rapidly returns reparable components to repair facilities and serviceable material into the supply system.

Capability: Receives, temporarily stores, classifies, field-level maintenance, inspects, and gains accountability of retrograde materiel.

Command Relationship: Attached.

Support Relationship: General Support. **Span of Operations:** JSA to the division support area.

Mobility: Requires 50% mobility, with the exception of the service and recovery section that requires 80% mobility in a single lift with organic vehicles.

3-125. The supply platoon headquarters provides mission command for the platoon. The supply platoon plays a fundamental role in the redistribution, retrograde and disposal of materiel. The supply platoon consists of the following sections. See ATP 4-42.2, *Supply Support Activity Operations*, for in-depth information on these supply sections. The reader will note that ATP 4-42.2 is SSA Operations; however, these supply platoon sections perform the same functions as the SSA sections.

- Stock control section provides control for logistical support and coordinates external logistics requirements. Plans, executes, and monitors the receipt, storage and issue of supplies.
- Receiving section accepts turn-ins of serviceable and unserviceable class II, III (packaged), IV,
 VII, and IX. Input all turn-in item data into the enterprise system for accountability, visibility purposes and for distribution instructions.
- Storage section stores and picks materiel to fill requirements.
- Packing and crating section performs preservation, packing and crating functions to prepare items for shipment.

3-126. The temporary storage platoon headquarters provides mission command for the platoon. The platoon consists of the following sections. See ATP 4-42.2, *Supply Support Activity Operations*, for in-depth information on these supply sections. The reader will note that ATP 4-42.2 is SSA operations; however, these temporary storage platoon sections perform the same functions as the SSA sections.

- Receive and storage section receives accountable items and provides temporary storage pending completion of maintenance processing and disposition instructions.
- Supply section maintains hand-receipts for equipment in temporary storage and provides records to the PBO to maintain accountability.
- Packing and crating section performs preservation, packing and crating functions for serviceable and reparable items.

3-127. The Army currently assigns all classification and inspection companies to the Army National Guard. The Army designed the companies as a permanent replacement to ad hoc redistribution property assistance teams. When deployed the companies are dependent upon the CSSB personnel staff section for personnel services and on appropriate elements with the theater for religious, legal, AHS support, force health protection, and finance. They also require the support of a medium truck company for transporting supplies to the appropriate destination.

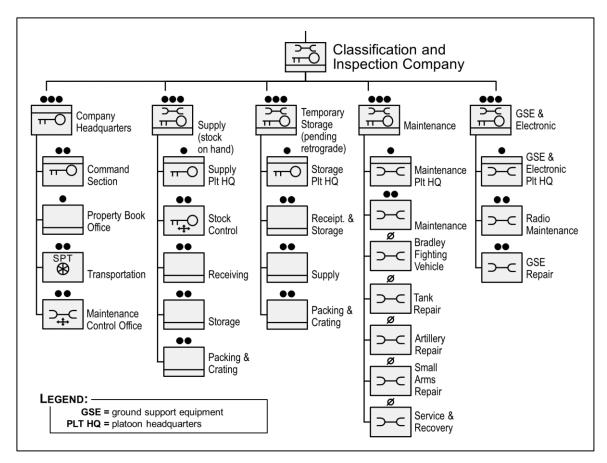


Figure 3-9. Classification and inspection company

3-128. The CSSB commander provides taskings through OPORDs or fragmentary orders (FRAGORD). Typical information in the order includes identification of supported units, the support relationship with each unit, priority of support, and attachments and detachments to the company as required. The classification and inspection company commander and key leaders use troop-leading procedures to conduct mission analysis, develop courses of action, plan maintenance support, and direct subordinate elements. See FM 6-0, Commander and Staff Organization and Operations. The classification and inspection company establishes routine communications with the headquarters for reporting purposes and with supported units to enable effective support. Typical reporting requirements include a LOGSTAT providing the status of the classification and inspection company's rate of receipt, inspection, classification, and distribution of materiel. The LOGSTAT also includes the status of the classification and inspection company's organic equipment and supplies to include pacing items, critical maintenance sets, kits, outfits, and test, measurement and diagnostic equipment. Figure 3-10 on page 3-30 shows the classification and inspection company's role in the materiel management process in a notional AOR.

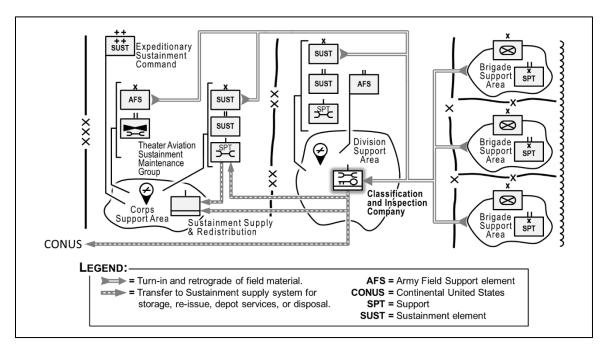


Figure 3-10. Classification and inspection company role in materiel management

SUPPLY COMPANIES

3-129. The following paragraphs describe the quartermaster companies that have a supply support mission. These companies normally have a command relationship with a CSSB or a DSSB. Although munitions is an ordnance function, this section includes the modular ammunition company because it supplies class V.

Quartermaster Composite Supply Company

3-130. The mission of the composite supply company is to provide class I, II, III (bulk and packaged), IV, VII, IX, shower and laundry services, water purification, and water supply support. Due to force design

changes approved for implementation in fiscal year 2022, the company's bulk fuel capability in active component units increases by replacing the shower and laundry capability. Reserve component composite supply companies will continue to provide shower and laundry services in addition to class I, II, III (bulk and packaged), IV, VII, and IX, water purification, and water supply support. Also because of this force design update, the composite supply company class I mission has been reduced. The composite supply company will normally be attached to a CSSB or organic to a DSSB. The company consists of a company headquarters, supply platoon, petroleum platoon, and water platoon. Composite supply companies operate in the division or corps areas depending on their allocation. Elements from the company may operate as far forward as the brigade support areas. Figure 3-11 on page 3-32 depicts the composite supply company without the 2024 force design changes. The following summary of the composite supply company elements is not based on the force development changes projected for 2024.

Composite Supply Company

Role: Provide general supply, class I supply, retrograde of materiel, water purification and supply, petroleum supply, and shower and laundry services.

Capability: Establish a multi-class SSA (general supplies, class I). Receive, store, and issue 240,000 gallons of bulk petroleum. Purify, store, and issue 120,000 gallons of potable water.

Command Relationship: Organic to DSSB or attached to CSSB.

Support Relationship: General support to units within the area of operations.

Span of Operations: Corps or Theater rear boundary to field trains.

Mobility: 50% mobility in one lift using organic assets.

- 3-131. Composite supply companies are dependent upon the appropriate elements within the theater area for religious, legal, force health protection, interpreters and translators support, finance, personnel and administrative, field level communications-electronics maintenance and supplemental transportation support. Composite supply companies depend upon the composite truck company for the distribution and return of supplies, flat racks, and the multi-temperature refrigerated container system. They depend upon the support maintenance company for field maintenance.
- 3-132. The company headquarters provides mission command, unit level administration, unit supply, chemical biological radiological nuclear defense support to unit personnel. An operations section coordinates supply, petroleum, water and shower and laundry field service operations. The maintenance section performs field level maintenance on organic unit vehicles and equipment.
- 3-133. The supply platoon receives, store, issues, and retrogrades materiel, to include class I (perishable and semi-perishable), class II, III (packaged), IV, VII and IX, maps and bottled water.
 - Supply platoon headquarters provides leadership, mission planning, and operational guidance to the sections assigned to the platoon.
 - Stock control section provides control and quality assurance of the multi-class SSA and subsistence supply mission. Stock control also coordinates external logistics, transportation, and movement control functions.
 - Receiving section receives and processes up to 51.6 short tons per day of class II, III (packaged), IV, VII, IX, and maps.
 - Storage section manages storage of class II, III (packaged), IV, VII, and IX items for issue to supported unit upon request.
 - Packing and crating section provides for efficient receipt, storage, inventory, transfer and issue of
 materiel. This section ensures for the optimum life, utility and performance of materiel through
 prevention of deterioration or damage as it prepares class II, III (packaged), IV, VII, class IX for
 shipping and storage.
 - Class I operations section performs class I stock control functions for subsistence supply
 operations.
 - The class I quality analysis section performs class I quality control and inspections on subsistence receipt, storage, and issue operations.
 - Class I receiving section receives and processes class I perishable, semi-perishable and bottled water (where provided) not to exceed 51.6 short tons per day.
 - Class I warehouse section stores perishable and semi-perishable class I and bottled water (where
 provided). It packages and palletizes class I loads and bottled water for shipment.
- 3-134. The petroleum platoon receives, stores, and issues bulk petroleum. The petroleum platoon performs quality surveillance by monitoring the condition of fuel until it is issued to the supported unit. The unit has two 120,000-gallon fuel system supply points that can be pushed forward to be closer to a BCT, if required. A petroleum platoon may augment up to three BCTs with additional capability to store and distribute fuel using 5,000-gallon tankers and heavy expanded mobility tactical trucks with modular fuel system tank racks on palletized load system trailers. It provides limited local bulk fuel distribution. A transportation truck company may also use modular fuel system tank racks and palletized load system trailers. The petroleum platoon consists of the following:
 - The petroleum platoon headquarters provides leadership, supervision and technical guidance to the petroleum platoon. The petroleum platoon headquarters includes petroleum laboratory specialists that provide quality surveillance and control measures for fuel stored and distributed by the platoon.
 - The storage and issue section has two Type 3, 120,000-gallon fuel system supply points and one Type 4, 300,000-gallon fuel system supply points. With these two systems, the platoon receives, stores, and issues up to 540,000 gallons of bulk petroleum per day.
 - The distribution section can issue up to 125,000 gallons using a combination of 5,000-gallon M969 tankers (60,000 gallons) and 2,500-gallon heavy expanded mobility tactical trucks and modular fuel tank racks (65,000 gallon) on palletized load system trailers. The distribution section can augment BCTs with modular fuel system tank racks, but capability is reduced when the tank racks

no longer used for distribution. The additional modular fuel system tank racks and palletized load system trailers in this section may be used for bulk fuel distribution. Section includes forward area refueling equipment capable of up to four aircraft refuel points.

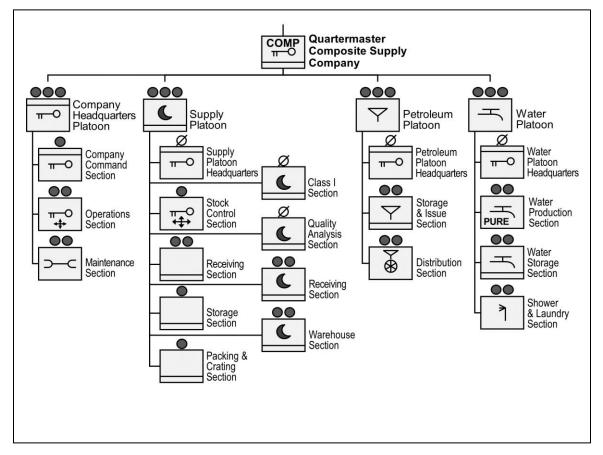


Figure 3-11. Composite supply company

- 3-135. The water purification platoon headquarters provides command and control of personnel and equipment to support water production, storage, and local distribution, and in giving warm showers and laundered clothing to soldiers in the field. The water purification platoon consists of the following:
 - The water production section purifies up to 120,000 gallons of water per day with four 1.5k tactical
 water purification system, 30,000 gallons per tactical water purification system from a fresh water
 source or 24,000 gallons from a brackish water source. The section is capable of operating four
 lightweight water purifiers, which can produce 2,500 gallons of potable water per day.
 - Currently, the water storage section can store 80,000 gallons potable water using its two water storage and distribution systems. The 100,000-gallon water storage and distribution system is replacing the two 40,000-gallon water storage and distribution system. It may also store an additional 60,000 gallons of water in HIPPOs when not used a distribution platform. HIPPO is the name applied to the load handling system compatible water tank rack When HIPPOs are loaded on palletized load system trailers, this section can distribute 8,000 gallons line haul, or 16,000 gallons locally based on two trips per day. The section may direct exchange HIPPOs with supported units.

Note: The HIPPO is usable mounted or dismounted, and is air- and ground- transportable when full, partially full, or empty. The HIPPO can be moved and set up rapidly with no site preparation, and its modular configuration supports expeditionary joint forces operations.

• The shower and laundry section provides chemical, biological, radiological and nuclear decontamination along with limited shower and laundry capability. This section can support a population of 5,000 personnel per week with showers and clean laundry by using two laundry advanced systems (LADS) and two twelve-head shower trailers.

Quartermaster Supply Company

3-136. Quartermaster supply companies provide area support for units at echelon above brigade and back-up support for BCTs and support brigades. The company or platoons may have a direct or general support relationship with supported units. Planners should allocate one quartermaster supply company per 12,000 troops or as required based on the capabilities of subordinate platoons. The company consists of one to three multi-class SSAs that includes receipt, storage, and issue of perishable and semi-perishable subsistence. Attached to a CSSB, the quartermaster supply company operates as far forward as the brigade support areas.

3-137. The quartermaster supply company consists of—

The company headquarters section that provides mission command, unit level administration, supply support, chemical biological radiological and nuclear defense support.

Quartermaster Supply Company

Role: Provides general support and direct support of class II, III (packaged), IV, VII and IX, maps and bottled water.

Capability: The supply company can support approximately 12,000 troops (4000 per Area Supply Platoon).

Command Relationship: Attached.

Support Relationship: General support and direct support to units within the area of operations.

Span of Operations: JSA to brigade support

Mobility: Capability to transport 50% of its equipment and supplies in a single lift using organic assets.

- The maintenance section that provides limited field maintenance on organic equipment and vehicle recovery.
- An operations section that plans and coordinates company operations.
- Three supply platoons each with a headquarters element that provides mission command and technical guidance. Each of the three supply platoons provides general support or direct support of class I resupply, not to exceed 53.48 short tons per day. Provides general support or direct support of class II, III (packaged), IV, VII, IX, maps and bottled water, not to exceed 51.6 short tons per day. Typically, one supply platoon may provide class I supply support and the other two supply platoons may provide class II, III (packaged), IV, VII, and IX, maps and bottled waters. The basis of allocation is one to three platoons per supply company. The supply platoon is dependent upon the appropriate elements within the theater area for religious, legal, force health protection, finance, personnel and administrative services. Supply platoons depend upon the supply company for unit level administration, additional maintenance support, vehicle recovery, and unit supply. The supply platoon has the capability to transport 33% of its equipment and supplies in a single lift using organic assets. The supply platoon consists of the following sections—
 - The stock control section provides control for logistical support. Coordinates external logistics, transportation, and movement control functions. Plans, executes and monitors the receipt, storage and issue of supplies for supported units, to include recoverable supplies and their retrograde back into supply network for reissue.
 - The receiving section provides receipt and issue of class II, III (packaged), IV, VII, and IX, maps and bottled water. Prepares supported unit loads for daily delivery and identifies materiel for transfer to the platoon storage section.
 - The storage section provides storage of class II, III (packaged), IV, VII, and IX items for issue to supported unit upon request.
 - The packing and crating section provides packing and crating support for shipping, receiving and storage of excess class II, III (packaged), IV, VII, repairable and un-repairable Class IX items for retrograde and return to the supply system.
 - The vehicle maintenance section provides mechanics to augment the maintenance section in the company headquarters (when co-located) and provides field level maintenance on

wheeled vehicles and equipment. When the platoon is employed independently, the mechanics will augment the maintenance section of the supporting unit.

MODULAR AMMUNITION COMPANY

- 3-138. The modular ammunition company's role is to receive, store, and issue munitions. The organization of the modular ordnance company permits assignment of modular platoons tailored for specific functions supporting forces or other munitions units as required. Modular ammunition companies operate ammunition supply areas at theater, corps, and other levels as required by the tactical situation.
- 3-139. The modular ammunition company is attached to the ordnance battalion (ammunition) or a CSSB. This company normally consists of a headquarters platoon and three modular ammunition platoons with the command and control capacity to expand to five as depicted in figure 3-12. This company provides

Modular Ammunition Company

- Role: Provides modular ammunition support on an area basis.
- Capability: Receives, configures, inspects, manages, issues, ships, and retrogrades class V stocks.
- Command Relationship: Attached.
- Support Relationship: General Support.
- Span of Operations: Joint support area to the brigade support area.

modular ammunition operations on an area basis within the theater area. Under the ammunition modularity concept, only the number of companies and platoons needed are deployed to support the deployed force. Generally, one modular ammunition company is required to support a division. This unit depends upon appropriate elements within the theater to provide religious, legal, force health protection, finance, communication, automation and electronic warfare support, personnel and administrative services.

- 3-140. The headquarters platoon provides administrative, planning, and logistics support for two to five geographically separated or centrally located modular ammunition platoons. This platoon operates the unit supply and provides construction, field feeding, firefighting, CBRN defense and field maintenance support for assigned and geographically collocated platoons. It will collocate with at least one modular ammunition platoon when deployed. When deployed, the fire-fighting and field maintenance sections will often task organize under and co-locate within the modular ammunition platoon ammunition supply point.
- 3-141. The modular ammunition company resupplies the headquarters support company and monitors the controlled supplied rate for critically managed munitions. The modular ammunition company provides support to units on an area basis. The modular ammunition company receives munitions; maintains theater, corps, and division stocks; conducts operational-level reconfiguration; and distributes munitions throughout the theater. The design of the modular ammunition company permits assignment of modular platoons tailored for specific functions deployed to support forces or other munitions units as required. The modular ordnance company support structure provides a flexible munitions distribution system that meets the needs of the GCC or senior sustainment commander. The modular ammunition company operates ammunition supply activities.

Army Operations

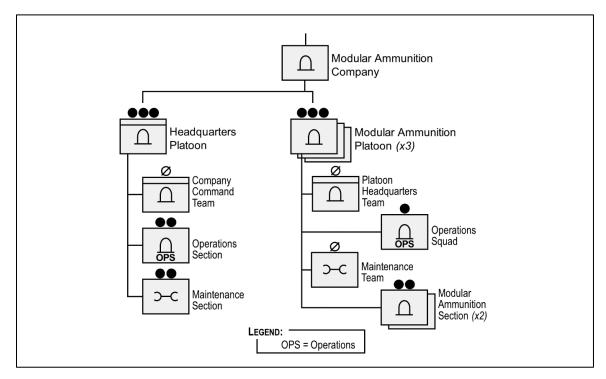


Figure 3-12. Modular ammunition company

3-142. Modular ammunition platoons receive, configure, inspect, manage, issue, ship, and retrograde class V stocks. The modular ammunition platoons normally consist of a platoon leader, ammunition warrant officer, chief ammunition noncommissioned officer (NCO), ammunition inspectors, ammunition stock control NCO, and ammunition handlers with associated equipment. The platoon may operate in conjunction with other modular ammunition platoons. It also performs munitions field maintenance and destroys, packs crates, bands, inventories, and decontaminates ammunition stocks. The modular ammunition platoon prepares and maintains ammunition records and reports, operates the communications net and provides the appropriate DMC with transaction and inventory management data. Modular ammunition platoons are employed within a theater to operate ammunition supply activities.

3-143. Modular ammunition platoons may deploy separately from their parent company. These platoons may be attached to a sustainment company headquarters, normally within a CSSB, to provide support to EAB elements. A modular ammunition platoon is sufficient to support a brigade under most conditions. If deployed separately from the modular ordnance ammunition company, the platoon is dependent upon appropriate elements within the theater to provide religious, legal, force health protection, finance, communication, automation and electronic warfare support, personnel and administrative services. The platoon also depends upon a company level headquarters organization for field feeding, supply, construction, firefighting, field maintenance, CBRN defense, personnel and administrative support. When operating an ammunition supply point, the modular ammunition platoon is incapable of securing itself. The number of modular ammunition companies or platoons that will be committed to any operation is determined during campaign planning. Modular platoons are capable of loading and moving 20-foot containers with their assigned rough terrain container handler operator, which is required during initial theater opening operations. The modular ammunition platoon may have either a general or direct support relationship with units operating within their supported area and maintains close coordination with all supported units.

FUNCTIONAL QUARTERMASTER ORGANIZATIONS

3-144. The following is a list of quartermaster functional organizations that support Army operations. Types of equipment and quantities identified in the following paragraphs are for general planning purposes and may vary widely depending on the actual operational environment or force design changes.

THEATER PETROLEUM CENTER

3-145. The theater petroleum center serves as the operational Army link to strategic petroleum partners providing liaison between DLA-Energy, host and partner nations, the ASCC, Army Petroleum Center, combatant command, and TSC, as needed. The TPC is allocated one per ASCC supporting a geographic combatant command or in the TSC when their capabilities to plan and execute petroleum operations are exceeded. The TPC serves as the linkage between petroleum partners by providing strategic and operational planning as well as liaison support between DLA-Energy, the U.S. Army Petroleum Center, Joint Petroleum Office, ASCC, the theater Army, corps, TSC or ESC, petroleum groups and the subarea petroleum office as needed. The TPC serves as the senior theater Army petroleum advisor to the geographic and functional combatant commands. The TPC is normally assigned or attached to an ASCC, corps, TSC, or ESC. The TPC may also be attached to a geographic combatant command when supporting the joint petroleum office mission as the Army's Service component representative.

3-146. For information on the theater petroleum center's capabilities, refer to ATP 4-43, *Petroleum Supply Operations*.

QUARTERMASTER PETROLEUM LIAISON TEAM

- 3-147. Each quartermaster petroleum liaison team is assigned to support a TSC or ESC. The quartermaster petroleum liaison team is similar to the TPC and provides the same capabilities of the TPC on a smaller scale.
- 3-148. For information on the theater petroleum center's capabilities, refer to ATP 4-43, *Petroleum Supply Operations*.

QUARTERMASTER (PETROLEUM, OIL, LUBRICANTS, AND WATER) GROUP

3-149. The quartermaster (petroleum, oils, and lubricants and water) group operates within a theater area of operations for distribution of petroleum and water in the theater. The organization provides centralized management of bulk petroleum and water. This unit also provides command and control, planning, liaison, and supervision of the supply, distribution, quality surveillance, and storage of bulk petroleum for a theater of operations. It also conducts operational planning for the development, rehabilitation, and extension of host nation petroleum systems and storage facilities based on the OPLAN of the theater commander. The group is normally attached to a TSC or ESC. There are two quartermaster petroleum groups in the Army Reserve Component. These units are dependent upon external support for area signal support, construction, rehabilitation, and maintenance of petroleum facilities. See ATP 4-43, *Petroleum Supply Operations* and ATP 4-44, *Water Support Operations*, for additional information.

THEATER PETROLEUM LABORATORY TEAM

- 3-150. The theater petroleum laboratory team's mission is to perform specification and procurement acceptance testing of petroleum products. This team, attached to a TSC or ESC, has a general support relationship to supported units. The laboratory 's capabilities include—
 - Providing theater level fuel testing and evaluation. Theater laboratories can perform a larger volume of fuel sample testing and serve as a backup to divisional area laboratories assigned to the composite supply company and aviation support battalion.
 - Providing technical support and supervision to other laboratories for handling, storing, sampling, identifying, and performing quality evaluation of petroleum products and their containers for all U.S. and multinational forces.
 - Providing quality surveillance (Modified A, B2-3 and C level) testing using data to make recommendations for proper use, reclamation, and disposal of the product.
- 3-151. For more information on the theater petroleum laboratory team, refer to ATP 4-43, *Petroleum Supply Operations*.

QUARTERMASTER FORCE PROVIDER COMPANY

- 3-152. The force provider company's mission is to provide the front-line Soldier a brief respite from the rigors of combat. It supports a task force during theater reception, rest and refit, redeployment, and at base camps. Each platoon of the force provider company fulfills different purposes. For example, force provider platoons combine to support larger populations with shelters for billeting and for morale, welfare and recreation activities. The Army has one force provider company assigned to the U.S. Army Reserve.
- 3-153. The force provider company, when assigned to a CSSB, supports combat and stability operations such as humanitarian aid, noncombatant evacuation, disaster relief, peacekeeping or peace enforcement. It may be employed in a geographical area or in support of a brigade-sized unit. In some instances, the force provider company acts as a stand-alone organization located as far forward as a brigade combat team. In either case, the force provider company will remain under the control of the command to which it is attached. It supports a task force during theater reception, staging, onward movement, and integration, rest and refit, redeployment, and provides field services (billeting, feeding, laundry, shower, and latrines) at base camps. Theater command structure and the force provider mission for each deployment will determine its exact assignment. See figure 3-13.
- 3-154. The four force provider company headquarters provides mission command, unit level administration, supply, and supervision of operations for up to six force provider platoons and a service and support platoon when organized as a structured company. The headquarters operations section plans and coordinates company operations and provides technical expertise. The company headquarters has the capability to transport 50% of its equipment and supplies in a single lift using organic assets.

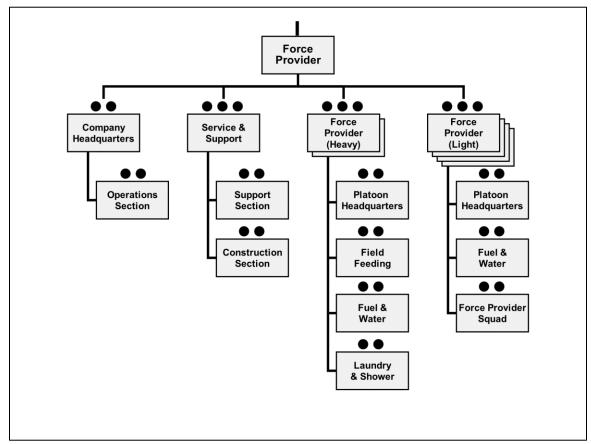


Figure 3-13. Force Provider Company

3-155. The service and support platoon provides engineer capability to support site preparation, maintenance, facilities maintenance, receipt, storage, and issue of the bulk fuel that supports the force provider company. The force provider service and support platoon is dependent upon the appropriate

elements within theater for religious, legal, force health protection, finance, personnel and administrative services, and supplemental transportation support. The platoon depends upon a horizontal construction company for site preparation, an engineer firefighting team for firefighting, and an engineer company for power generation, an a utility team for utilities operations.

- 3-156. Force provider's heavy platoon has the capability to transport 50% of its equipment in a single lift using organic assets. The platoon headquarters provides supervision coordination and scheduling for operating elements of the platoon. Each support section provides retail fuel support and additional maintenance personnel to provide field level maintenance and recovery for the force provider company. The construction section provides engineer functional area expertise and capabilities for site preparation and facilities maintenance of the force provider modules.
- 3-157. Two force provider heavy platoons provide full service support for personnel residing in force provider facilities. Force provider heavy platoons support major combat and stability operations such as humanitarian aid, noncombatant evacuation, disaster relief, peacekeeping or peace enforcement operations. The heavy platoons depend upon appropriate elements within theater for religious, legal, force health protection, finance, personnel and administrative services, and supplemental transportation support. The platoon depends upon a horizontal construction company for site preparation, an engineer firefighting team for firefighting, and an engineer company for power generation, an a utility team for utilities operations.
- 3-158. The light platoon headquarters provides supervision over billeting, supply functions, climate control, and provides facility space for basic morale, welfare, and recreation services. Each of the two field feeding sections provide the capability to prepare and serve three cook prepared meals daily, for up to the maximum supported personnel capacity of the 600-person module. Two fuel and water sections each stores and distributes potable water; stores and disposes grey water; collects black water; and stores and distributes bulk fuel. Two laundry and shower sections plans and coordinates internal logistics requirements to provide shower support, based on, one shower per Soldier per day. The laundry system supports washing up to 17 pounds of laundry per Soldier every three days.
- 3-159. Two force provider light platoons provide full-service support for personnel residing in force provider facilities. Force provider light platoons support major combat and stability operations such as humanitarian aid, noncombatant evacuation, disaster relief, peacekeeping or peace enforcement operations. The light platoons depend upon appropriate elements within theater for religious, legal, force health protection, finance, personnel and administrative services, and supplemental transportation support. The platoon depends upon a horizontal construction company for site preparation, an engineer firefighting team for firefighting, and an engineer company for power generation, and a utility team for utilities operations.
- 3-160. The four platoon headquarters provide supervision over billeting, supply functions, climate control, and provides facility space for basic morale, welfare, and recreation services. Four fuel and water sections each stores and distributes potable water; stores and disposes grey water; collects black water; and stores and distributes bulk fuel. The four force provider squads each plans and coordinates internal logistics requirements to include the ability to provide shower support, based on, one shower per Soldier per day. The force provider modules also include shower water reuse systems. The laundry system supports washing up to 17 pounds of laundry per Soldier every three days.
- 3-161. See ATP 4-45, Force Provider Operations, for in-depth information about the force provider company.

BRIGADE AND BELOW

3-162. The following is a list of BSB functional organizations that support the brigade. Types of equipment and quantities identified in the following paragraphs are for general planning purposes and may vary widely depending on the actual operational environment or force design changes.

BRIGADE SUPPORT BATTALION

3-163. The BSB provides logistics and health service support to a BCT. The BSB SPO controls the distribution management process via centralized, integrated and automated command and control. Support

operations is comprised of supply and services, ammunition, and transportation cells. Each cell provides input to establish and maintain overall pipeline visibility. Functional and multifunctional support brigades reinforce BCTs and divisions with the following capabilities: sustainment, fires, maneuver support, and aviation. See ATP 4-90, *Brigade Support Battalion*.

3-164. The BSB SPO is responsible for distribution management support for the brigade. The support operations functions generally include materiel management, transportation, maintenance, ammunition, AHS support (except field artillery and maneuver enhancement brigade), supply and field services, and distribution operations. This ATP addresses only the supply-related functions of the BSB SPO, see ATP 4-90,

BSB, Brigade Combat Team

Role: Provides logistics, Army Health System, and maintenance support to a brigade combat team.

Capability: Expeditionary, multi-functional logistics battalion with integrated Army Health System support capable of operating at the tactical level.

Parent: BCT.

Command Relationship: Organic to a BCT.
Span of Operations: BCT area of operations.
Mobility: Requires 100% mobility in a single lift using organic vehicles.

Brigade Support Battalion for other functions. See figure 3-14 for the BSB SPO organization chart.

- 3-165. Materiel managers coordinate with the transportation section of the BSB SPO for distribution of materiel to supported units.
- 3-166. The BSB SPO is responsible for the materiel management of munitions for the brigade, provides staff supervision to the distribution company's ammunition transfer holding point, and provides technical assistance and advice on munitions management to brigade units. The SPO ammunition section maintains records of munitions allocations, receipts, and expenditures for the brigade's units.
- 3-167. The BSB SPO is responsible for coordinating the resupply of bulk fuel to the FSCs and from the sustainment brigade to the BSB distribution company. The SPO also provides supervision and management of general supplies (less class V) within the brigade. They monitor the on-hand stocks within BSB companies, determine requirements, coordinate local purchase, retrograde, and distribution of supplies. They also provide oversight of parts requirements and projections of parts availability. See figure 3-15 on page 3-40 for a notional battlefield array of a BSB supporting an armored brigade combat team.

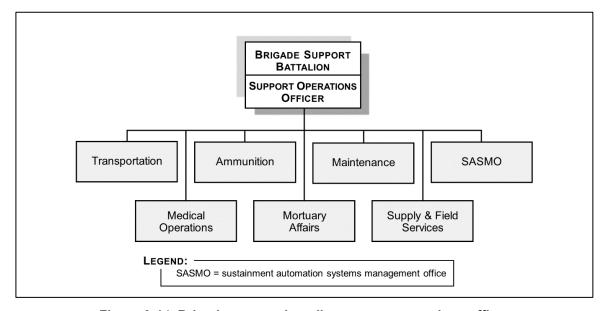


Figure 3-14. Brigade support battalion support operations office

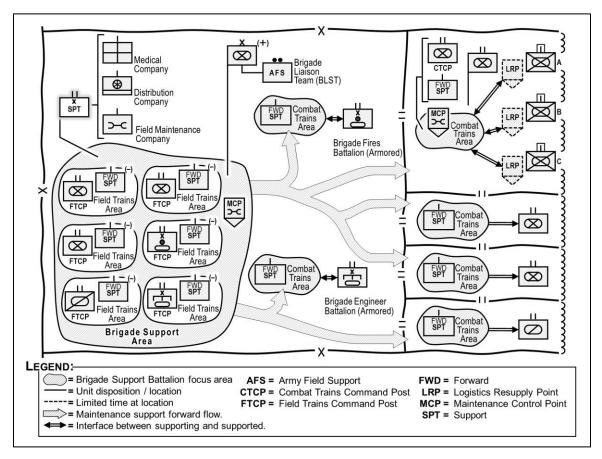


Figure 3-15. BSB in support of an ABCT

DISTRIBUTION COMPANY

3-168. The role of the BSB distribution company is to plan, direct, and supervise supply support operations and supply distribution to the brigade combat team or multifunctional brigade missions. See ATP 4-90,

Brigade Support Battalon, for in-depth information about the distribution company.

3-169. The BSB distribution company is a multifunctional distribution and supply company capable of operating at the tactical level as directed by the BSB commander. The BSB employs the distribution company in the brigade support area and its subordinate units operate throughout the supported brigade area of operations. The company executes supply support activity operations that include managing the daily receipt, storage, and issue of supply class I, II, III, IV, V and IX. The company also executes distribution, distribution integration, and transportation operations to ensure timely supply support to the BCT.

3-170. A BSB distribution company supporting Stryker and infantry BCTs has three platoons: a transportation platoon, a supply platoon, and a fuel and water platoon. The distribution company leadership (commander,

BSB Distribution Company

- Role: Plans, directs, and supervises supply distribution in support to a BCT or multifunctional brigade.
- Capability: Manages the distribution of supplies to the brigade and provides distribution capability for class I, II, III, IV, V, and IX.
- Parent: BSB.
- Command relationship: Organic to a BSB.
- Support relationship: General support to the BSB and BCT.
- **Span of operations:** BCT area of operations.
- Mobility Index: Requires between 68-85% mobility in one lift using organic assets.

executive officer, and first sergeant) are responsible for company support operations. These personnel ensure

the distribution management tasks are executed effectively. The company commander may designate responsibility for the distribution management tasks between the executive officer and the first sergeant as necessary.

- 3-171. The distribution company headquarters executes the BSB commander's concept of support and manages task organization and employment of all assets.
- 3-172. A transportation platoon headquarters provides leadership and supervision to three tactical truck squads performing motor transport operations.
- 3-173. The supply platoon headquarters provides leadership, supervision and technical guidance to the SSA. The SSA consists of a general supply and class IX section that supervises, directs and manages the receipt, storage, and issue of supplies and equipment and a modular ammunition transfer point section that receives, transships issues, inspects, and performs limited munitions maintenance operations support. The BSB SPO provides brigade level ammunition requirements determination and manages asset visibility.
- 3-174. A fuel and water platoon headquarters provides leadership and supervision to the platoon. It consist of a class III section that conducts fuel distribution operations and a water section that conduct water distribution operations.
- 3-175. The Army has centralized the fuel storage, water purification, and a majority of the personnel transportation assets of the BSB distribution company within CSSBs. The BSB SPO coordinates with the sustainment brigade SPO to ensure this support is in place. For additional information about the distribution company, see ATP 4-90, *Brigade Support Battalion*. See figure 3-16.

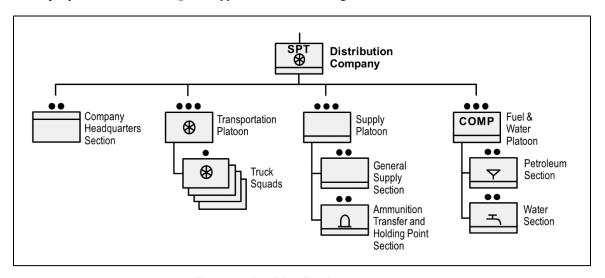


Figure 3-16. Distribution company

FORWARD SUPPORT COMPANY

3-176. FSCs provide direct support to maneuver, engineer, cavalry, and fires battalions, aviation, special force assistance, and maneuver enhancement battalions. The FSC provides the supported commander with

dedicated logistics assets organized specifically to meet the battalion's requirements. FSCs provide the brigade, battalion, and BSB commanders the greatest flexibility for providing logistics support. FSCs provide the BSB commander the ability to task organize and prioritize the logistics effort in support of decisive action.

3-177. The FSCs have a headquarters section, a distribution platoon, and a maintenance platoon. See figure 3-17 for the FSC wiring diagram. The headquarters' food service section provides class I support, food service, and food preparation for the company and its supported battalion. The distribution platoon consists of a platoon headquarters and four squads that can be task organized to distribute class II, III, IV, V, and VII. FSC maintenance platoons capabilities vary based upon the equipment and major weapon systems of the supported battalion. See ATP 4-90, *Brigade Support Battalion* for detailed information. See figure 3-18 for a notional battlefield array of an FSC supporting an armored battalion.

Forward Support Company

Role: Provides logistics in direct support to a specific supported battalion.

Capability: Provides field feeding, bulk fuel, general supply, ammunition, and field-level maintenance in direct support of a supported battalion.

Parent: BSB.

Command Relationship: Organic to a BSB; may be attached or OPCON to its supported battalion.

Support Relationship: Direct support to its specific maneuver battalion; general support to other units in the BCT, general support to others on a limited basis by exception.

Span of Control: BCT area of operations from the BSA to the forward line of troops.

Mobility: Requires 100% mobility in a single lift using organic vehicles.

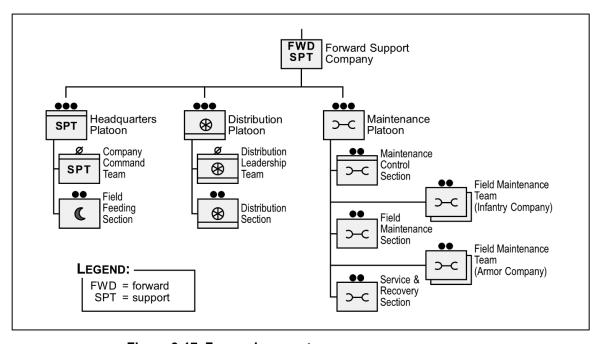


Figure 3-17. Forward support company

Army Operations

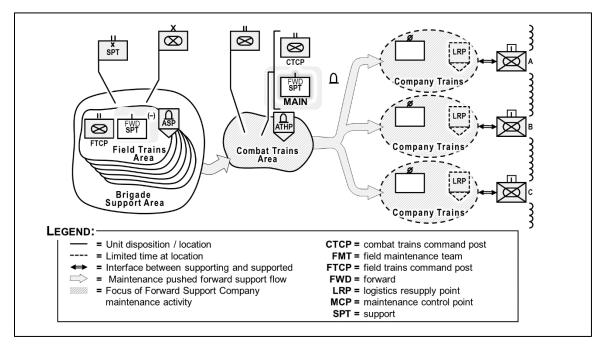


Figure 3-18. Forward support company supporting an armored battalion

ARMY HEALTH SYSTEM SUPPORT

3-178. The Army sustainment warfighting function consists of health service support, logistics, financial management, and personnel services. AHS support consists of health service support and force health protection. This section addresses the intersection of health service support and logistics as well as the AHS force health protection mission, which is an element of the protection warfighting function. The AHS has units designed to manage medical logistics. The following discussion offers brief introductions to the medical units with a focus on the class VIII supply support mission. See AR 40-1, *Composition, Mission, and Functions of The Army Medical Department*, AR 40-3, *Medical, Dental, and Veterinary Care*, and AR 40-5, *Preventive Medicine*, ATP 4-02.1, *Army Medical Logistics*, for additional information.

ARMY HEALTH SYSTEM

- 3-179. The AHS mission is to maintain the health of the force and conserve its fighting strength by providing care on and off the battlefield. During the shape and prevent strategic roles the MEDCOM (DS) provides AHS support to set the theater through coordination and integration of strategic medical capabilities from the U.S. sustaining base. It also provides support through global health engagements, establishment and maintenance of medical support agreements, deploying medical technical expertise for consultation services and other support, and military medical training exercises.
- 3-180. The MEDCOM (DS) establishes health standards, provides health education, and preventive medicine services to help reduce instances of disease and nonbattle injury (DNBI) during combat operations. For in-depth information about the AHS, please see FM 4-02, *Army Health System*.

MEDICAL COMMAND (DEPLOYMENT SUPPORT)

3-181. The MEDCOM (DS) is the theater medical command responsible for command and control, integration, synchronization, and execution of AHS support within the AOR. The MEDCOM (DS) controls and supervises Class VIII supply and resupply (including blood management) in support of the ASCC. The MEDCOM (DS) is responsible for the coordination and orchestration of medical logistics (MEDLOG) operations to include Class VIII supply, distribution, medical equipment maintenance and repair support, optical fabrication, and blood management including planning and support for the single integrated medical

logistics management, when designated. The MEDCOM (DS) also provides preventive medicine and veterinary services support for field services operations, which includes basic sanitation and hygiene, water potability, food protection, quality, and sanitation inspections, food and water risk assessments, pest management, occupational and health surveillance, and other preventive measures. The MEDCOM (DS) establishes policy, monitors, coordinates, and facilitates MEDLOG operations within the theater including Class VIII supply and resupply, blood management, medical equipment maintenance and repair, and optical fabrication. This section also—

- Establishes a liaison with the theater sustainment command, through the MLMC forward support team
- Coordinates with and provides MEDLOG support for all Services deployed in the area of operations including planning and support for the single integrated medical logistics management mission (when the Army is designated).
- Establishes the theater Joint Trauma System and prevents and mitigates health threats.
- Coordinates with the theater distribution centers for all transportation issues related to the distribution of class VIII materiel in the theater.
- Coordinates the fielding of medical APS.
- Provides veterinary services support for food protection, quality, and sanitation inspections; conducts food defense vulnerability assessment and food and water risk assessments.
- Provides health facility planning support for the theater.
- Coordinates and facilitates contracting operations in support of the theater medical mission.

3-182. The MEDCOM (DS) coordinates with medical planners in the GCC, ASCC, and other service component surgeon cells and with the TSC or ESC to establish the JOA class VIII sustainment base. The MEDCOM (DS) issues guidance for implementing the class VIII portion of ASCC Army Health System plans for future operations, with emphasis on required deployment instructions and issues guidance to medical brigades to specify unit support assignments. The MEDCOM (DS) also task organizes MEDBDEs for support, including class VIII supply support to the JOA and advises the commander on class VIII support options available, and the service capabilities within the theater. Refer to FM 4-02, *Army Health System* for a full description of the Army Health System.

MEDICAL BRIGADE (SUPPORT)

3-183. The medical brigade (support) MEDBDE (SPT) provides command and control for assigned or attached theater medical units providing AHS support for BCTs, division, and corps, joint and multinational forces. The role of the MEDBDE (SPT) in MEDLOG operations is to plan, coordinate, and supervise class VIII supply and resupply (including blood management) support within the unit's area of operations. The MEDBDE (SPT) may also serve as the single integrated medical logistics management, when designated by the combatant commander.

3-184. The MEDBDE (SPT) monitors, coordinates, and facilitates MEDLOG operations within the command. They coordinate, control, and manage the functional areas pertaining to the highly specialized and technical materiel and services used in support of the health care delivery system. The MEDBDE (SPT) exercises responsibility for units engaged in medical supply, optical fabrication, medical equipment maintenance and repair, blood support, quality control operations and other MEDLOG support. The MEDBDE (SPT) also—

- Provides command policy and monitors the collection, evacuation, and accountability of all MEDLOG items of supply classified as salvage, surplus, abandoned, or uneconomically repairable.
- Plans, directs, and implements the multifunctional areas of medical materiel management and their
 integration into the overall DOD logistics system, as well as the support interface between the
 deployed medical logistics resources and reach to the wholesale logistics system and industry in
 the CONUS-support base.
- Provides oversight of units engaged in the receipt, storage and preservation, issue, and distribution
 of medical equipment, medical equipment maintenance and repair parts, optical fabrication, blood
 support, and medical supplies.

- Serves as the focal point for medical property management and accountability procedures.
- Synchronizes formularies within the theater with the logistics support available to ensure efficiencies are met and pharmacological supply requests are processed accurately.
- Provides the status of all class VIII items, critical item shortages, and the status of the automated supply systems.
- Develops, coordinates, and supervises the supply support portion of the integrated logistics support plan.
- Provide planning, direction, and guidance for medical equipment maintenance programs for the MEDBDE (SPT).
- Coordinates and facilitates contracting operations in support of the brigade medical mission.
- Provides health facility planning support for the brigade and supported units.

MEDICAL BATTALION (MULTIFUNCTIONAL)

- 3-185. The MMB is designed as a multifunctional medical battalion headquarters. It provides medical command and control, administrative assistance, MEDLOG support, and technical supervision for assigned and attached medical functional organizations (companies, detachments, and teams) task-organized for support of BCTs in its area of responsibility.
- 3-186. The MMB is responsible for planning, coordination, and execution of the Class VIII mission within the MMB area of operations. The MMB is responsible for—
 - Providing an accountable officer to the MLC (when assigned) for the management and oversight of class VIII stocks maintained by the company.
 - Medical logistics support operations and the single integrated medical logistics management mission, when designated.
 - Providing direction and guidance for medical equipment maintenance and repair programs in the MMB.
 - Facilitation of reception, staging, onward movement, and integration operations and coordination with subordinate MEDLOG units for the distribution of medical supplies.
 - Oversight of pharmacy operations within the battalion to ensure compliance with regulatory requirements and establishing policy and procedures for dispensing over-the-counter drugs.

MEDICAL DETACHMENT, BLOOD SUPPORT

- 3-187. The medical detachment blood support provides collection, manufacturing, storage, and distribution of blood and blood products to BCTs, corps, and echelons above corps medical units and to other services as required. The headquarters, medical detachment, blood support provides command and control for the medical detachment, blood support, plans, supervises the activities of the teams under its control and provides technical guidance and subject matter expertise to commanders on blood operations. This headquarters will deploy when any other team of the medical detachment, blood support is called into service.
- 3-188. The collection, storage and distribution team provides collection, manufacturing, storage and distribution of blood and blood products to BCTs, corps, and echelons above corps medical units and to other services as required. The collection storage and distribution team, receives, inspects, accounts, stores and ships blood products to supported units. Team can store up to 3,900 units of blood with secondary mission to collect under emergency conditions of up to 100 units fresh whole blood and or up to eight Apheresis platelets per day when not distributing blood products.
- 3-189. The collection, manufacturing and distribution team's mission is to provide collection, manufacturing, storage and distribution of blood and blood products to BCTs, corps, and echelons above corps medical units and to other services as required. The collection, manufacturing and distribution team receives, inspects, accounts, stores and ships blood products to supported units. Team can store up to 900 units of blood with secondary mission to collect under emergency conditions of up to 100 units fresh whole blood and or up to eight Apheresis platelets per day when not distributing blood products.

3-190. The distribution team's mission is to provide storage and distribution of blood and blood products to BCTs, corps, and echelons above corps medical units and to other services as required. The distribution team provides blood and blood products to medical treatment facilities operating in the BCT, corps and echelons above corps. The distribution team provides blood and blood products to medical treatment facilities operating in the BCT, corps, and echelons above corps, the receipt and transshipment of packed red blood cells and blood products from the U.S. Air Force Expeditionary Blood Transshipment Center, refrigerated storage for 300 units of packed red blood cells. The team distributes boxes of packed red blood cells and other blood products to BCT, corps and echelons above corps medical treatment facilities. It deploys as a forward distribution team as required.

MEDICAL LOGISTICS COMPANY

3-191. The medical logistics company provides class VIII supply support, optical lens fabrication and repair, and medical equipment maintenance and repair for the BCT and EAB units, to include augmented support to the hospital center and combat support hospital. The medical logistics company can process 13 short tons of medical materiel a day and has the capability to store 51 short tons of class VIII. The medical logistics company can also—

- Provide 220 hours per day of field level medical equipment maintenance and repair.
- The receive and storage sections, shipping section and the stock control section can process up to nine short tons of class VIII supplies per day.
- Coordinate for emergency delivery of class VIII supplies.
- Build and position preconfigured push-packages, as required, in support of units in the theater.
- The optical section can provide single and multi-vision optical lens fabrication and repair to support a maximum force of 22,000 troops.
- Provide the distribution capability for a theater lead agent for medical materiel, when the Army is designated.
- Provide one early entry team, three contact repair teams, and three forward distribution teams, who can process up to four short tons class VIII per day.
- 3-192. The medical logistics company early entry team provides limited class VIII supply support, and medical equipment maintenance and repair support to early entry BCTs and units operating at EAB. The early entry team coordinates for higher priority delivery of class VIII supplies and receives and positions preconfigured push packages, until normal automated requisition flow is established. The early entry team combines with the medical logistics company base, once deployed, to provide medical logistics to supported units. The early entry team will provide asset visibility and in-transit visibility of class VIII supplies. The early entry team also has a biomedical maintenance team that establishes and tracks medical equipment density and schedule service information from the Logistics Information Warehouse for all medical units during theater opening operations. The biomedical maintenance team also provides limited field maintenance and regeneration enablers upon request (72-hours during initial operations).
- 3-193. The medical logistics company contact repair teams can be rapidly deployed to provide medical equipment maintenance and repair. The contact repair teams can augment any medical organization to include joint or multinational partners. The contact repair team can be collocated with a brigade support medical company if a forward resuscitative and surgical team is deployed forward. When the contact repair teams are deployed, separate from the base element and are dependent upon a host unit for life support operations.
- 3-194. The medical logistics company forward distribution teams can be rapidly deployed to provide class VIII distribution support. The forward distribution teams may collocate with Role 2 and 3 medical treatment facilities and the brigade medical supply office, if required, and provide distribution management of class VIII. The forward distribution teams assist customers in their AOR and provide in-transit visibility. The teams extend the class VIII lines of supply by coordinating storage and shipping of cold chain management items and items requiring special handling (controlled substance, hazardous material, oxygen and medical gas). The unit can process up to four short tons. Refer to ATP 4-02.1, *Army Medical Logistics* for a more detailed description of Army medical logistics.

KEY PERSONNEL ROLES AND RESPONSIBILITIES

3-195. The following section describes material management roles by position and by commodity. In all of the personnel roles, the duty position (for example, company commander, executive officer, and first sergeant) has multiple responsibilities not related to supply. This ATP focuses only on the position's role in managing material for supply support.

3-196. Personnel roles and responsibilities are similar regardless of echelon or size of the organization. Duty titles vary and, in some instances, one individual may perform the responsibilities embodied in two or more of the materiel management roles described in this section of the publication. Support operations at all echelons perform the same basic distribution management functions, but their focus changes based on the scope of responsibilities. For example, the TSC DMC includes a DIB that focuses on the entire theater, but the CSSB has a SPO that focuses only on that CSSB's support area. This ATP does not provide echelon specific role descriptions for multi-echelon duty positions.

COMMANDER

3-197. Commanders at all echelons exercise authority and direction over their units to perform the mission. Each commander is responsible for the administration of the unit and its supply requirements. The commander is responsible for making timely requests for supplies and for distributing those supplies to the elements of the unit.

3-198. Staffs assist the commander in understanding situations, making and implementing decisions, controlling operations, and assessing progress. They make recommendations and prepare plans and orders for the commander. Staffs communicate information to subordinate units for execution. Each staff section exercises control over its area of expertise within the commander's intent. While commanders make key decisions, they are not the only decision makers. Trained and trusted staff members, given decision-making authority based on the commander's intent, enable commanders to focus on key aspects of operations. These staff members support and advise the commander within their area of expertise.

EXECUTIVE OFFICER

3-199. The executive officer is the commander's principal staff officer. The executive officer manages day-to-day activities for all administrative and logistical functions. The executive officer assists the commander with maintaining materiel readiness by tracking incoming and outgoing equipment, planning supply requirements for future operations, providing guidance to subordinate elements on materiel readiness issues, and providing liaison with higher headquarters or outside agencies regarding materiel readiness.

OPERATIONS OFFICER (G-3 or S-3)

3-200. The operations officer develops the support OPORD and associated logistics annexes to all plans and orders. Operations officer planning considerations include—

- Current mission and mission changes.
- Task organization changes.
- Friendly situation two levels higher.
- Current subordinate unit status.
- Significant friendly actions during last twenty-four hours.
- Current commander's critical information requirements and answers received during last twenty-four hours.
- Obstacle and survivability update.
- Anticipated planning requirements.

3-201. The operations officer has directive authority over subordinate units during the performance of current operations and support operations. The operations officer maintains the running estimate. Using interoperable automation and communications, the operations section perform daily management functions and fuse logistics requirements for the support and distribution operations section. The operations officer forecasts future requirements for the SPO and assists in the development of the support plan and concept of

sustainment. The operations officer recommends and incorporates current and future replenishment posture, days of supply, and on hand quantities of class I rations, water (bulk and bottled), ice, class III (bulk), class IV, and class V.

LOGISTICS STAFF OFFICER (G-4 or S-4)

3-202. As the lead sustainment planner, the logistics staff officer manages the budget, oversees logistical support planning, logistics readiness reporting, logistics automated systems, and tactical transportation operations; coordinates and supervises supply support, and monitors material readiness; and plans, monitors equipment transfers; verifies need for property book accounting for all government purchase card purchases; and coordinates transportation requirements for movement. The logistics staff officer provides input to plans, policies, procedures, and programs for supply, transportation, maintenance, and field services in support of subordinate units.

3-203. The logistics staff officer fulfills the battalion sustainment mission by working closely with the command and staff structure. The logistics staff officer consolidates the logistics posture of subordinate units, coordinates logistics requirements, and establishes support priorities in accordance with the commander's guidance. The logistics staff officer works closely with the executive officer, operations officer (G-3 or S-3), and the intelligence staff officer (G-2 or S-2) to forecast resupply. Considerations for supply planning include current mission, mission changes, changes to task organization, and current subordinate unit status. The commander provides the following information to the logistics staff officer—

- Mission statement.
- Concept of the operation.
- Commander's intent.
- The enemy and friendly situation.
- Priority of fires and effort.
- Priority of maintenance support.
- Priority of classes III and V supply and priority for the tailoring of emergency re-supply in the combat trains.
- Any special ammunition requirements.
- Mission essential tasks for each task force unit.
- Maneuver control measures.
- Timeline for operation.
- Future operations and next mission.
- Obstacle plan and special needs for target reference point markers in the defense.
- Chain of command, how the battalion commander can be located.
- Rehearsal schedule.
- Axis of advance and the enemy avenue(s) of approach.
- Re-supply timeline and pauses for recovery.

3-204. The logistics staff officer confirms the mission and tactical concept is understood through input to the following mission analysis discussions:

- Key sustainment constraints and limitations.
- Positioning of assets and units to support operations.
- Organization of trains.
- Status of sustainment support plan.
- Does plan allow sustainment functions to be performed as far forward as possible?
- Is the main effort weighted?
- Unit's fuel, ammunition, maintenance, and barrier material requirements versus on-hand and available.
- Current status and expected line of departure.
- Class VII weapon system loss estimate.

- Transportation requirements, routes, and capabilities.
- Adequacy of command and control facilities for directing sustainment activities.
- Night operation measures.
- Rehearsal schedule.

3-205. Logistics staff officers work with the battalion financial management staff officer (S-8) or the brigade financial management staff officer (G-8) for effective budget execution. Technological advances have resulted in supply request and turn-in financial transactions that instantly influence the status of unit funds and budget availability. Automation delivers more control of unit purchases (through visibility) giving resource managers a larger role in materiel management. See FM 1-06, *Financial Management Operations* for details about S-8 and G-8 responsibilities.

Property Book Officer

3-206. The PBO is the principle advisor to the command and supported units on property accountability and organizational level supply matters. PBOs assist units with property accountability to ensure that all authorized equipment is on hand, on valid requisition, or on redistribution order. The PBO coordinates acquisition, prioritizes distribution of new equipment fielding, and redistributes material within the command. Typically, all property, except real property, requires continuous detail accounting from the time of acquisition until the property is disposed of or consumed. However, during hostilities, the Secretary of the Army may waive detail accounting in favor of summary accounting. Based on mission requirements theater commanders may impose stringent record keeping policies. This does not mean that the PBO's accountability lessens

3-207. PBOs develop, execute, monitor, and provide input to the unit's annual supply budget. They coordinate funds availability and oversee the small purchase program for standard and nonstandard equipment. They manage materiel through record adjustments, issues, turn-ins, property losses, and status reports. Unless units are specifically authorized by the Secretary of the Army to operate under wartime policy, property acquired from any source must be accounted for as prescribed by AR 710-2, *Supply Policy Below the National Level*, AR 735-5, *Property Accountability Policies* and Department of the DA Pamphlet 710-2-1, *Using Unit Supply System* (Manual Procedures).

3-208. The PBO uses a property book to account for property authorized to a unit. A unit is authorized a property book when the unit has been issued a parent UIC, which is signified by an "AA" in the last two digits of the organization's UIC. A PBO, an accountable officer formally appointed by the commander at the level of authority, at which the applicable property book is established, manages each property book account. The property book office applies for, coordinates, and manages the unit DODAACs.

Food Advisor

3-209. The food advisor is the food operations subject matter expert for field feeding and class I. Food advisors provide technical supervision over internal food service activities and advises the commander on feeding operations, available feeding options, and the service capability. The food advisor coordinates with DLA, the Joint Culinary Center of Excellence, veterinary personnel, and contracting officers to acquire required menu components and helps the theater subsistence officer determine requirements, schedule issue and turn-in times, and decides the best methods for ration break down and distribution. Food advisors ensure available resources such as equipment, facilities, and personnel are adequate to receive, store, and issue class I supplies. See Figure 3-19 on page 3-50 for a notional battlefield field feeding operation.

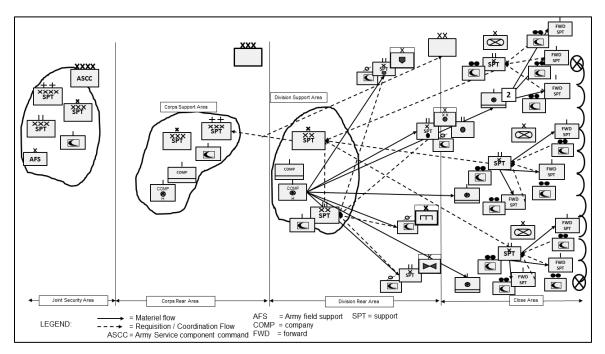


Figure 3-19. Field feeding operations

Ammunition NCO

3-210. The ammunition NCO advises the command and supported units on all ammunition issues. The ammunition NCO coordinates and controls use of class V supplies, recommends controlled supply rates to the logistics staff officer. The ammunition NCO monitors class V to ensure adherence, within operational considerations, to the established controlled supply rate and that resupply at rates that exceed the controlled supply rate are coordinated according to SOP. Figure 3-20 depicts class V materiel management.

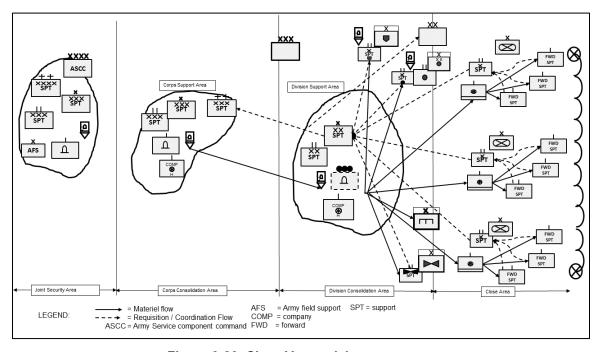


Figure 3-20. Class V materiel management

Petroleum Systems Technician

3-211. The petroleum systems technician advises the command on all matters related to petroleum services, personnel, equipment, facilities, and training. They monitor, coordinate, and synchronize all bulk fuel actions. The petroleum supply technician maintains monitors current inventory, equipment, consumption factors, stockage objectives, and deficiencies affecting bulk petroleum, oil, and lubricant supplies, storage, and distribution.

Mortuary Affairs Officer

3-212. The mortuary affairs officer advises the command on all mortuary affairs operations. They monitor, assist with, advise, and coordinate all mortuary affairs operations.

SUPPORT OPERATIONS OFFICE

3-213. The SPO provides supervisory control over day-to-day support operations, advises the commander and staff on the support operations plans, directs and supervises logistics operations, and plans and controls the use of transportation specifically allocated or attached for logistics missions. The SPO sections in echelons above and below brigade synchronize and integrate material and movement management operations by maintaining logistics situational understanding through a common operational picture.

Support Operations Officer

- 3-214. The support operations officer is the principal staff officer for coordinating logistics, providing technical supervision for the sustainment mission of the supporting command, and is the key interface between the supported unit and the supporting command. The support operations officer provides planning, preparation, and command and control of the execution of all sustainment operations in the AO, to include theater opening and distribution. The responsibilities of the support operations officer include—
 - Advising the commander on support requirements versus support assets available.
 - Coordinating external support requirements for supported units.
 - Synchronizing support requirements to ensure they remain consistent with current and future operations.
 - Planning and monitoring support operations and making adjustments to meet support requirements.
 - Coordinating with other staff.
 - Preparing and distributing the external service support SOP that provides guidance and procedures to supported units.

Support Operations Noncommissioned Officer In Charge

3-215. The SPO noncommissioned officer in charge (NCOIC) is the principal staff NCO that assists the officer in charge with coordinating support for all units within the assigned AO. The NCOIC provides technical supervision of all sustainment operations conducted within the assigned AO and is therefore the key interface for supported units. The NCOIC supervises the other NCOs and Soldiers and coordinates all administration issues and training. The NCOIC provides planning, preparation, and command and control of the execution of all sustainment operations within the assigned AO to include theater opening and distribution.

Plans Officer

3-216. The plans officer plans future sustainment operations. The plans officer develops the logistic estimates and support plans for future OPORDs, FRAGORDs, and associated sustainment annexes to all plans and orders for SPO. This officer conducts mission analysis and participates in military decision-making process as part of a collaborative effort to develop, refine, and execute sustainment operations. The plans officer recommends and incorporates all technologies, automation, combat unit requirements, historical data, current and future logistics posture, mobility data, and commander's guidance into the development of the support plan.

Fuel Noncommissioned Officer

3-217. The fuel NCO monitors the on hand quantities and forecasts requirements of all bulk fuel for the unit. The fuel NCO uses current and historical data to support the concept of sustainment, LOGSTATs, and other relevant documents, tracking mechanisms, and running estimates. The fuel NCO ensures that all fueling operations are conducted in accordance with operational and safety standards.

Mortuary Affairs Noncommissioned Officer

3-218. The mortuary affairs NCO advises the commander on mortuary affairs, develops detailed operational mortuary affairs plans, and establishes mortuary affairs policy. The mortuary affairs NCO also trains units on unit-level battlefield recovery tasks, which include search and recovery, tentative identification, preserving human remains, and safeguarding of the decedent effects. The mortuary affairs NCO also coordinates with mortuary affairs units in the area to synchronize the evacuation of the remains and personal effects, and to execute the mortuary affairs concept of operations. Mortuary affairs NCOs monitor incoming and outgoing remains and personal effects, coordinates transportation, and sends all documentation to the brigade.

Transportation Officer

3-219. The transportation officer plans and manages movement and distribution operations. The transportation officer collects analyzes support information for the plans branch and individual commodity sections and develops the movement annex for plans and orders. The transportation officer plans for and controls the use of ground transportation assets specifically allocated or attached for logistics and distribution missions. In addition to accomplishing their specific commodity management missions, all other managers channel information to the transportation officer to improve the total distribution system visibility and allow for coordination, prioritization, and decision-making by the support operations officer. The transportation officer works with staff sections to deconflict and validate push requirements. The transportation officer keeps the S-3 informed of all transportation and distribution missions. The transportation officer conducts a daily allocation board to verify assets for convoys in the next 72 hours, a daily distribution management board to inform appropriate parties of allocations in the next 72 hours. The transportation officer coordinates transportation movements to ensure efficient flow of movements exist with all participating units.

Movement Supervisor Noncommissioned Officer

3-220. The movement supervisor NCO provides the transportation officer with deployment training and execution expertise. The movement supervisor NCO manages and controls the flow of Army transportation assets during unit movement operations. The movement supervisor NCO also plans, organizes, and supervises the movement of Army personnel and equipment. The movement supervisor NCO coordinates movement operations issues and provides interpretation and guidance on the implementation and use of transportation automation systems. They verify all convoy loads in order to make sure all mission requests are properly supported.

Transportation Management Noncommissioned Officer

3-221. The transportation management NCO assists the transportation officer in working with battalion staff sections to deconflict and validate push requirements. The transportation management NCO keeps the transportation officer informed of all transportation and distribution missions. The transportation management NCO also conducts a daily allocation board to verify assets for convoys in the next 72 hours. The transportation management NCO conducts a daily distribution management board to inform battalions and appropriate parties of allocations in the next 72 hours.

Ammunition Officer

- 3-222. The ammunition officer advises the SPO and commander on all ammunition-related issues. The ammunition officer engages with the staff in order to:
 - Provide oversight for ammunition replenishment operations.
 - Coordinate the actions and reporting of all ammunition support agencies.

Coordinate ammunition resupply.

Ammunition Logistics Noncommissioned Officer

3-223. The ammunition logistics NCO, the senior enlisted ammunition advisor to the ammunition officer, provides oversight of ammunition operations. The ammunition logistics NCO closely coordinates with supported units to provide technical assistance, coordination, and advice. Typical duties include coordinating with transportation elements; mission analysis to ensure ammunition support operations; assisting in munitions plans and operations; and input on the positioning of the ammunition transfer holding points.

Ammunition Inspector

3-224. The ammunition inspector is responsible for inspecting the quality and serviceability of all class V items within the ammunition transfer and holding point. This NCO works closely with quality assurance specialist ammunition surveillance personnel to ensure that ammunition lot numbers are not suspended. If the numbers are suspended then the items are recalled back to the facility and serviceable ammunition is issued to the using unit in its place. This NCO is also responsible for the coordination with explosive ordnance disposal personnel to demilitarize all unserviceable munitions. This NCO is also responsible for dispositions of captured enemy ammunition and potentially captured enemy weapons. This NCO works closely with the ammunition and weapons logistics assistance representatives in the event that captured enemy ammunition or captured enemy weapons are acquired.

COMPANY LEVEL SUPPLY

- 3-225. Unit supply is the logistical hub for every unit in the Army. Property responsibility is one of the greatest challenges a company commander faces. The supply room handles all property transactions, to include lateral transfers, turn-ins, and receipts of equipment, credit card purchases, property loss financial liability investigations, and statement of charges and cash collection vouchers for the commander. All units, down to the company level, have supply responsibilities regardless of the mission of the unit. The following describes roles at the company level for unit supply.
- 3-226. Company commanders can do many things right, but fail as a commander by not maintaining property accountability. At the company level, key leaders should understand that property responsibility determines readiness. One hundred percent property accountability prepares the unit for deployment at a moment's notice. Effective commanders keep monthly, quarterly, and cyclic (prescribed load list, sensitive item, physical, serial number, key register, hazardous material) inventories on file along with unit supply discipline inspection results. These reports and findings identify logistical strengths and weaknesses within a unit.
- 3-227. Unit supply rooms keep supply records, receive supply requests, and issue materiel to company elements while executing other unit support and operational tasks. Unit supply personnel process personal clothing requests, prepare, and maintain organizational clothing and individual equipment records. Unit supply sergeants supervise the inventory of supplies and equipment; determine methods to obtain relief from responsibility for property; update supply status; account for absentees' clothing, equipment and personal effects; dispose of absentees' clothing, equipment and personal effects; process property adjustment documents, and conduct property book accounting operations.
- 3-228. Whatever the means of storage that best meets the need of the unit the primary objective for storage of supplies and equipment is to protect them from pilferage, theft, fire, odor, light, extremes of temperature, and other potential sources of damage and pollution. Special classes of supplies, such as petroleum, oils, and lubricants, ammunition, and sensitive or pilferable items require extra care in storage. Effective physical security is continuous and limits access to authorized personnel. All equipment in the supply room is stored and secured in accordance with AR 190-51, Security of Unclassified Army Resources (Sensitive and Nonsensitive) and local policies. The supply room and its storage areas are kept locked and secured when not occupied.
- 3-229. Secured hand receipts prevent loss or tampering of the documents. Commanders should provide subhand receipt holders an area for appropriate security control and storage. Paper records account for many valuable assets, and loss of these records may result in the loss of government property. Primary and sub

hand receipt holders should document where property is stored to facilitate inventories, ascertain property lost due to a security breach, and identify losses due to natural disaster, fire, or flood

Company Commander

3-230. Company commanders are responsible for the proper use, care, custody, and safekeeping of all government property within the command. Company commanders, by virtue of their assignment, are responsible for equipment readiness and availability for combat operations. The company commander ensures—

- All authorized equipment is on hand or on order.
- Unit property is complete and serviceable.
- Excess property is turned in.
- All property is inventoried annually.
- Supply personnel are properly trained.

Company Executive Officer

3-231. The executive officer is the company team's primary sustainment planner and coordinator, reporting directly to the commander. During preparations for the operation, they work closely with the first sergeant to determine specific support requirements of the tactical plan. The executive officer —

- Determines the location of the company resupply point based on data developed during operational planning.
- Compiles logistics status updates from the platoon leaders, platoon sergeants, the first sergeant, and the company maintenance team and provides the updates to the commander.
- Along with the first sergeant, ensures that the company is executing supply and re-supply operations.
- Leads the company re-supply rehearsal in cooperation with the company first sergeant.

Platoon Leader

3-232. The platoon leader considers priorities of work and resupply to ensure the platoon is prepared for operations. The platoon leader consolidates LOGSTAT reports for the platoon and keep the commander informed of the platoon's operational status as situations change. Platoon leaders are responsible for materiel often valued at millions of dollars including vehicles, weapons systems, sensitive items, and radios.

First Sergeant

3-233. In addition to tactical responsibilities, the first sergeant plays a key role in sustaining the company. The first sergeant supervises field feeding, unit resupply operations, and other unit field services. Unit first sergeants ensure Soldiers, equipment, weapons, and systems are ready and available at all times. They supervise submission of LOGSTATs, receipt of mail, and routine unit correspondence. The first sergeant executes the company's logistical plan in accordance with unit SOPs. Unit SOPs include but are not limited to the following—

- Conducts sustainment rehearsals at the company level and integrates sustainment into the company's maneuver rehearsals.
- Establishes and organizes the company resupply point.
- Meets the LOGPAC at the logistics release point, guides it to the company resupply point, supervise resupply operations there, and if necessary, guide the LOGPAC to its subsequent destination.

Platoon Sergeant

3-234. Platoon sergeants supervise the platoon's administrative, supply, and maintenance actions. The platoon sergeant distributes supplies by coordinating and supervising platoon resupply operations. The platoon sergeant identifies resupply locations, the types and amounts of supplies needed, the time required

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to conduct resupply, and any necessary security considerations. Platoon sergeants collect, prepare, and forward logistics status updates and requests to the platoon leader or higher headquarters as directed.

Company Supply Sergeant

3-235. Company supply sergeants maintain hand receipts often valued in the millions of dollars. They obtain, distribute, safeguard, and account for unit property, to include government purchase card and fuel cards. They control supply and accountability records for requests, issues, inventories, organizational clothing, individual equipment, and absentee baggage. They collect unit laundry and coordinate the issue and turn in of unit property between the company and its personnel, and between the company and supply support activities. Depending upon the unit and its mission, the supply sergeant forecasts requirements for supply classes I, II, III, IV, V, VII, and VIII, and manages arms room operations, to include ensuring field maintenance on assigned weapons.

Unit Armorer

3-236. Unit armorers maintain accountability of organic weapons through frequent sensitive item and ammunition inventories. They maintain the master authorization list, ensure Soldiers' weapons cards are up to date, and maintain arms room key control. Armorers perform organizational maintenance to identify failures and arrange for higher-level maintenance when required.

Equipment Records Parts Specialist

- 3-237. The equipment records parts specialist work as prescribed load list and army maintenance management system clerks that are responsible for maintaining records of services performed, ordering and managing repair parts, dispatching vehicles and equipment, and maintaining operator licensing records. The equipment records parts specialist—
 - Keeps and updates automated and manual detail accounting records.
 - Processes requests and turn-ins.
 - Conducts inventories.
 - Corrects, reviews, and verifies quantities received against bills of lading, contracts, purchase requests, and shipping documents.
 - Interacts with vehicle drivers, mechanics, armorer, unit supply sergeant, company executive officer, maintenance officer, and commander while conducting daily duties.

SUPPLY POINT

3-238. The Army executes supply operations below the national level via supply points. All Army supply points maintain accountability and inventories of supplies required to support the readiness of supported units. All supply points operate in much the same manner because the supply process is the same regardless of supply classes managed. The following section describes roles associated with supply points, by commodity.

Bulk Fuel Supply Point

3-239. The following section describes the roles and responsibilities for supply personnel staffing a bulk fuel supply point.

Bulk Fuels Accountable Officer

3-240. The bulk fuels accountable officer supervises the overall bulk petroleum operation, mobile filling station sites, bulk storage facilities, and tank farms. Petroleum supply point accountable officers are responsible for the layout of the tactical petroleum terminal, as well as the operations involved in the receipt, storage, and issue of petroleum. The accountable officer directs the acquisition, storage, inspection, testing, issue and distribution of petroleum stocks. Accountable officers develop local policy guidance, periodically review all operating procedures, and executes corrective actions. Accountable officers direct the preparation of reports and maintenance of records pertaining to petroleum accounting and distribution operations. The

accountable officer ensures that petroleum operations adhere to applicable environmental policies, procedures, laws and regulations. Specific to mobile laboratory operations, the accountable officer ensures the commander is advised of quality surveillance problem areas.

Bulk Fuels Section Chief

3-241. The section chief supervises and controls supply section operations and personnel. The section chief is responsible for the day-to-day supervision and coordination required to ensure mission accomplishment. The section chief is responsible for assigning duties, as well as for planning and managing the functions of the bulk petroleum operation. The section chief ensures that stock is safe from weather, contaminates, or any other factors that may alter the stock. Along with the security of the stock, the section chief enforces health and safety requirements and standards. The section chief implements policies, procedures, and priorities. The section chief develops and implements plans of action to alleviate problems, as necessary. The section chief develops and implements training to include cross training for all personnel. They prepare, reviews, and submits required reports for the accountable officer's approval. The section chief also assists the platoon sergeant, as needed.

Bulk Fuels System Technicians

3-242. Petroleum system technicians supervise and manage the reception, storage, and shipping of bulk or packaged petroleum products. The petroleum system technician serves in staff positions assisting with requirements determination for bulk fuel and packaged petroleum products, storage space and fuel systems. Petroleum system technicians monitor petroleum quality surveillance procedures. In addition, the petroleum system technician develops, supervises and coordinates unit procedures and programs for environmentally sound handling of petroleum products.

Bulk Fuels Supply Specialists

3-243. Petroleum supply specialists operate the pumps and filter separators that simultaneously deliver fuel to tanks, semitrailers, receive fuel into bulk storage, and discharge fuel into hose lines and pipelines. Petroleum supply specialists lay, operate, and retrieve hose line and pipeline. They lay, assemble, and operate equipment used for the mobile filling station operation. When required, petroleum supply specialists operate forklifts and other material handling equipment.

Petroleum Inventory Control Specialist

3-244. The petroleum inventory control specialists maintain the tactical petroleum terminal's stock status on a 24-hour basis. Inventory control specialists maintain inventory control and location records of bulk petroleum products and process requisitions, requests, and turn-in documents.

Petroleum Laboratory Noncommissioned Officer In Charge

3-245. The petroleum laboratory NCOIC is responsible for the day-to-day supervision, and coordination for ensuring mission accomplishment. The NCOIC implements laboratory policies, procedures, and priorities. As a manager, the laboratory NCOIC is responsible for assigning duties, planning, managing, and ordering supplies for the functioning of the laboratory. The NCOIC prepares and reviews laboratory reports and makes recommendations for the disposition of petroleum products. Laboratory NCOICs prepare, review, and submit required reports for the accreditation of the laboratory and the accountable officer's approval.

Multi-Class Supply Support Activity

3-246. The following section describes the roles and responsibilities for supply personnel staffing multiclass SSAs. Figure 3-21 depicts multi-class commodity distribution management and materiel management. All supply classes entering the theater of operations through an air or seaport of debarkation entail theater level SSA and central receiving point personnel sorting and packaging materiel for transport to the forward points of need. Transportation managers assign the most efficient and effective mode of transportation by the priority of the requesting unit's place within the priority of support, the priority of the item, and the type of cargo being moved. Often, materiel passes through specified areas, such as, trailer transfer points or central

XXX SUST COMP = company FWD = forward = Materiel flow LEGEND

receiving points for sorting according to SSA for supply point distribution or supported unit for unit distribution.

Figure 3-21. Multi-class distribution and materiel management

= Requisition / Coordination Flow

SUST = sustainment

3-247. Class I supply support operations are included in this discussion because class I operations are a separate section of the current composite supply company's supply platoon. In addition, the supply platoon of a quartermaster supply company may be designated for class I SSA operations. If one of the supply company's platoons are designated for a subsistence mission the platoon has the same headquarters, stock control section, receiving section, storage section, and packing and crating section that it would have without the subsistence mission. In either instance, the class I supply mission is performed by the automated logistical specialist military occupational specialty (MOS) 92A Soldiers and not food service MOS 92G Soldiers.

Accountable Officer

3-248. The accountable officer supervises the multi-class SSA operation. Accountable officers are directly responsible for all assets in their inventory. Accountable officers manage the receipt, storage, and issue of supplies in accordance with DOD and Army policies, to ensure performance standards are achieved. An accountable officer develops local accountability operating procedures; periodically reviews all operating procedures; and executes corrective actions. Accountable officers instruct supply point personnel on supply systems and functional procedures. The accountable officer communicates throughout the organization and with supply point supported units to develop relationships with supported units, supporting activities and staff elements.

Stock Control Manager

3-249. The SSA stock control manager coordinates the functions of the stock control section. Stock control managers develop and establish stock control procedures and guidance in coordination with the accountable officer. A stock control manager builds relationships with supported units through guidance and assistance. Stock control managers establish, schedule, and supervise the conduct of inventories and resolves inventory issues. They prepare, review, and submit required reports for the accountable officer's approval.

Storage Manager and Storage Clerks

3-250. The storage manager and storage clerks are responsible for an uninterrupted flow of materiel through the SSA. This responsibility demands a detailed understanding of warehouse operations, including the shipping, receiving, and packaging of items. Storage clerks operate material handling equipment, load and unload materiel from delivery vans, large trucks, airplanes, review, prepare, and maintain required documents using the ERP technology.

Noncommissioned Officer In Charge

3-251. The SSA noncommissioned officer in charge is responsible for day-to-day supervision, coordination, and ensuring mission accomplishment. The NCOIC is responsible for assigning duties, as well as for planning and managing the functions of the warehouse. The NCOIC ensures that the storage types and bins are ready for storing goods until the prescribed time. The NCOIC ensures that the building and supplies are safe from inclement weather, animals, or any other factors that may spoil the stock. Along with the security of the supplies, the NCOIC ensures that health and safety requirements and standards are being followed. The NCOIC implements SSA policies, procedures, and priorities. The NCOIC develops and implements plans of action to alleviate backlogs, as necessary. The NCOIC develops and implements SSA training to include cross training for all personnel. The NCOIC prepares, reviews, and submits required reports for the accountable officer's approval.

Warehouse Supervisor

- 3-252. The warehouse supervisor assists the warehouse NCOIC and platoon sergeant in establishing and implementing policies, procedures, and priorities established for the warehouse operation. He assists the NCOIC and platoon sergeant in the conduct of military occupational specialty training.
- 3-253. Section NCOICs assist the warehouse NCOIC and platoon sergeant in establishing and implementing policies, procedures, and priorities for SSA operations. The warehouse NCOIC establishes a desktop standard operating procedure for all sections and updates the standard operating procedure as necessary.

Class I Supply Section

- 3-254. The key document used to manage the class I section's operation is the schedule of issues. While commanders may select the ration type desired for each meal period, the class I SSA decides the menu number for that ration type. Based on current operational ration menus, the supply point issues unitized group ration menus in sequence to prevent units receiving the same meals repetitively. The schedule of issues provides class I SSA supported units information on—
 - Ration request, issue, and consumption dates.
 - Strength reporting dates and procedures.
 - Menu numbers for unitized group rations.
 - Substitutions, deletions, and mandatory issues.
 - Residual ration turn-in dates and procedures.

Class I Manager

3-255. Class I managers are responsible for the operation of class I points, to include operation of the class I management system (manual or automated) being used. They are responsible for acquisition, receipt, storage, configuration, shipments, and accountability of subsistence and health and comfort packs. They supervise inventories and recommend resupply levels. They supervise the transshipment of rations throughout the theater. Class I managers compute tonnage requirements and loading plans. Class I managers conduct frequent inventories to ensure excess subsistence items are not allowed to avoid spoilage, pilferage, and waste.

Food Advisors

3-256. Food advisors assist class I supply section personnel in the planning and operation of class I points. One of the ways food advisors do this is by providing class I point operations sustainment training to MOS 92A automated logistical specialist personnel prior to and during the unit's deployment. The success or failure of the class I supply operation in the field depends on the prior training of the following key class I point tasks: requisition, distribution, receipt, storage, issue, turn-in, and accountability.

Personnel That Augment The Supply Support Mission

3-257. The following personnel assist with the supply mission. Materiel managers work with contracting officers and field ordering officers when using contracts to provide materiel and services to the supported units. Materiel managers coordinate with preventive medicine and veterinary services personnel to ensure that water and class I meets all health and safety requirements.

Contracting Officer Representative

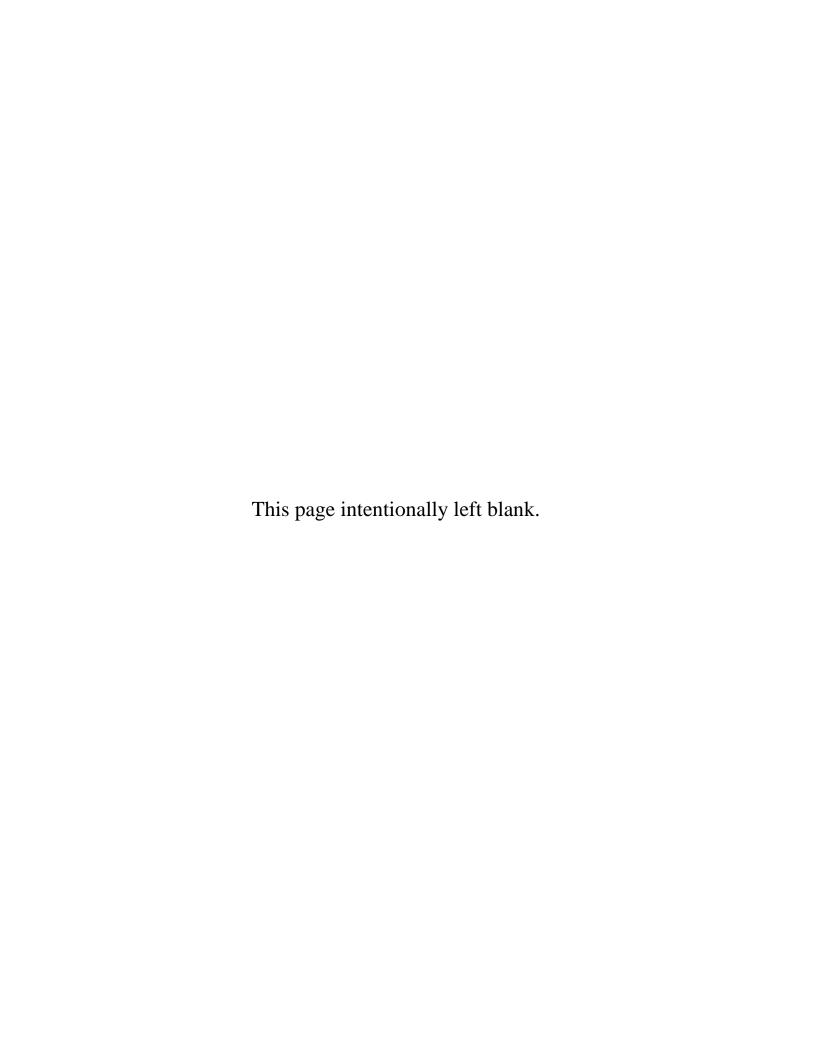
3-258. Commanders nominate CORs. Contracting officers appoint CORs. The COR assists the contracting officer with managing unit contracts for obtaining materiel and services. The contracting officer prepares an appointment letter describing COR duties such as performing inspections, verifying corrected deficiencies, performing government acceptance, submitting performance reports, and performing quality assurance surveillance. CORs reside at all echelons where there are active contracts for providing supplies or services. See ATP 4-10/MCRP 4-11H/NTTP 4-09.1/AFMAN 10-409-O, *Multi-Service Tactics, Techniques, and Procedures for Operational Contract Support*.

Field Ordering Officer

3-259. A field ordering officer (FOO) is an individual trained by a designated contracting officer, when conditions dictate, to make micro-purchases within established thresholds (normally with local vendors) and places orders for goods or services. This position is an additional duty for a FOO. FOOs are appointed by the contracting officer and are under the technical supervision of the contracting officer in all matters concerning the administration of FOO duties. The FOO interfaces with the with battalion or brigade financial S-8 or the G-8 and the contracting officer on a routine basis. For more information regarding FOO support, see ATP 1-06.1, Field Ordering Officer and Pay Agent Operations.

Preventive Medicine

3-260. Preventive medicine personnel augment the supply support mission. Preventive medicine personnel work with materiel managers to address basic sanitation and hygiene, water potability, waste handling and disposal, field food service, pest management, environmental and industrial hazards. Depending on the unit mission, preventive medicine personnel may be assigned or organic to nonmedical units. For example, a preventive medicine NCO may be assigned to quartermaster units to ensure water quality standards are met and maintained. Class I supply point personnel coordinates with veterinary assets to assess food and water safety risks, recommend mitigation steps, and perform other activities that support DNBI reduction efforts. *Disease and nonbattle injuries* are all illnesses and injuries not resulting from enemy or terrorist action or caused by conflict (ATP 4-02.55). See chapter 3, ATP 4-02.8, *Force Health Protection* for information about veterinary services.



Chapter 4

Planning and Coordination

Supply support planning begins with receipt of the order. By analyzing the mission, materiel managers acquire the operational understanding critical to the development of a viable plan. Materiel managers at all levels continuously collaborate and coordinate with the battalion or brigade operations officer and battalion or brigade logistics staff officer to clarify any confusing portions of the order. Close ties to the operations and logistics staff ensure that planners quickly communicate changes to tactical supply points. A critical part of initial planning is a clear understanding of the task organization of the supported force, as this information provides the basis for planning factors and forecasting.

OPERATIONS PROCESS INTEGRATION

4-1. Commanders and staffs at every echelon should integrate the distribution management process into the operations process to develop a distribution plan that is synchronized with all warfighting functions. Failure to execute this integration leads to operational conflicts that hinder timely supply support. Commanders and staffs realize that support operations offices and the distribution plan directly influences the unit's mission success. Close ties between the operations and logistics staff ensures that planners quickly communicate changes to materiel managers located at tactical supply points. Although maneuver G-3 or S-3 and sustainment DMC or SPO are located in separate units, they are inextricably linked during the operations process and military decision-making process (MDMP). See FM 6-0, Commander and Staff Organization and Operations, for in-depth information on the military decision-making process. The maneuver G-3 or S-3 and the sustainment DMC or SPO collaborate continuously through the phases of planning, preparation, execution and assessment.

PLANNING

- 4-2. Planning is the art and science of understanding a situation, envisioning a desired end state, and determining effective ways to bring that end state about. Planning allows leaders to understand situations to include potential problems; develop solutions to problems; direct, coordinate, and synchronize actions; prioritize efforts; and anticipate events. For distribution management, planning helps leaders determine the best application of existing supply capability to meet operational requirements by identifying potential opportunities and threats along the way.
- 4-3. A critical part of supply support planning means gaining a clear understanding of the task organization of the supported force as this is what provides the basis for planning factors and forecasting. Supply support planning information includes a variety of data, such as consumption rates. 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). In developing the distribution plan, commanders start by analyzing the operational environment in terms of mission, enemy, terrain and weather, troops and support available, time available and civil considerations. The distribution plan outlines who, what, when, where, and how to accomplish supply support.
- 4-4. During planning, the staffs execute MDMP appropriate for the planning horizon. The TSC may plan for weeks or months in advance whereas a BSB may plan for days and hours. Regardless of the horizon, the outcome of a plan is an executable order. The order synchronizes subordinate unit actions in time, space, and purpose to achieve objectives and accomplish the supply support mission. Understanding the distribution management process, described in chapter 1, to include all subordinate functions facilitates working through

the MDMP steps. The order also informs others outside the organization on how to cooperate and provide support. The order describes the situation, establishes a task organization, describes the concept of operations, assigns tasks to subordinate units, and provides essential coordinating instructions.

- 4-5. Commanders do not attempt to obtain perfection in planning. Imperfect knowledge and assumptions about the future are inherent in planning and planners cannot precisely predict how enemies will react during operations. Planning does not eliminate uncertainty but, instead, identifies actions to take amidst uncertainty. Regardless, planning improves situational understanding and facilitates future decision making. Planning and plans help leaders to—
 - Understand the situations, supply requirements, and develop solutions to problems.
 - Task-organize the supply and transportation units and prioritize efforts.
 - Direct, coordinate, and synchronize action.
 - Anticipate events and adapt to changing circumstances.
- 4-6. Planning keeps sustainment commanders and staffs focused on the future in spite of requirements of current operations. During planning, sustainment commanders and staffs anticipate enemy action and problems and develop contingency plans to provide flexibility. Decision points, branches, and sequels are tools used to create this flexibility. A decision point is a point in space and time where a commander or staff officer expect to make a key decision on a course of action. A decision point is tied to the commander's critical information requirements, enemy, and friendly action. At such points, based on assessment, commanders may decide to alter the initial operations concept. A branch is a contingency option built into the base plan that allows flexibility and adjustment to the plan beyond the initial stages of the operation. A sequel is a subsequent operation based on the possible outcomes of current operations. During planning, sustainment commanders and staffs develop branches and sequels as part of the order.
- 4-7. Unit G-3 or S-3 and DMC or SPO should collaborate throughout MDMP from receipt of the mission until the OPORD is published and disseminated. Both staffs have roles in developing a distribution plan for inclusion in the order as part of the operations concept. Figure 4-1 represents one way in which the G-3 or S-3 and DMC or SPO may interact during planning to develop an order. Each of the MDMP steps and each of the distribution management functions, defined in chapter 1, contain assumptions, facts, planning considerations, and hundreds of details that influence mission success. The top lane illustrates the MDMP steps undertaken by commanders and staffs. The three lanes within the support operations lane display the functions distribution integrators, materiel managers, and transportation managers perform separately and together. Arrows between the functions and the MDMP steps demonstrate the complexity of the coordination between support operations, the S-3 or G-3, the commander's staff, and the commander as they uncover and evaluate courses of action. The bottom lane presents a very high-level view of how and when supply points, for all classes of supply, come into the process. Tactical leaders responsible for providing materiel and the mode of transportation receive orders then prepare for their role in supporting the commander using troopleading procedures. The overall collaboration process depicted in the flowchart graphic applies to supply support planning for all warfighting functions. See FM 6-0, Commander and Staff Organization and Operations, for in-depth information on the military decision-making process.

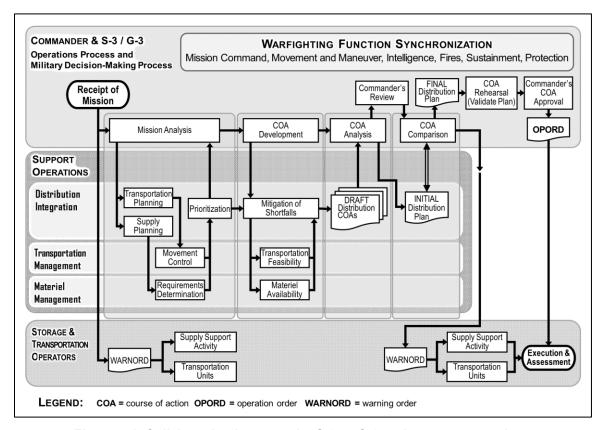


Figure 4-1. Collaboration between the S-3 or G-3 and support operations

PREPARATION

- 4-8. Preparation includes activities performed by sustainment units and Soldiers to improve their ability to execute an operation. Preparation creates conditions that improve sustainment unit opportunities for success and include activities such as rehearsals, training, and inspections. Again, understanding the required distribution management functions defined in chapter 1 assists in preparation. This understanding allows commanders to properly position supply and distribution capability in the most advantageous manner. Preparation helps the force transition from planning to execution. Commanders drive preparation activities with a focus on leading and assessing. The functions of preparation include the following:
 - Improve situational understanding. Intelligence channels, analysis of logistics status reports, and information management enable this improvement.
 - Develop a common understanding of the plan. This goal requires a thorough understanding of the higher headquarters and supported commander OPORD, detailed OPORD briefings and confirmation back briefs.
 - Train and become proficient on critical tasks. However, normally a home station event, training
 continues when deployed. Understanding all required distribution management functions and their
 desired outcomes is critical.
 - Task-organize and integrate the force. Establish appropriate command and support relationships
 and describe them clearly in the OPORD. Ensure every supply and transportation unit understands
 the units with whom they have a support relationship.
 - Ensure forces and resources are positioned. All supply and transportation capability should be positioned to provide the most responsive support to the maneuver commander. All units should have the maximum supplies and transportation assets on hand to support the operation.

EXECUTION

- 4-9. Execution is the act of putting a distribution plan into action by applying supply and distribution capability to accomplish the mission and adjusting operations based on changes in the situation. Commanders and staff focus their efforts on translating decisions into actions. Execution requires decisions on whether to execute planned actions or to modify the plan using branches and sequels based on opportunities or threats. Although a plan provides a reasonable forecast of how execution occurs, it remains a starting point for operations and will be adjusted as the situation changes. Subordinate commanders need maximum latitude to exploit situations and meet the higher commander's intent when the original order no longer applies. Effective execution requires leaders trained in independent decision making, aggressiveness, and risk taking in an environment of mission command.
- 4-10. Sustainment commanders continually refine their situational understanding and adjust plans accordingly to exploit opportunities or counter threats. Major activities of execution include assessment, decision making, and directing action.
- 4-11. Assessment is an integral phase of the operations process and is executed continuously during all phases including execution. Assessment allows sustainment commanders and staffs to determine if the distribution plan is achieving the desired end state and commander's intent. If it is not, assessment allows commanders and staff to make prudent adjustments to the distribution plan to ensure success. The situation and type of operations affect the characteristics of assessment. During large-scale combat operations, assessment focuses the effectiveness of distribution operations and the logistics status of the friendly force. Identifying what and how to assess requires significant effort from the commander and staff. Regardless, assessment includes monitoring the current situation to collect relevant information, evaluating progress toward attaining end state conditions, achieving objectives, and performing tasks, and recommending or directing changes to the plan.
- 4-12. Decision-making involves execution decisions and adjustment decisions. Execution decisions implement actions that are anticipated and planned within the order. These decisions may be based on anticipated circumstances such as route changes, the need to commit additional supply or transportation assets, or the need to execute a branch. The current operations integration cell oversees the synchronization and integration needed to implement execution decisions. Adjustment decision are more complex. These decision modify the operation based on unanticipated circumstances or threats. Adjustment decisions include reallocating resources, changing the operations concept, or changing the mission.
- 4-13. During execution, commanders and staff may use the rapid decision-making and synchronization process. Unlike the MDMP, the rapid decision-making and synchronization process does not seek optimal solutions. Instead, the rapid decision-making and synchronization process seeks a timely and effective solution within the commander's intent, mission, and concept of operations. The rapid decision-making and synchronization process avoids the time-consuming requirements of developing decision criteria and multiple courses of action. When using the rapid decision-making and synchronization process, sustainment commanders and staffs combine their experiences and intuition to quickly understand the situation, develop a viable option, and direct adjustments to the current order using the decision-making techniques described above. See FM 6-0, Commander and Staff Organization and Operations.

PLANNING CONSIDERATIONS

4-14. Army leaders face problems, often requiring unique and creative solutions to influence the future and to respond to potential events. Planning entails thinking through the consequences of hypothetical decisions while identifying and evaluating courses of action. Planning considerations are variables based on knowledge of current and future events taken into account when formulating a plan. Considerations could be a known or anticipated support requirement, a known or anticipated problem, a capability shortfall, or enemy threat. As planners gather more information and the operational situation becomes clearer, the leader's understanding of these considerations will refine accordingly.

SUPPLY PLANNING

- 4-15. The supply and field service planning process examines capabilities and requirements from end-to-end to ensure that supply and field services support the operating environment. Supply planning is a continuous process for classes II, III, IV, V, VII, VIII, and IX because of sensitivity to weather, terrain, and tactical operations. Based on combat intensity, bulk fuel, ammunition, and medical requirements are particularly unpredictable. Classes I, III (bulk), and VI requirements are usually easier to plan for because they are generally based on the supported population.
- 4-16. The concept of support incorporates running estimates developed using a variety of planning tools. These running estimates project casualties, consumption rates, maintenance requirements, and other sustainment requirements. The estimate process, constructed around the supported commander's requirements and priorities: identifies, coordinates, and integrates supply and field services into the operation. Planning estimates derived through the distribution management planning process are based upon historical data, logistics reports, and the current environment. The key to a workable estimate is asking the right questions to find out what is needed, how many are needed, where is it needed, and when is it needed.
- 4-17. Logistics estimates employ a formal process to analyze a problem from a specific functional area point of view, for example supply support. Logistics estimates support course of action analysis through the following considerations:
 - What is the logistics situation analysis of the operating environment?
 - What are the key areas and concerns?
 - What are the commodity or service requirements based on knowledge of the total force?
 - What are our capabilities?
 - What are the shortfalls?
 - Based upon the situation analysis of the operating environment, what are logistics support courses of action?
 - Analyze the logistics courses of action for the best support options.
 - Receive commander guidance and decisions regarding best course of action.
 - Adjust course of action based on commander guidance and provide logistics input to the plan and order.

ELEMENTS OF OPERATIONAL ART AND SUSTAINMENT INTEGRATION

- 4-18. Commanders gain an understanding of an OE by aligning their capabilities in time, space, and purpose with the elements of operational art to develop the concept of operations. When applying operational art, maneuver and sustainment commanders ensure a shared understanding of purpose through continuous collaboration to define the problems and conditions of an OE. Effective collaboration facilitates assessment, fosters critical analysis, and anticipates opportunities and risk. Sustainment commanders use the elements of operational art to envision how to synchronize and integrate sustainment with the other warfighting functions. Examples of how this can be done are shown below by determining—
 - End state and conditions. What is the required supply support capability and where should it be located in order to achieve the desired end state? Establish desired conditions such as required quantities of supplies or operational readiness rate.
 - Center of gravity. Is supply support a center of gravity for the operation? What are the components
 of the supply support structure? If supply support is a center of gravity, commanders may
 apportion a higher level of protection to the critical assets such as supply points that could cause
 failure if destroyed.
 - Decisive points. Will supply support limitations prevent a maneuver commander from reaching decisive points? Limitations might include bulk fuel, ammunition, or maintenance availability. Indepth analysis should determine whether there is adequate bulk fuel, ammunition, and repair parts to reach the decisive point.
 - Lines of operation and lines of effort. How does supply support affect lines of operation and lines of effort? Is supply support a line of effort required to establish the desired end state? Analyze how supply support influences the ability to reach and control a geographic objective.

- Tempo. How does supply support affect the desired tempo of the operation? For example, bulk fuel availability is critical to controlling the tempo since fuel directly influences movement and maneuver.
- Phasing and transitions. How will supply support affect the completion of the current phase of an
 operation and the transitioning to the next phase? Commanders use supply estimates to ensure that
 that the maneuver tempo does not outpace the support concept or prevent achieving the desired
 operational objectives. Sustainment estimates identify necessary changes to a plan or concept of
 support.
- Culmination. At what point will supply support limitations cause the operation to culminate?
 Coordination with the maneuver unit staff coupled with in-depth analysis gives the sustainment
 commander the information to advise the maneuver commander on a potential culmination point.
 Maneuver commanders may decide to plan a deliberate transition from offense to defense at the
 culmination point.
- Operational reach. The culmination point affects operational reach because the culmination point
 is normally the limit of a unit's operational reach. Supply, maintenance, personnel replacements,
 and medical support directly affect endurance and the ability to employ combat power for
 extended periods.
- Basing. Commanders should consider what types of basing, such as an intermediate staging base
 or temporary base camps, are required to execute supply support. These considerations include
 positioning, dispersion, protection, and command and control required to control the bases.
- Risk. What is an acceptable amount of risk for committing sustainment forces? Commanders must balance the risk with the potential favorable outcome. As an example, a commander might commit an entire fleet of tactical fuel vehicles to reach a decisive point in the operation but must accept the risk of jeopardizing future operations if the fuel assets are destroyed by enemy action.

PLANNING CONSIDERATIONS BY WARFIGHTING FUNCTION

- 4-19. Throughout operations, the commanders, subordinate commanders, and their staffs face various problems, requiring distinct and creative solutions. Planning provides an informed forecast of how future events may unfold. Planning is thinking critically and creatively; it entails identifying and evaluating potential decisions and actions in advance including thinking through consequences of certain actions. Planning involves thinking about ways to influence the future as well as how to respond to potential events.
- 4-20. Planning considerations listed are examples of what sustainment planners take into account during large-scale ground combat operations for each of the warfighting functions. These considerations help planners identify specific support or operational requirements based upon available information. This list is not all-inclusive. Considerations will vary for individual operations.
- 4-21. Command and control planning considerations include the following:
 - Expect enemy attacks on space and cyberspace domains to include the electromagnetic spectrum
 that will degrade communications and digital information transmission. Attacks on these domains
 affect supply support operations in terms of satellite communications, positioning, navigation,
 timing, information collection, internet operations, computer systems, and communications.
 Commanders develop and execute a primary, alternate, contingency, and emergency
 communications plan ensuring redundancy.
 - Identify sustainment forces providing supply support for the operation. Develop the appropriate command and support relationships for all units.
 - Understand that terrain limits or degrades communications dictating the need for retransmission stations.
 - Assess supply support task organization frequently to ensure it is adequate and positioned properly
 to support the sustainment mission. Plan for replacement of units that are lost as a result of enemy
 attack.
- 4-22. Movement and maneuver planning considerations include the following:
 - Expect sustainment resupply and support elements to operate outside the unit boundaries and beyond the forward line of own troops while supporting attack forces. Sustainment units must

- understand OPCON measures to include passage of lines with maneuver forces in perimeter defense.
- When developing distribution plans consider how terrain, defense obstacles, fire support coordination measures, movement restrictions, and terrain affect methods of resupply.
- Expect increase in unmanned aircraft system resupply items (bulk fuel, repair pairs, munitions) during defensive operations.
- All movement competes for available modes of transportation, airspace, waterways, and roads.
 Materiel and transportation managers synchronize movement of personnel and materiel to avoid conflicting movement on available air, waterway, and land routes.
- Plan for special ammunition and special, non-standard equipment maintenance support to special operations forces.
- Plan for aviation-grade fuel, forward arming and refueling points, and munitions support to attack helicopter operations.
- 4-23. Intelligence planning considerations include the following:
 - Review enemy threat capabilities and enemy probable courses of action to understand how enemy threat affects supply support operations.
 - Become familiar with the operational environment through analysis of operational variables to understand how these variables influence supply support operations.
- 4-24. Fires planning considerations include the following:
 - Forecast increased consumption of long range, obscuration, and precision munitions.
 - Anticipate frequent and rapid relocation of supported fires units to shift supply support units accordingly.
 - Ensure quantity and positioning of modular ammunition units are sufficient to support ammunition requirements.
 - Ensure that ammunition transportation assets are adequate and properly positioned to support ammunition distribution for fires operations.
- 4-25. Protection planning considerations include the following:
 - Plan for establishing base cluster operations to disperse forces and facilitate concealment.
 Commanders should plan to disperse supply support units into smaller bases to form a base cluster.
 Consider all security integration implications of the base cluster. See ATP 3-37.10, Base Camps, for more information about establishing a base camp.
 - Plan for CBRN conditions. This planning includes more requirements for non-potable water and chemical defense equipment. CBRN defense planners should also consider the processing of contaminated human remains and equipment decontamination.
 - Expect direct enemy attack by special operations ground forces, attack aircraft, and long-range artillery. Commanders ensure that base defense measures can detect and defeat small unit operations (level 1 or level II threats). Units should employ concealment measures to prevent detection by enemy forces. Dispersion mitigates effects of long-range fires and attack aircraft.
 - Coordinate with internal and external sources while planning for convoy security operations. For example, an external source may be host nation security personnel. Another external source may be aviation sources for aircraft gunship support. An internal source is the convoy commander for guidance on a number of conditions that can occur during a convoy, for example, timetable for movements, actions to be, start and release points, and actions to be taken if enemy contact is made. See ATP 4-01.45/MCRP 3-40F.7[MCRP 4-11.3H]/AFTTP 3-2.58, Multi-Service Tactics, Techniques, and Procedures for Tactical Convoy Operations, for more information on convoy security.
- 4-26. Sustainment planning considerations include the following:
 - Plan for provisioning all classes of supply.
 - Weight the main effort by cross leveling supply support assets as needed.
 - Prioritize main effort support for spoiling attacks, counter attacks, and follow-on offensive operations by forward positioning class I, water, III, IV, V, VIII, and IX as configured loads.

- Balance forward positioning with rapid mobility. Ensure adequate transportation for the higher demand for class III (bulk), IV, V, VIII, and IX during offensive and defensive operations.
- Plan for the need to provide casualty evacuation when requirements exceed capability of ground and air evacuation assets.
- Plan for back-haul of serviceable and unserviceable materiel during retrograde operations.
- Expect high demand for obscurant (fog oil and smoke generators) supplies and equipment.

MATERIEL MANAGEMENT PLANNING CONSIDERATIONS

- 4-27. Materiel managers and sustainment planners collect information on materiel that is readily available within the AO. Subsistence items, bulk petroleum, and barrier materials are the most commonly available commodities. Materiel managers and sustainment planners seek answers to the following questions—
 - What materiel can be purchased locally?
 - What supply systems are coalition partners using? Are the systems compatible?
 - What classes of common user items are Army sustainment units responsible for providing joint and/or coalition forces? (see JP 4-02, *Joint Health Services*, for discussion on common user logistics) Does a commonality exist in equipment and repair parts?
 - Does the host nation have repair parts that could support current systems?
 - Are theater support contracts available?
- 4-28. A successful concept of operations is logistically supportable throughout the duration of the battle. National level materiel managers must know when to buy, how much to buy, where to distribute, how best to support complex logistics operations, and how to forecast and plan for ongoing operations. Operational level materiel managers plan for what to stock, how much to stock, and where to stock in order to maintain a continuous pipeline of supplies. Tactical level materiel managers plan for operational readiness of supported units.
- 4-29. Friction points and resource shortfalls can be avoided through early identification of customs and clearance requirements; contract support requirements; reception, staging, and onward movement; and close out processes. It is vital that sustainment planners leverage strategic partners to identify all requirements during initial, mid and final planning conferences to ensure that the execution unit is prepared. Moreover, sustainment planners create a shared understanding from knowledge gained during planning conferences by creating a logistics playbook to use for synchronizing the sustainment warfighting function during execution.
- 4-30. By using known requirements, capabilities, and consumption rates for all classes of supply, materiel managers produce a logistics estimate with a logistics task organization that mitigates shortfalls and backhaul. The following list provides some examples of supply actions that range from strategic to tactical level activities—
 - Analyze LOGSTATs to anticipate supply support requirements.
 - Consider placement of supply points in the support areas.
 - Establish supply stockage and safety levels.
 - Monitor daily battle losses.
 - Identify source, location, and requirements for water.
 - Recommend policies, priorities, allocations, and criteria for controlled items.
 - Establish and distribute materiel evacuation instructions, condition standards, and policies for the collection and evacuation of materiel.
 - Track performance measures such as speed, accuracy, and reliability that indicate supply pipeline responsiveness.

PLANNING TOOLS

4-31. Using planning guidelines and planning factors, materiel managers determine the quantities of supplies and services needed to support an operation. AR 700-8, *Logistics Planning Factors and Data Management*, dictates policy and responsibilities for managing Army logistics planning data. Logistics planning data includes a variety of information, such as consumption rates, reference data, and planning factors. Strategic,

operational, and tactical leaders use Army logistics planning data and factors to estimate the amount and type of efforts required for a given operation.

- 4-32. There are many strategic, operational, and tactical sources (manual and automated) for information that provide logistics and operational information that can be used as planning data. For example, at the tactical level GCSS-Army, described in chapter 2, collects consumption information in real-time and near real-time for all classes of supply managed in that system. Other information, such as bulk fuel consumption, water purification, and water consumption, comes from LOGSTAT reporting. At the strategic level and operational level DLA and USAMC collects consumption information in real-time and near real-time with ERP systems. Operations Logistics (OPLOG) Planner is the most widely used source for logistics data because it contains Army and joint planning factors for all classes of supply.
- 4-33. Units forecast each commodity using logistics planning factors. A planning factor (rate, ratio, length of time) is a multiplier used to estimate the amount and type of effort involved in an operation. Population based planning factors have three variables: weight of the commodity for a given period, population supported during the same period, and estimated number of days for the operation. Equipment based planning factors consider equipment usage profiles for each fuel burning LIN in each organization.
- 4-34. Class VIII planning is an integral function of the multi-functional Army Health System. Planning considerations include patient bed occupancy, projected patient movement and operating room utilization, status of blood and other medical stocks, and the commander's health service support priorities. Class VIII requirements are challenging to forecast because consumption is dependent on many operational and geographic variables and demands are not generated until forces are actually deployed (peacetime demands do not reflect casualty care). Medical planners use modelling tools such as The Joint Medical Planning Tool and the Medical Contingency Requirements Workflow to models patient flow and estimate medical materiel requirements based on patient conditions and associated medical treatment data.

LOGISTICS SYNCHRONIZATION

4-35. Daily logistics synchronization meetings help to ensure successful supply support execution. Effective logistics synchronization meetings have appropriate participation for validating logistic status reports, synchronize resupply operations, and create shared understanding among all of the sustainment planners. The logistics synchronization meetings should be a scripted event involving the same participants and conducted at the same time. Participation by relevant staff and unit representatives is critical in validating the logistic status reports. Having an established timeframe to conduct the meeting enables the sustainment planners to develop a battle rhythm. Leaders use the logistics synchronization meeting to update a preformatted and practiced synchronization matrix. See figure 4-2 on page 4-10 for a depiction of BSB logistics synchronization.

Logistics Synchronization Meeting

Purpose, Frequency, Duration, Location

Purpose: Synchronize logistics throughout the brigade and identify existing and future logistics requirements.

Frequency: Daily **Duration:** Less than one hour

Location: BSBCP

Composition

Staff Proponent: BSB SPO Chairman: Chief of Staff

Attendees: Brigade XO, G-3 representative, S-4, S-1, FSC commanders, BSB XO, BSB SPO, S-2, PBO, and representatives for transportation, supply, field services, ammunition, distribution, and other

commodities

Products

Input:

- Combat power
- Direct support stock status
- Logistics requirements · Current operations
- Running estimates

Output:

- · Logistics synchronization
- Sustainment graphics
- · Update common operational picture
- Fragmentary order

Updated running estimates

Agenda

Roll Call (SPO) Enemy situation (S-2) Upcoming mission (S-3) Current logistics status (SPO)

Sustainment next 24 - 72 hours Convovs SASMO Issues

Legend

BSB - brigade support battalion SASMO - sustainment automation support management office

CP - command post FSC - forward support company PBO - property book officer

SPO - support operations office XO - executive officer

Figure 4-2. Logistics synchronization meeting

4-36. The synchronization matrix is a tool for planning and synchronizing operations between maneuver and supporting units during an operation. Using the synchronization matrix throughout the planning process enables planners to think through the many details that ensure mission success. Planners spell out who is getting what (commodities and amount), when (time window), where (grid coordinates), and how (supply point, logistics release point, forward logistics element) on the synchronization matrix. It includes key activities of adjacent units, and may incorporate unit and commodity management data. Since the synchronization matrix helps manage and track requirements, it should be updated continually as changes occur during the course of an operation.

OPERATIONS LOGISTICS PLANNER

4-37. Stockage and resupply requirements for a theater can be determined using LOGSTAT, command guidance, unit SOPs, and the OPLOG Planner. OPLOG Planner is an interactive stand-alone tool that assists commanders and staff in developing a sustainment estimate. This application supports operations typically associated with multi-phase operations plans and orders. It enables users to estimate mission requirements for classes of supply I, II, III (bulk), III (packaged), IV, V, VI, VII, IX, mail, water and ice. Sustainment planners answer a series of questions about mission, enemy, terrain, weather, troops, time available, civil considerations and task organizations to generate supply estimates for each commodity. This planner contains the latest DA G-4 approved planning factors and all table of organization and equipment force structures for the year prior to the annual publication update.

COORDINATION

- 4-38. Materiel managers develop and execute strategies to work around choke points and bottlenecks. They should seek opportunities to nest supply support planning with the maneuver plan by leveraging the available tools found across each staff section. Materiel managers should learn the functions, outputs, and individual personalities of the supporting and supported staff sections to develop an in-depth picture for sustaining the operation.
- 4-39. When deployed, Army materiel managers anticipate requirements and solve problems in a complex operational environment. Efficient and timely supply support depends on building relationships because there are a number of moving pieces that require a team working across the spectrum of supported units, suppliers

(commercial and military), contractors, and multi-national forces. Materiel managers constantly assess the battlefield to identify potential shortfalls in the pipeline by working closely with tactical plans and operations personnel. Managers should make contacts with the supporting and supported staffs because building relationships leads to learning about available resources in given situation.

- 4-40. Even with automated materiel management procedures, positive human relationships enable the best, most informed decisions regarding supply support. Coordination through relationships prepares materiel managers for continued supply support during unanticipated challenges that include temporary losses of information technology. During large-scale combat operations, logistics information systems are vulnerable to disruption, damage or destruction making human communication and shared understanding key to synchronizing efforts as far into the future as applicable to support the commander's intent.
- 4-41. In joint operations, a combatant commander may assign responsibility for planning and executing supply support for common user items to a lead Service, which in unified land operations is usually the Army. Execution of common user logistics responsibilities requires coordination with other Service Components to gain visibility of their requirements, by commodity, and ensure their integration into distribution management functions to ensure supply effectiveness as well as efficiency. See JP 4-0, *Joint Logistics*, for additional discussion of logistics control options.
- 4-42. Effective supply support requires a clear understanding of coalition partners' logistics capabilities because these have a direct impact on supply support. Materiel managers should work very closely with the coalition partners to gain trust and confidence to leverage the capabilities of those countries.
- 4-43. Materiel managers must understand and leverage the transportation network, to include contractors. They should develop relationships with contracted host nation companies for moving supplies across the battlefield.
- 4-44. When working with contractors, materiel managers and unit leaders must coordinate through their CORs to avoid making any unauthorized purchases due to miscommunication. CORs can only act to the extent of the authority detailed in their COR's appointment letter. CORs should never overstep the responsibilities delegated to them by the contracting officer. If there is any question regarding the extent of granted authority, the COR should contact the contracting officer for clarification. Only the contracting officer has the express authority to change cost, schedule, and performance conditions for a contract.

COMMUNICATION

4-45. USAMC and DLA provide on-the-ground representatives to facilitate supply support to their supported units. Leaders should include USAMC and DLA customer service representatives in decision cycles and with planning associated with current and future operations. Army materiel managers (all commodities) and distribution managers should meet and build relationships with supported units in order to understand each unit's mission and supply requirements.

OPERATIONS OFFICE (S-3 OR G-3)

4-46. While operations offices do not directly engage in the supply support mission, their coordination with distribution managers ensures that materiel reaches its subordinate units. The operations officer is the chief of the movement and maneuver warfighting function and the principal staff officer responsible for all matters concerning training, operations and plans, force development, and modernization. In addition to coordinating the activities of the movement and maneuver warfighting function, the operations officer is the primary staff officer for integrating and synchronizing the operation across the planning horizons in current operations, future operations, and plans integrating cells.

4-47. Key tasks—

- Track and process relevant information to create an ongoing link between current operations and plans, to include monitoring current operations and contributing to the common operational picture.
- Maintain and disseminate vertically and horizontally the supported unit's common operating
 picture through the collection and analysis of unit situational reports and operations summaries.

- Conduct mission analysis to forecast details that support informed and timely decision-making.
- Establish command operational reporting procedures for serious incident reports, commander's critical information requirements, combat power, and requests for information.
- Support synchronization and optimization of supported unit resources in support of the mission and commander's intent in order to turn command guidance into executable orders.
- 4-48. Accurate forecasting of supply support requirements requires analysis of supported unit equipment density, upcoming deployments, seasonal requirements, and other operational requirements. Current operations sections maintain and disseminate the common operating picture through collection and analysis of unit situational reports and operations summaries.
- 4-49. Current operations sections provide forecasts for tactical pauses that may offer opportune resupply windows or changes in movement priority on supply routes. As opportunities arise, they support timely analysis for sustainment units to coordinate logistics requirements, and establish support priorities in accordance with the commander's guidance. The future operations section plans for the mid-range horizon by focusing on the "what if" analysis.
- 4-50. The future operations section refines and modifies operations plans and orders based on the current situation, develops branch plans, and assesses midrange progress of operations. Normally ongoing operations mean that several plans undergo refinement simultaneously with associated working groups and joint planning teams. Effective distribution managers frequently coordinate with supported units' current and future operations in order to provide timely supply support.

LOGISTICS STAFF OFFICE (G-4 or S-4)

4-51. Logistics staff operations apply to almost all mission sets. The logistics office is the principal staff officer responsible for monitoring and advising on logistics within the supported unit. The logistics staff office serves as the sustainment integrator for the commander and develops the logistics plan in support of the operational plan. The staff provides recommendations on a variety of command priorities including host nation support, commercial support, materiel management, and movement control. The logistics staff may incorporate divisions, branches, and specialized sections for supporting various types of operations. In addition, it may include joint and multinational capabilities for supporting requests for logistics support. The staff may also serve as the focal point for planning and integrating LOGCAP and commercial support.

4-52. Key sustainment tasks—

- Develop the unit operation plan service support annex.
- Coordinate external logistic support.
- Formulate policy, procedures, and directives related to materiel readiness.
- Formulate and implementing policy and procedures for classes of supply and related services.
- Monitor and report the status of logistic automated information systems.
- Coordinate with internal and external activities and agencies regarding mobility operations.
- Monitor unit logistic operations.

SURGEON

- 4-53. Organizations from battalion through Army Service component command level are authorized a surgeon. The ASCC surgeon is the theater Army staff proponent responsible for (in coordination with the MEDCOM [DS] commander) the provision of AHS support within the AOR. The AHS leverages the surgeon's cells (staff channels) at each echelon and medical command channels (through the MEDCOM [DS], medical brigade [support], and medical battalion [multifunctional]) to provide AHS support to the deployed force. Integration of these two chains and other elements of sustainment occur at command headquarters at echelon and not just between sustainment organizations.
- 4-54. The ASCC surgeon and the surgeon cells at each echelon identify, assess, counter and/or mitigate health threats across the range of military operations. ASCC surgeon and the surgeon cells also advise commanders on medical capabilities and capacities necessary to support plans, and interface with logistical, financial management and personnel elements to coordinate AHS support across the warfighting functions.

4-55. The ASCC surgeon and the surgeon cells at each echelon (including the TSC, ESC, and sustainment brigade surgeon cells) work with their staff to conduct planning, coordination, synchronization, and integration of AHS support to plans to ensure that all 10 medical functions are considered and included in running estimates, OPLANs, and OPORDs in coordination with the MEDCOM (DS). The surgeon also prepares a portion of annex E (Protection) and annex F (Sustainment) to the operation order or operation plan.

U.S. ARMY MATERIEL COMMAND

4-56. During military operations, USAMC provides imbedded logistics assistance representatives to Army commands, ASCCs, direct reporting units and other Army forces through the establishment of an Army Logistics Assistance Program. The Logistics Assistance Program is intended to aid in the early detection and resolution of logistics-related problems that affect unit and materiel readiness. Logistics assistance representatives serve as subject-matter experts for identifying problems, determining responsibility for resolution, and solving problems. Logistics assistance representatives help with recognizing and reconciling supply support discrepancies such as delivery or shipping delays, pricing errors, and backlog situations. The logistics assistance representatives resolve issues affecting supported units. Logistics assistance representatives engage in day-to-day operational level activities to include arranging for warehouse space; coordinating with vendors, supported units and higher headquarters; ensuring safe and secure transportation of supplies; scheduling; and special projects. AR 700-4, *Logistics Assistance*, describes logistics assistant representative tasks and capabilities.

DEFENSE LOGISTICS AGENCY

4-57. DLA serves mission needs by providing regional coordination and support through customer service representatives and liaison officers. National account managers, customer account managers, and customer service representatives are part of a process designed to deliver uninterrupted commodity-based support to DLA's customers. DLA's customer assistance personnel synchronize supply pipeline activities from the national level to the tactical customer by being available 24 hours per day to assist with identifying problems, determining responsibility, and problem resolution. See figure 4-3 on page 4-14 for a notional DLA interaction with Army units. This interaction is depicted as notional because every deployment and every theater will be different. The following DLA elements engage with Army representatives at all levels:

- DLA assigns liaison officers and customer service representatives worldwide. These representatives assist with planning and coordination between the sustainment planners and the DLA organizations responsible for supply pipeline support.
- DLA support teams normally collocate with the ESC or TSC, and the theater J-4. They deploy as requested by the combatant commander to provide on-site DLA support, bulk fuels management, and disposal services.

4-58. The DLA Customer Assistance Handbook provides contact information and resolution alternatives. The DLA Customer Assistance Handbook is marked FOR OFFICIAL USE ONLY and is not open to the public. Only DLA customers with a need-to-know will be granted access to the handbook, either on-line or in hard copy by contacting the handbook editor by accessing the DLA website.

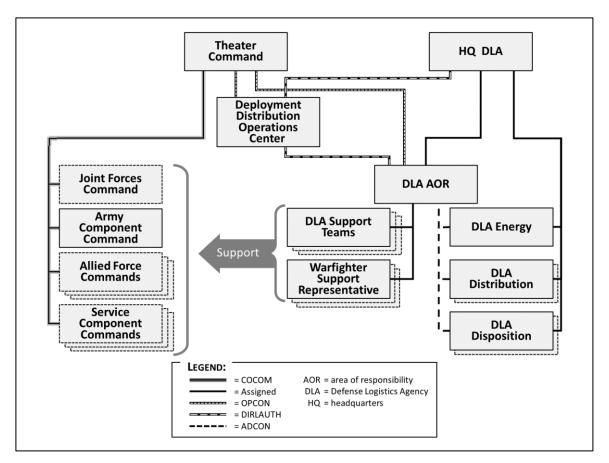


Figure 4-3. Defense Logistics Agency customer service (notional)

SUPPLY POINT

- 4-59. This paragraph applies to tactical supply point (all commodities) managers. The supply point's unit commander and accountable officers can best assist supported units through periodic liaison visits. Encourage supported unit leadership, S-4 or G-4, SPOs, battalion maintenance officers, and others responsible for ordering and receiving material to visit supply points frequently. Frequent communication includes monthly face-to-face meetings where the supported unit and supply point discuss and resolve issues.
- 4-60. Every Army supply point is unique because each point determines the amount and type of stockage based on the needs of its supported units. The supply point's supported units may change causing the supply point to add or turn-in stocks. Accountable officers analyze each supported unit's task organization to prioritize requirements and to make the most efficient use of available storage space. Task organization analysis includes identifying the supported unit's organic and theater-provided equipment density.

Chapter 5

Execution of Supply Support

Supply support includes all processes from acquisition until the materiel is disposed of or consumed. This chapter discusses the execution of supply support. It provides supply support methods pertaining to unit supply, property books, and SSAs.

SUPPLY SUPPORT

- 5-1. Success during large-scale combat operations depends on the Army's ability to feed and clothe its Soldiers, provide medical care, fuel its combat vehicles, fortify its positions, and replace its weapons systems. Materiel management is the means for providing supply support necessary to accomplish these tasks. Theater materiel managers develop a distribution plan to deliver supplies from the theater ports of entry to the supply points and to the supported unit to execute mission requirements. Sustainment planners establish supply points throughout the theater to support the readiness of supported units. Tactical supply personnel execute unit level procedures that ensure food, water, clothing, ammunition, petroleum products, barrier material, medical materiel, and major end items are available when and where needed.
- 5-2. Supply support depends upon the flow of information and materiel from the supply source to the user, back to the supply system, and disposal. This flow includes the last tactical mile (unit formations that come directly into contact with enemy forces) and the retrograde of materiel. Speed alone is not the desired result. Effective supply support requires the reliable, predictive, rapid, and precise delivery of materiel when and where required. Success is measured when the commander's validated materiel requirements are delivered. Figure 5-1 on page 5-2 and figure 5-2 on page 5-3 contain the distribution management functions that influence effective and efficient supply support. This set of graphics follow from figure 1-2 on page 1-16 that introduced the distribution management functions, figure 1-3 on page 1-21 that displayed the complexity of the distribution management process, and figure 4-1 on page 4-3 that links the operations planning process with the distribution management process. These graphics illustrate the coordination between the players throughout the distribution management process and the high-level tasks associated with each of the functions. These tasks are not all inclusive and each task contains too many details to list in this publication.

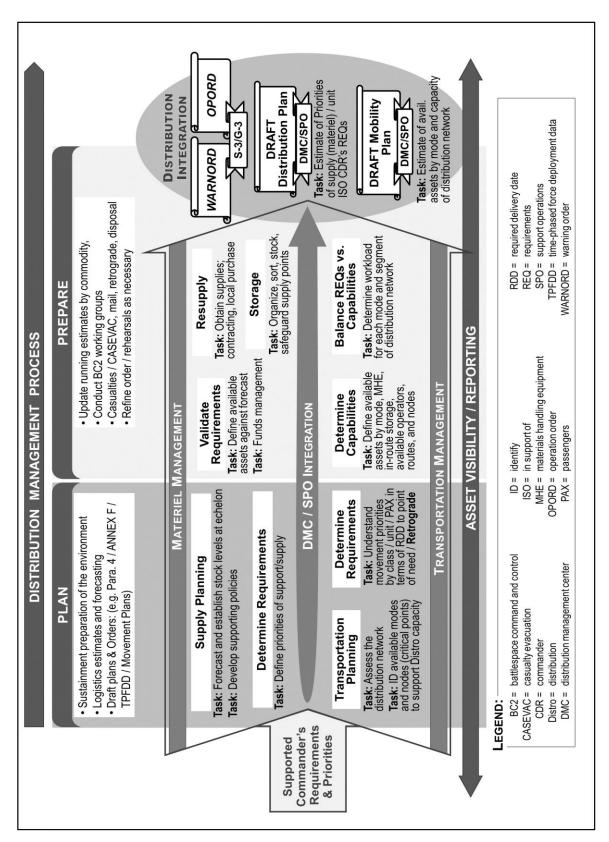


Figure 5-1. Distribution management framework

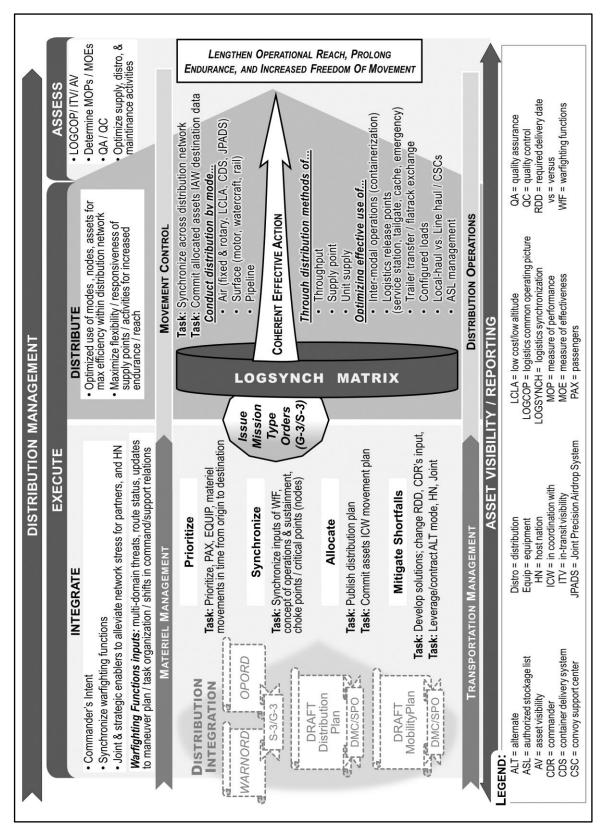


Figure 5-2. Distribution management framework

REQUIREMENTS DETERMINATION

- 5-3. Unit leaders and supply personnel at every echelon forecast requirements for all classes of supply. Requirements by supply class depends upon the type of unit, unit mission, equipment density, current operations, future operations, and other factors.
- 5-4. After a unit or maintenance facility determines there is a requirement and the requirement validated through unit channels and procedures, the unit or maintenance facility generates a demand on the supply system to deliver materiel. A using unit may satisfy materiel requirements through several different avenues. Options include—
 - Submit a request either manually or through an automated system.
 - Purchase supplies locally with a government purchase card or through a contract.
 - Initiate a demand on the supply system through timely and accurate LOGSTAT reporting.
 - Submit an operational needs statement to initiate a materiel solution to an operational requirement.
 - Submit an equipment sourcing document for filling equipment shortages that are validated and authorized by DA.

Note: The Army supply system is the supply process of choice. Units should try to meet requirements within the system before using other options, such as local purchase.

- 5-5. DODAAC management is one of the most important functions for materiel managers (all supply classes) during requirements determination activities. Every organization that requests, requisitions, contracts for, receives, has custody of, issues, or ships DOD assets, or pays bills for materiel and services is identified by six-position alphanumeric, the DODAAC. Units may have more than one DODAAC, for example, a DODAAC for bulk fuel and a DODAAC for other materiel.
- 5-6. The property book office, located in the G-4 or S-4, maintains property book records for subordinate elements and any separate elements operating in its area of responsibility. It accounts for nonexpendable property assigned to organizations and activities. It manages nonexpendable material through record adjustments, issues, turn-ins, property losses, and status reports. Property book offices request, issue, receive, and store materiel.
- 5-7. The G-4 or the S-4 manages supply operations. They analyze battlefield characteristics for effects on the type of support required and for the manner in which support will be delivered. The G-4 or S-4 ensure a continuous flow of all classes of supply to their subordinate units. They coordinate delivery schedules and distribution methods between subordinate and supporting units. The G-4 or S-4 coordinate logistics requirements with external activities and internally monitors field feeding, water purification, mortuary affairs, aerial delivery, laundry, and shower for organic and attached elements.
- 5-8. G-4 or S-4 determine potable water consumption rates. To complete their missions, deployed personnel must drink sufficient quantities of potable water to maintain adequate physical and mental health. The daily water requirements depend on a number of factors including the weather, geographical area, the tactical situation, and the operational tempo. Planners must also consider the following activities that also require potable water:
 - Ice making.
 - Food preparation.
 - Medical treatment.
 - Personal hygiene (brushing teeth, shaving, and showering).
 - Laundry.
 - Mortuary affairs operations.
 - Chemical, biological, radiological, and nuclear decontamination.
- 5-9. The SPO fuel and water section is responsible for bulk water distribution and materiel management. Comprehensive and detailed requirement forecasts and running estimates depend upon supported unit daily consumption, forecasted requirements, on-hand bulk water quantity, and available storage capacity. The SPO

fuel and water section synchronizes water production capability with water support company storage capacity because of the finite amount of storage capacity at each level. Bulk water planners consider supported unit storage capacity and on-hand stockage to avoid:

- A unit unable to accept the shipment because its storage capacity is at or near full.
- Delivering a quantity of bulk water that does not meet the supported unit requirements.

REQUEST

5-10. AR 710-2 defines a request as a supply request initiated by a supported unit. A requisition, defined in AR 710-2, is a supply request initiated by the supply point in a Military Standard Requisitioning and Issue Procedures format or a unit supply request converted to a Military Standard Requisitioning and Issue Procedures format by the supply point for submission to the next higher source of supply. Units do not request bulk water and fuels through traditional, request forms such as the DA Form 2765–1 (*Request for Issue or Turn-in*) or electronically through an automated system such as GCSS-Army. Petroleum and bulk water materiel managers, at each echelon, manually consolidate consumption data forwarded from subordinate and supported company-level units. They prepare comprehensive and detailed requirement forecasts and running estimates of water and fuel to ensure there are adequate stocks available to meet daily requirements.

Bulk Water Request Process

- 5-11. Bulk water requirements determination and request process includes the same basic process as all classes of supply, but is managed manually through coordination and communication. Figure 5-3 on page 5-6 represents the requirements determination process for bulk water in a BSB. However, please note that this process works the same for all sustainment units at all echelons. It is the focus that changes. The circle points represent requisition and coordination actions between organizations. The square points represent distribution actions. The dotted lines represent transmission of information. The solid lines represent the physical movement of materiel.
- 5-12. Circle 1. The BSB provides bulk water support to its parent brigade with organic storage and distribution capability. The BSB is dependent upon the DSB and DSSB for bulk water production. The BSB's water platoon does not have the capability to produce bulk water and the FSCs do not have the capability to store and distribute bulk water.
- 5-13. Circle 2. Concurrently, the DSB SPO fuel and water section maintains awareness of division current and future operations to forecast bulk water requirements. The DSB SPO fuel and water section anticipates the division's bulk water requirements for the next 96-120 hours and plans bulk water production and resupply based on the division commander's priorities.
- 5-14. Circle 3. The BSB SPO supply and field services section receives daily LOGSTAT reports showing bulk water consumption and requirements from their supported FSCs. The BSB supply and field services section analyzes the FSC's on hand quantities, expected consumption and capacity. The BSB supply and field services section anticipates the brigade's bulk water requirements for the next 96 hours to plan bulk water resupply based on brigade priorities. The BSB SPO supply and field services section sends current consumption information and forecasted bulk water requirements to support future brigade operations to the DSB SPO fuel and water section for resupply.
- 5-15. Circle 4. The DSB SPO fuel and water section receives and analyzes the BSBs' daily LOGSTAT showing on hand quantities, expected consumption and expected capacity for the next 96 hours. The DSB SPO fuel and water section validates their forecasts and production throughput against the BSBs' bulk water requirements to verify proper amounts and identify discrepancies with estimates.
- 5-16. Circle 5. The DSB SPO fuel and water section provides the DSB DIB with the division's current bulk water on-hand quantities by unit, bulk water requirements by unit and storage capacity for the next 96 hours. The DSB SPO fuel and water section also provides bulk water production, storage and distribution assets at the division support area. The DSB SPO DIB synchronizes and plans bulk water distribution to all supported units with other commodity requirements in accordance with division priorities and within the constraints of division movement corridors.

5-17. Circle 6. The DSB SPO fuel and water section consolidates the division's daily bulk water consumption and daily requirements, and provides the information to the ESC DMC fuel and water section. The information also provides the ESC DMC awareness of any DSB production, storage or distribution capability shortfalls. The DSB SPO fuel and water section also provides a copy of the bulk water information to the division G-4 for visibility.

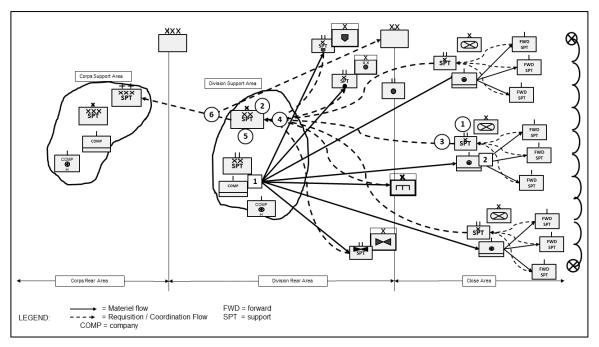


Figure 5-3. Bulk water request process

- 5-18. The DSSB composite truck company transports water distribution assets belonging to the DSSB CSC and resupplies the BSB Distribution Company water distribution assets. The BSB Distribution Company resupplies FSC and Maneuver Battalion water buffaloes.
- 5-19. The DSSB composite truck company transports water distribution assets belonging to the DSSB CSC and resupplies the BSB Distribution Company water distribution assets. The DSSB composite truck company throughputs bulk water to FSC and maneuver battalion water buffaloes.

Bulk Fuel Request Process

- 5-20. Petroleum materiel managers communicate along command channels and technical channels to ensure that supported units receive on-specification bulk petroleum. The command channel involves the petroleum units within the Army while the technical channel includes joint and Army organizations. Command and technical channels incorporate a two-way flow of information to ensure that the petroleum materiel managers receive the most current guidance and to inform the command or suppliers of real or potential problems in the supply chain. Army petroleum materiel managers work closely with DLA-Energy to ensure that petroleum units can deliver fuel to supported units in a timely manner.
- 5-21. Figure 5-4 depicts the class III (bulk) request process. Each of the numbered points represent a node where actions take place and are discussed in subsequent paragraphs. The circle points represent requisition and coordination actions between organizations. The square points represent distribution actions. The dotted lines represent transmission of information. The solid lines represent the physical movement of materiel.
- 5-22. Circle 1. The BSB provides support to its parent brigade with organic storage and distribution capability. The BSB SPO supply and services section forecasts brigade fuel requirements based on current and future operations.

- 5-23. Circle 2. Concurrently, the DSB SPO fuel and water section maintains awareness of division current and future operations to forecast fuel requirements. The DSB SPO fuel and water section anticipates the division's fuel requirements for the next 96-120 hours and plans fuel resupply based on the division commander's priorities.
- 5-24. Circle 3. The BSB SPO supply and service section receives daily LOGSTAT showing fuel consumption and requirements from the FSCs. The BSB SPO supply and service section analyzes the FSC's on hand quantities, expected consumption and capacity. The BSB SPO supply and service section anticipates the brigade's fuel requirements for the next 96 hours to plan fuel resupply based on brigade priorities. The BSB SPO supply and service section sends current consumption information and forecasted fuel requirements to support future brigade operations to the DSB SPO Fuel and water section for resupply.
- 5-25. Circle 4. The DSB SPO Fuel and water section receives and analyzes each support battalion's daily LOGSTAT showing on hand quantities, expected consumption and expected capacity for the next 96 hours. The DSB SPO fuel and water section validates their forecasts against the BSB's fuel requirements to verify proper amounts and identify discrepancies with estimates.

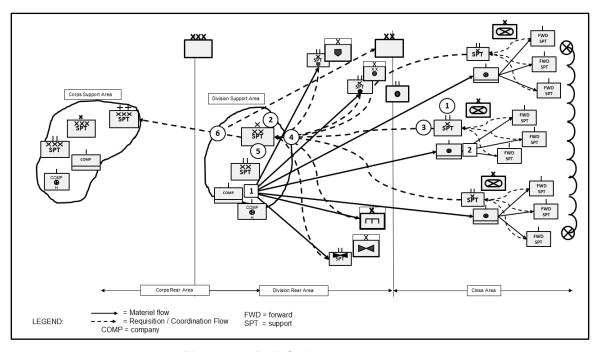


Figure 5-4. Bulk fuel request process

- 5-26. Circle 5. The DSB SPO fuel and water section provides the DSB SPO DIB with the division's current on-hand quantities by unit, fuel requirements by unit and storage capacity for the next 96 hours, and fuel distribution assets at the division support area. The DSB SPO DIB synchronizes and plans fuel distribution to all supported units with other commodity requirements in accordance with division priorities and within the constraints of division movement corridors.
- 5-27. Circle 6. The DSB SPO Fuel and water section consolidates the division's fuel consumption and requirements and prepares the bulk petroleum contingency report. The DSB Fuel and water section provides this report to the corps ESC in order to provide the ESC SPO visibility on the division's anticipated requirements for the next 120 hours. The DSB SPO Fuel and water section also provides a copy of the bulk petroleum contingency report to the division G-4 for visibility.
- 5-28. Square 1 and 2. During division logistics synchronization meetings, the DSB SPO DIB coordinates with the support battalion SPOs to synchronize DSB resupply operations to each supported unit. The DSB tasks the DSSB with the resupply mission. The possible courses of action for resupply, based on mission variables, includes but are not limited to:

- The DSSB composite supply company resupplies the BSB fuel assets in the brigade support area after the BSB's Distribution Company completed resupply to the FSCs.
- The DSSB composite throughputs fuel directly to the FSC location or logistics release points.

LOCAL PURCHASE

- 5-29. Materiel may be procured locally from outside of the Army supply system using government purchase cards and operational contracting:
 - Units purchase nonstandard or commercial items under \$3,000 with the government purchase card. Commanders follow local policy for use of the government purchase card.
 - Typically, commands use contracts to request nonstandard or commercial items over \$3,000. To acquire contract support, the unit should coordinate with the local contracting agency to develop and submit a requirements package. Only warranted contracting officers may award contracts.

Government Purchase Card

- 5-30. The government purchase card is a credit card, issued by name, to a designated individual who becomes the cardholder. Commanders normally assign the card to the S-4 or supply sergeant. The government purchase card program enables units to purchase authorized materiel directly from vendors. This process is commonly known as local purchase. The DOD controls four types of charge card programs: purchase cards, travel charge cards, fleet cards, and aviation into-plane reimbursement cards.
- 5-31. DOD issues purchase cards to Soldiers designated by their organization to exercise purchasing authority through use of the card for official purchases. Each cardholder falls under the authority of an approving official appointed to monitor the activities of the cardholders by reviewing monthly billing statements. Misuse of the government purchase card is subject to a range of administrative and disciplinary actions, as well as criminal prosecution, depending on the nature of the infraction.
- 5-32. Typically, commanders or designated representatives validate the local purchase requirement prior to approving the purchase. A single purchase limit restricts the dollar amount for any one purchase. The monthly limit restricts the cumulative amount for that card during a billing cycle. The card can also be restricted from use at specific merchant types. Local agency program coordinators establish single purchase and monthly limits for cardholders and block merchant types that would not be needed by the cardholder. When a charge within established limits is made by an authorized cardholder, that charge authorizes the card-issuing bank to pay the vendor or contractor. The bank presents the government (through the approving official) with a monthly bill for all cardholders' transactions during that billing period.
- 5-33. The regulatory authorities governing the use of purchase cards are the *Federal Acquisition Regulation*, *Part 13, Simplified Acquisition Procedures*".

Operational Contract Support

- 5-34. Contracted commercial support plays an important role in the sustainment warfighting function. Contracts provide deployed units with technical and surge capabilities that either do not exist or exceed existing capabilities. Employment of contracts as a sustainment capability occurs across all echelons and across supply and some field services functions. OCS is the process of planning for and obtaining supplies and services from commercial sources within a theater of operations. OCS becomes a component of the supply support process because it augments existing capabilities, bridges gaps in the deployed force structure, leverages assets, and reduces dependence on CONUS based logistics.
- 5-35. Leaders and sustainment planners should know and understand the OCS process to avoid lapses in services or product delivery. This process includes pinpointing the location of key partner agencies and responsible organizations. During planning Army sustainment planners, consider contract support capabilities, limitations, and how to integrate contractors into the overall concept of support.
- 5-36. Materiel managers think through complex problems to identify specific support requirements to be included in a performance work statement. After the requiring activity determines and validates its requirements and the funding is approved, the request package goes into the contracting process, which ultimately leads to vendor selection. Materiel managers must also be cognizant of special considerations,

requirements to manage materiel in accordance with emergency use approvals for non-Food and Drug Administration approved class VIII items. See ATP 4-10/MCRP 4-11H/NTTP 4-09.1/AFMAN 10-409-O, *Multi-Service Tactics, Techniques, and Procedures for Operational Contract Support,* and ATP 4-92, *Contracting Support to Unified Land Operations,* and AR 700-137, *Logistics Civil Augmentation Program,* for additional information.

- 5-37. The requiring activity develops an acquisition-ready requirement package for submission to the supporting contracting activity. The package includes a detailed performance work statement for service requirements or detailed item descriptions for a commodity requirement. In addition to the performance work statement, these packages include an independent cost estimate and DA Form 3953 (*Purchase Request and Commitment*). Finally, the requiring activity must be prepared to support, and possibly lead, an acquisition review board to approve and set priorities on high demand, special command interest contract support actions.
- 5-38. The requiring activity staff assists the contracting agency by nominating a COR. CORs are required for every service contract and task order. CORs ensure that contractors provide the contracted service or item in a safe and effective manner.
- 5-39. The requiring activity completes receiving reports. After acceptance, the receiving official must certify receipt of supplies for payment purposes either in wide area work-flow or by completing a Service specific inspection and receiving statement, for example, DD Form 250, (*Material Inspection and Receiving Report*). Requiring activities should ensure the receiving official has the skills to perform the duties as receiving official and is made available as needed to perform these duties

Contractor Functions On The Battlefield

- 5-40. Contractors can provide the full range of supply and field services functions during military operations, including item management, stockage, and delivery of all classes of supply. Contractor support may also provide field services (such as, laundry, shower, water purification, waste disposal, and portable latrine support) within specific parameters. The availability and type of contract support on the battlefield depends on mission, enemy, terrain, troops, time, and civilian considerations.
- 5-41. To meet the challenges of large-scale combat operations, the Army is rebalancing its force structure to improve the velocity, precision, and survivability of future sustainment operations. Force structure improvements will provide commanders with more organic sustainment capability, especially in the forward area. However, gaps in the Army's fuel distribution, unit mobility, and maintenance capabilities will require several years to reduce, and the recalibration of capabilities between active and reserve components will take time. In the short term, these force structure improvements will not eliminate the need for commercial support.
- 5-42. Contractors will play an especially critical role in shaping operations, when Army service component commands depend heavily on the LOGCAP and other external support contracts to open ports, establish intermediate staging bases, and execute the reception, staging, and on-ward movement of arriving units. As operations develop, most uniformed sustainment capabilities will deploy forward to support the corps headquarters, divisions, and brigades engaged in direct combat, leaving an enormous joint security area dependent on contractors to operate the theater distribution network and provide communications, security, and base life support.
- 5-43. Army formations conduct operations to consolidate gains in those areas where large-scale combat operations have ceased. The transition to consolidation of gains, however, reflects a change in the scale of combat operations, not necessarily a change in their lethality.
- 5-44. See JP 4-10, *Operational Contract Support*, and ATP 4-10/MCRP 4-11H/NTTP 4-09.1/AFMAN 10-409-O, *Multi-Service Tactics*, *Techniques*, *and Procedures for Operational Contract Support* for more information on the contracting process.

Working With Contractors

5-45. Contractors provide additional sources of support for required supplies and services. Contractor support does not directly correlate to military support. Keep in mind that contractor support involves payment to vendors for goods and services. The type and quantity of support a contractor provides is similar to that

provided by a military support unit, when considered from a supported unit perspective; however, commanders and staffs must remain aware of some fundamental differences. Contractors perform only the tasks specified in the contract. Contractors and their employees are not combatants, but rather civilians accompanying the force. Commanders do not have command of contractor employees and contractor personnel are not government employees meaning contractors manage and supervise their employees. Commanders manage contractors through the contracting officer and COR in accordance with the terms and conditions of the contract.

- 5-46. Contracted support within the overall concept of support. Annex W of the operations plan describes OCS procedures for the procurement of all goods, services, and minor construction within the AO. Contractor functions provide several benefits on the battlefield from mitigating high operating tempo, offering force projection, and by providing a source of high-tech, low-density skills. See ATP 4-10/MCRP 4-11H/NTTP 4-09.1/AFMAN 10-409-O, *Multi-Service Tactics, Techniques, and Procedures for Operational Contract Support*. For in-theater contractor and contract management, see AR 715-9, *Operational Contract Support Planning and Management*.
- 5-47. Sustainment planners and leaders should monitor contracts to know when to modify statements of work and performance work statements as situations change. There may be instances where it is difficult to influence the contracting process, however, because of the source of contracting support. When identifying needs, requiring activities should identify de-scoping procedures to make it as easy to reduce support, as it is to surge support. Trained CORs have a base of knowledge on the contracting process to help them work through the complex issues associated with contracted products and services.
- 5-48. Materiel managers and leaders should work closely with contractors to know how well the contractor is performing. Leaders should include contractors in daily, weekly, and monthly meetings, as appropriate to the service provided, to keep the contractor informed on changes that might affect daily workforce scheduling or contract deliverables. The COR monitors which performance measures are being met, which performance measures are not being met, and steps being taken to correct deficiencies. Materiel managers and leaders should perform monthly audits with CORs to determine whether contract requirements are being satisfied.
- 5-49. Contracted employees must be vetted through their employer to ensure their skills match the contract statement of work and that there are no security risks. If the contracted employees are local hires and not American citizens, then a condition of employment must be a voluntary submission of their biometrics data that includes fingerprints, iris scans, and facial photographs, to the supporting contracting office so their identity can be confirmed. See ATP 2-22.82, *Biometric-Enabled Intelligence*, for more information.

DEPARTMENT OF DEFENSE ACTIVITY ADDRESS CODE MANAGEMENT

- 5-50. The DODAAC uniquely identifies a unit, activity, or organization within the DOD Activity Address Directory. The DOD Activity Address Directory contains DODAAC and a routing identifier code. The routing identifier code is a 3-character, alphanumeric code that uniquely identifies a unit, activity, or organization that requires system ability to route transactions or receive transactions within the logistics and financial business systems. The first character designates the particular service or agency ownership; the second and third characters are determined by the Central Service Point. A unit, activity, or organization typically has more than one DODAAC for different authority codes or purposes.
- 5-51. There are four type address codes associated with a single DODAAC:
 - Type address code 1 address: Used for mail, parcel post, and small package shipments.
 - Type address code 2 address: Used for freight shipments, but only when a unit, activity, or organization is to receive freight at an address different from the type address code 1 address.
 - Type address code 3 address: Used for billing purposes. Contains an address that is listed with a
 fiscal station number in the Disbursing and Fiscal Station Number Directory. Army commands
 normally pass a Joint Chiefs of Staff project code to its subordinate elements that allow units to
 commit resources during deployed operations.
 - Type address code 4 address: Identifies a more definitive shipping address.
- 5-52. Deploying units sometimes require derivative UICs and DODAACs. The property book officer manages the command's UIC, derivative UIC, and DODAAC requirements by ensuring that these codes are

up-to-date for supported units. DODAAC management is important because the DODAAC identifies the unit on purchase orders, shipping documents, and billing documents.

- 5-53. A UIC is a six-position code that uniquely identifies MTOE and TDA units in the Army. The first position identifies a unit as actual or planned; the next three positions represent the unique identity group, wherein a leading alpha character always identifies a MTOE unit. The last two positions identify the unit as a parent, subordinate, derivative, or TDA unit. DODAACs and associated UICs, derivative UICs, and the routing identifier codes are essential transportation and logistics codes. These codes identify unit location, mission, and support requirements used by the defense transportation and supply systems.
- 5-54. Incorrect and obsolete shipping addresses present an unnecessary drain on the supply system that causes frustrated cargo. Frustrated cargo is any shipment of supplies and equipment which, while en route to its destination, is stopped prior to receipt, and for which further disposition instructions are required. Mismanaged DODAACs lead to—
 - Units not receiving supplies.
 - Units receiving supplies in theater meant for home station.
 - Frustrated Cargo.
 - Lack of trust for the supply system.
- 5-55. Every unit supply room, PBO, and SSA should be diligent in the management of DODAACs. Each unit should update DODAAC type address codes as required in order to receive supplies at the right location, ensure that units receive bills and credit for reimbursable materiel as appropriate.

Note: Failure to manage DODAACs results in billing and shipping errors that require correction by materiel managers and tactical budget analysts. Failure to manage DODAACs also leads to units not receiving much-needed materiel.

5-56. Unit supply and property book personnel ensure the accuracy of critical data fields such as unit or activity names, and shipping, billing, and point-of-contact information. DODAAC management involves DODAAC scrubs and research along with coordinating UICs and routing identifier code actions that are required in conjunction with DODAAC changes.

Note: Incomplete, outdated, and wrong type address code information leads to poor audit trails, frustrated cargo, and obstructed supply discipline.

- 5-57. In addition to managing DODAACs, units should also manage all transactions associated with their DODAACs. Every unit requests materiel and it is imperative that the materiel reaches the point of need. Materiel managers handle supply classes either manually or in logistics information systems, depending upon the class, meaning procedures may vary. After the unit receives deployment orders, materiel managers, for all supply classes, should coordinate with the PBO to obtain the DODAAC with the correct type address codes. Next, as part of the operations planning process, materiel managers should decide which, if any, inbound materiel shipments need re-directing to the new DODAAC addresses. Materiel managers for all supply classes must ensure that they re-direct their requests, as needed, according to the procedures for that supply class. In order to do this all materiel managers should analyze their requests to determine if the inbound materiel is required for the deployment.
- 5-58. GCSS-Army offers a set of transaction codes that simplifies split operations by maintaining the unit's original document number while re-directing open orders and shop stock requests between DODAACs. Historically, units had to close open work orders and cancel purchase orders to re-direct in-bound materiel to the deployed location. Then the unit had to reorder materiel when it reached its destination or home station. This process created an increased workload and fiscal difficulties for the unit. DODAAC portability unburdens GCSS-Army users in the motor pool and unit supply by eliminating the redundancy of reordering parts when a unit moves from location to the next. DODAAC portability provides the following advantages for materiel managed in GCSS-Army:
 - Increases readiness by seamlessly transitioning requests for high priority repair parts.

- Reduces the need to transfer funds to cover the costs incurred during training or operations.
- Relieves units from having to cancel and reorder parts during unit deployment and redeployment operations.
- Mitigates de-obligation of funds by keeping the original orders intact with the original ordering date, priority, and line of accounting.

LOGISTICS STATUS REPORT

- 5-59. The LOGSTAT is a status report that provides visibility on critical shortages and logistics complications, used by higher headquarters to plan for crucial supply support, potential reallocation of resources, and to inform courses of action. Disciplined asset reporting via the LOGSTAT is essential to usable forecasting because accurate and timely information enables and drives material decision making.
- 5-60. At the company level, each platoon submits a LOGSTAT to the executive officer. The executive officer consolidates the company's status for submission to the battalion S-4. Battalion S-4s consolidate the battalion's status into one battalion LOGSTAT for submission to the brigade S-4 who submits it to the division G-4. The battalion S-4 may also submit a copy of the LOGSTAT to the supporting SPO. LOGSTATs give sustainment planners, materiel managers, and maneuver leaders a daily snapshot of consumption, on hand quantities, and upcoming requirements. A disciplined LOGSTAT reporting process enables leaders to monitor the readiness and logistics posture of subordinate units. Figure 5-5 depicts a high-level view of the LOGSTAT reporting process.
- 5-61. LOGSTATs drive resupply operations. Logistic status reports should include the unit's on hand stockage levels and expected consumption over the next 24, 48, and 72 hours to ensure accurate resupply requirements. Unfortunately, supported units tend to submit the same reports day-to-day instead of conducting analysis based on the impending mission and factors such as consumption rates, time, and distance. All unit leaders must understand that accurate and timely reporting based on task organization, equipment density, and assigned mission drives decision making for each unit's specific requirements.
- 5-62. LOGSTAT reports provide asset visibility, thus enabling the higher command and supporting units to make timely decisions, prioritize, cross-level, and synchronize the distribution of supplies to sustain units. The absence of accurate and timely reporting by supported units forces material managers to choose between three poor courses of action:
 - Push the wrong material or the incorrect amount of material, thereby risking emergency resupply requirements.
 - Delay the planning process until accurate information is gathered, thereby risking emergency resupply requirement for units dangerously low on critical commodities.
 - Push supplies based on incomplete data, thereby risking the need to move inordinate amounts of backhaul (planned or unplanned loads carried back with a transporter to the point of origin).
- 5-63. LOGSTAT reporting is not a request in the classic sense of the word; however, daily LOGSTATs serve to place demands on the supply system. Daily LOGSTAT reporting summarizes logistics developments that may affect the conduct or outcome of current or planned operations. Consolidated LOGSTAT reports generate demands on the supply system for subsistence, bulk fuel, ammunition, and medical supplies when the operations tempo is unpredictable. Supported units cannot expect to receive critical supplies at the right time and in the right place without timely and accurate LOGSTAT reporting.

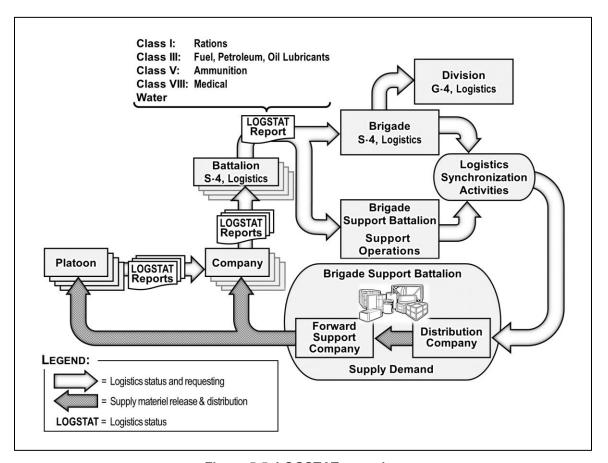


Figure 5-5. LOGSTAT reporting

EQUIPMENT SHORTAGES

5-64. There are two ways to fill equipment shortages. One is to submit an operational needs statement and the other is to submit an equipment sourcing document. AR 71-9, Warfighting Capabilities Determination, provides information on both processes. Following mission analysis, unit task organization and cross leveling, or lessons learned, commands use the Army operational needs statement process to document the urgent need for a nonstandard and or un-programmed capability to correct a deficiency or improve a capability that enhances mission accomplishment. An equipment sourcing document is a unit request for sourcing a shortage of authorized equipment urgently needed to achieve mission success and reduce risk of casualties. See DODD 5000.01, The Defense Acquisition System, and DODI 5000.02, Operation of the Defense Acquisition System.

- An operational needs statement is a request for a material solution to an operational requirement. Submit an operational needs statement if the request is for—
 - Commercial-off-the shelf equipment not authorized by regulation, Army type classified, or found in one of the standard Army supply channels.
 - An additional quantity required above the approved TDA or MTOE.
 - DA controlled equipment for which a unit does not have authorization and validation.
 - Any USAMC, DLA, General Services Administration, or program manager-managed equipment requiring additional authorization.
 - Standard Army equipment with a valid line item number and material number, and the requested equipment is not in a validated mission essential equipment list (MEEL).
 - Standard Army equipment and the quantity requested is above the MEEL authorized quantity.

- Equipment listed in a validated MEEL, but the specific item requested either is in lieu of the MEEL item or is a newer version not specified in the MEEL.
- For a new capability not reflected in MTOE or MEEL.

Note: An operational needs statement addresses a capability gap or capability required versus a shortage of authorized equipment.

- An equipment sourcing document is a request for filling an equipment shortage that has already been validated and authorized by DA. Submit an equipment sourcing document if the request is for—
 - A request for sourcing an equipment requirement that has already been validated and authorized by DA, within 1 year of deployment.
 - MTOE and TDA shortages.
 - A MEEL (authorized for use by G-3) shortage.
 - A DA pre-validated equipment shortage.
 - A request for sourcing only (authorization and validation not required).

Note: Submit an equipment sourcing document for equipment that is DA validated, pre-approved, and authorized.

5-65. Units submit equipment sourcing documents or operational needs statement equipment requirements via the Equipment Common Operating Picture. The Equipment Common Operating Picture information technology database is a secret internet protocol router network, collaborative web-based database and documentation library for requesting and sourcing materiel and nonmateriel solutions to urgent warfighter needs. The Equipment Common Operating Picture supports situational awareness and common visibility of requests as the chain-of-command coordinates for endorsement, validation, and resourcing. The Equipment Common Operating Picture has a posted library containing DA-validated MEEL and applicable DA and select ASCC, Army forces equipping policy documents covering named operations. See AR 71-9 for information on how and where to access the Equipment Common Operating Picture.

REQUIREMENTS VALIDATION AND FUNDS MANAGEMENT

5-66. Because the Army has a large and complex set of missions and a limited set of resources with which to accomplish these missions the necessity to maximize spending power rests on leaders at all levels. Supply discipline and funds management should be managed simultaneously to ensure that—

- Any available excess materiel is cross-leveled throughout the organization prior to purchasing.
- All materiel requested from the Army supply system or other sources are valid requirements.

REQUIREMENTS VALIDATION

5-67. Readiness determines the Army's ability to fight and win during large-scale combat operations. Managing resources is part of all Army leaders' duties and is essential for maintaining readiness to accomplish assigned missions. Equipment readiness is and will continue to be a critical component of overall unit readiness. Leaders should improve equipment readiness at the company level by managing the Command Supply Discipline Program, maintaining property accountability for equipment, attaining and sustaining level 10 and level 20 standards, and by filling shortages through the redistribution of excess materiel.

5-68. Commanders at all levels should also validate requirements to avoid instances of fraud, waste, and abuse. Fraud is a false misrepresentation of a material fact, whether by words or by conduct, by false or misleading allegations, or by concealment of that which should have been disclosed, which deceives another so that he they acts, or fails to act to his detriment. Waste involves the taxpayers not receiving reasonable value for money in connection with any government-funded activities due to an inappropriate act or omission by players with control over or access to government resources. Waste relates primarily to mismanagement, inappropriate actions and inadequate oversight. Abuse involves behavior that is deficient or improper when

compared with behavior that a prudent person would consider reasonable and necessary business practice given the facts and circumstances. Abuse also includes misuse of authority or position for personal financial interests or those of an immediate or close family member or business associate.

FUNDS MANAGEMENT

- 5-69. Supply requests for class I, II, III (packaged), IV, VI, VII, VIII, IX, and X managed within the enterprise resource planning systems automatically generate financial transactions. Some materiel turn-ins automatically generate financial transactions. These transactions enable informed decision making because all data is shared automatically throughout the information system. Materiel managers have drill-down visibility giving them the capability to see the source of obligations, expenses and disbursements because the finance modules are integrated with the logistics modules. Access to real-time and near real-time tactical sustainment and financial management information provides timely, actionable information that enables commanders to analyze the financial impact on readiness. Subsistence and bulk fuel are not managed in an automated supply system, but these require the same level of validation and funds management as the supply classes managed via automation. All supply classes have financial requirements that are managed in the automated financial asset and accounting management system, GFEBS, discussed in chapter 2.
- 5-70. Requests typically undergo a series of validations to ensure that they meet locally dictated and higher headquarters conditions. Prior to requesting materiel, commanders verify need, authorization, and available funding. Figure 5-6 on page 5-16 depicts a generic request; the purpose of the graphic is to show leader, materiel manager, execution manager, and budget analyst interactions during the requirements determination and requirement validation process. The graphic portrays the process as notional because every command is different.
- 5-71. Available fund balances and budget availability fluctuate throughout the day. Automated logistics information systems use a budget availability control mechanism to prevent unit spending from exceeding a dollar threshold. If automated, the information technology routinely generates reviewable information in real-time, near real-time, or as static reports for the commander and budget analyst. Most thresholds have standard settings configured according to the required level of oversight or commander discretion. Budget analysts verify the fund cite and confirm funds availability before obligating funds in the accounting system of record.
- 5-72. Leaders and materiel managers engage in requirements validation for unit OMA dollars and with SSAs to validate requirements for AWCF and DWCF dollars. Class VIII SSAs are typically funded by the DWCF. Class VIII materiel managers and leaders engage in the same requirements determination process except they validate unit OMA dollars with SSAs to validate requirements for DWCF dollars. Bulk fuel and subsistence managers manually forecast and validate requirements. Validating requirements ensures that no request is submitted through the supply system until it is determined available assets cannot meet the requirement and that the unit has the available funds to pay for the requirement.
- 5-73. An authorized individual with delegated authority reviews requests to verify that it includes the appropriate information for a particular unit. For example, budget analysts review the information for funds availability for all items above a certain dollar threshold.
- 5-74. Automated funds status reports display commitments, obligations, and disbursements. Automated procedures typically contain a funds availability control feature to help prevent units from overspending. Before requesting materiel, materiel managers should check available funds to ensure that the request amount does not exceed the budget. For example, GCSS-Army offers the following features—
 - At 75% of budget consumption, the system displays a warning message to alert the unit leadership, budget analysts, and materiel managers.
 - At 100% of budget consumption, the system initiates a hard stop to prevent over-obligating available funds. Over obligating funds can lead to anti-deficiency violations.

Note: Automation is a tool for maintaining and gathering information; it is not the decision maker. It takes human interaction coupled with automated procedures to manage materiel and the budget.

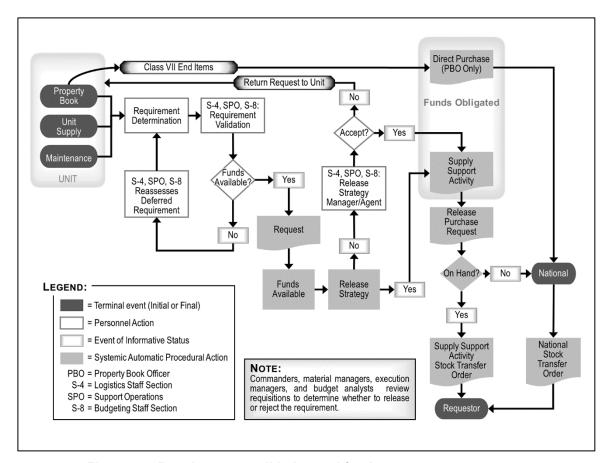


Figure 5-6. Requirements validation and funds management process

STORAGE

- 5-75. Storage refers to any location used by a unit supply room or a supply point (all supply classes). A storage operation involves the act of storing, the act of being stored, or the keeping or placing of property in a warehouse, shed, or open area. Storage is a continuation of receiving and is preliminary to the shipping or issuing operations. Storage involves stock control, receiving, inspecting, stocking, asset reporting, safeguarding, inventorying, and maintaining the stock.
- 5-76. The term warehouse does not always refer to a stationary building in a developed area. Since all classes of supply require storage, a warehouse refers to any materiel storage area for any commodity. Each commodity constitutes a separate problem to be worked for local storage conditions. For example, bulk fuel requires a large space to accommodate a tank farm, concrete, steel, or collapsible fabric containers, subsistence may require a refrigerated building or space to park mobile refrigeration trailers, and other commodities may be stored outside. After water has been treated to achieve potable water standards, it is stored to build required quantities in support of tactical operations. Storage areas should meet the following criteria:
 - Secure against theft and protected from the deteriorating effects of weather, heat, light, moisture, and the destructive effects of microbes, vermin, and rodents.
 - Easy to access for issue or shipment reducing handling to a minimum.
 - Easily maintained, inspected, and inventoried.
- 5-77. The amount of storage space available is often limited; therefore, make the best use of all space, reducing wasted space to the minimum consistent with efficient and economical operation. Planning considerations for storage include—

- Space availability.
- Dispersion of stocks.
- Surveillance and maintenance capability.
- Type and quantity of items to be stored and plan a storage layout.
- Requirements for storage of perishable, pilferable, hazardous, or inflammable materials.
- Provide for stock rotation in the storage plan.
- Arrange for marking and arrangement of supplies and aisles.
- Compliance with security standards per supply class.
- Requirements for cold chain or controlled substances, (vaccines, laboratory reagents, blood, narcotics).

RECEIVE

5-78. Receipt and shipping documents normally accompany inbound materiel regardless of commodity. Supply personnel accept custody and accountability for the materiel after reviewing the receipt documentation along with a physical inventory. Shipping documents list the quantity of supplies shipped, the item order, and ship dates. Unit supply personnel, property book personnel, and supply point personnel receiving materiel from any government storage location or commercial source take the following steps prior to acknowledging receipt of the materiel:

- Verify the DODAAC and UIC on the receipt document.
- Verify the item description on the receipt document and the data plate (if applicable) matches the paperwork.
- Verify the registration and serial numbers.
- Bring discrepancies to the attention of the storage supervisor (according to local SOP) prior to signing the receipt documents.
- Count all items to ensure the quantity received reflects the receipt documents.
- Verify unit of issue.
- Visually check the condition of the item to verify serviceability.
- Check end items for completeness using the current technical manual or supply catalog to identify components.
- Make a list of all shortages or overages and itemize damages.
- Report discrepancies if seals are broken or if the inspection reveals shortages or damage.
- When receiving material through commercial carriers inspect all cartons for damage and note on carrier's bill of lading.
- If there are no discrepancies, the supply personnel signs and dates the receipt documentation.

Note: If the supplies are damaged or do not meet specifications, the unit has the option to reject the delivery and the supplies returned to the source.

STOCK CONTROL

5-79. Materiel management includes, but is not limited to, stocking the items needed for supported unit readiness, monitoring performance metrics, and conducting inventories. Stock control is the process of maintaining inventory data on the quantity, location, and condition of supplies. The method of storage depends on the materiel because each class of supply must be stored in accordance with that commodity's specific requirements. Materiel managers need correct identification and location of stored materiel to ensure the correct item of supply is issued to meet requirements.

Inventory

5-80. Frequent, accurate, and properly documented inventories ensure effective accountability. See ATP 4-42.2, Supply Support Activity Operations, ATP 4-41, Army Field Feeding and Class I Operations, ATP

- 4-43, Petroleum Operations, ATP 4-44, Water Support Operations, ATP 4-35, Munitions Operations and Distribution Techniques, and AR 40-61, Medical Logistics Policies, for detailed information on inventory procedures for each commodity's supply point.
- 5-81. It is critical to perform physical inventories on a regular basis to maintain an accurate inventory record. A physical inventory is an actual count of the materiel regardless of supply class. The results of the physical inventory are reconciled to verify that storage records are correct. It is important that the quantity and type of items shown on hand on the stock record match the quantity and type of stored materiel. Inventories play an important part in keeping storage and financial records straight. Different types of inventories help materiel managers discover and correct inventory discrepancies:
 - A scheduled wall-to-wall inventory involves all items in the unit supply room, property book, and the supply point.
 - Cyclic inventories are scheduled and count only a portion of the inventory. Cyclic inventories can be executed weekly, monthly, or quarterly.
 - Special inventories are not scheduled. A special inventory may be done any time and for any reason that requires a physical count of items in storage.
- 5-82. At unit level, inventories lead to administrative corrections to the property book, identification and resolution of shortages, realignment of excess property, and protection of hand receipt holders from potential monetary losses. Hand receipt holders should know well in advance that an inventory is scheduled. Publishing a schedule with the time, place, and hand receipt will allow for preparation. Prior to the inventory, leaders should brief hand receipt holders on the importance of accurate accountability, the consequences for supply discipline violations, and the layout of their equipment for inventory.
- 5-83. During the inventory, use the correct, updated technical manuals to identify components. Although the internet provides a great resource for downloading technical manuals, supply catalogs, and component lists, units should download these references from the Logistics Support Activity (typically referred to as LOGSA) and no other source.
- 5-84. Unit supply personnel should ensure that all hand receipts are updated, signed, and shortages are on order with appropriate adjustment documents. Check the document register to make sure that component shortages are on request. Ensure all component (expendable, durable and nonexpendable) and end item shortages discovered during the inventory are processed in accordance with AR 735-5. Relief-from-responsibility forms should be processed for any shortages without supporting documentation and any unresolved discrepancies found on the primary hand receipt holder.

Soldier Personal Effects

- 5-85. A Soldier personal effects inventory is not stock control; however, it is a critical company level inventory. Due to their nature, personal effects are sensitive items demanding the utmost respect. Personal effects includes all privately owned moveable, personal property found on human remains, in the camp or quarters, or those places under the command and control of the unit commander in a theater of operations. Government property is not personal effects, but are included in this inventory. The unit personal effects inventory officer is responsible for recovering all personal effects and individual combat clothing. Company commanders have specific responsibilities regarding the safekeeping and disposition of deceased or missing in action Soldiers' personal effects.
- 5-86. Company commanders should take action as soon as possible. The longer a commander waits to initiate inventories, the greater the opportunity for discrepancies, theft, loss, or damage to property. An immediate inventory protects the command and the Soldier's property. Commanders are required to appoint a summary courts-martial officer, summary courts officer, or inventory officers to inventory all personal items in the possession of an individual at the time of death. The summary courts-martial officer, summary courts officer, or inventory officers must accompany the sealed personal effects containers to the theater mortuary evacuation point.
- 5-87. Unit commanders are responsible for the collection, inventory, safeguarding, and shipment of wounded personnel's effects to the rear detachment. The unit supply sergeant handles these personal effects through unit supply channels.

- 5-88. When conducting a personal effects inventory, separate the Soldier's property from other Soldiers' property (roommates, shared lockers in a motor pool). The Soldier's clothing records, unit level inventory records, and military clothing bag quantities will establish the difference in government-owned military equipment and personally owned military equipment. Soldiers often buy additional military clothing and equipment, and these items may be easily confused with government-issued equipment.
- 5-89. The unit should keep records of everything. This step protects the Soldier in the event of loss or damage and ensures appropriate compensation can be made; it also protects the government and command from possible fraud. Retain all receipts associated with storage, transportation, disposition, or shipment of the Soldier's property. Digital cameras can make the inventory process much more accurate as well, with photos to accompany each item as it is inventoried.
- 5-90. The personal effects inventory officer should record inventory results accurately. Be as descriptive as possible when recording items on the inventory documents, especially the personal effects of deceased and missing in action Soldiers. See AR 638-2, *Care and Disposition of Remains and Disposition of Personal Effects*, and ATP 4-46, *Mortuary Affairs Operations*, for detailed information on how to handle personal effects.

MANAGE EXCESS PROPERTY

- 5-91. Excess property accumulates in units and in supply points. Excess property comes in many forms: excess major end items, repair parts, and all sorts of random items stockpiled inside containers within a unit. Excess material results from force modernization upgrades, pure fleet upgrades, ordering too many repair parts, obsolete repair parts, equipment found on installation and many other influences. Whatever the reason, excess not designated for redistribution within the command must be returned to the supply system. There are three types of turn-ins—
 - Serviceable turn-ins. This materiel is in working condition and not required by the company, battalion, division, or corps. Disposition instructions are required for all serviceable materiel.
 - Unserviceable turn-ins. The materiel has been inspected by the supporting maintenance activity and is not in working condition.
 - Found on Installation turn-ins. This term defines nonexpendable materiel is identified that is not on the unit's hand receipt or is not a component to another end item.

Unit Excess

- 5-92. Authorization documents prescribe the unit's quantity and type of property based on the unit's organizational structure. Authorizations align organizational structure with mission, personnel and equipment. Inevitably, units acquire excess items and the commander is responsible for disposal of the excess property.
- 5-93. Unit commanders review authorization documents and inspect their areas of responsibility, and coordinate for the technical inspections required for excess materiel turn-in. Units discovering serviceable excess property in their command during MTOE changes, inventories, incorrect shipments, or any source request disposition instruction from higher headquarters. Higher headquarters may authorize turn-ins or direct lateral transfers of property within the command. Items should be complete with all components and basic issue items prior to turn-in or lateral transfer. If not complete, the unit should attach a shortage annex to the turn-in document signed by either the commander or PBO. Higher headquarters provide disposition instructions that fill existing shortages in other units to use every available asset prior to purchasing from the supply system.
- 5-94. When an item is excess, but needed to accomplish the wartime mission, submit The Army Authorization Documents System change to the appropriate authorization document. The Army Authorization Documents System contains the following documents—
 - Modified Table of Organization and Equipment.
 - Table of Distribution and Allowances.
 - Augmentation Table of Distribution and Allowances.
 - Full Time Support Table of Distribution and Allowances.

- Mobilization Table of Distribution and Allowances.
- 5-95. Transfers of non-expendable property from one organization to another within the same command are lateral transfers. Lateral transfers are for the cross leveling of materiel from units with excess items to units with shortages in the same or similar LINs. The overall goal of lateral transfers is to balance distribution of property throughout the command. Commanders may find it helpful to stress to their subordinates that timely completion of lateral transfers helps to ensure responsible stewardship of Army property.
- 5-96. The PBO is responsible for cross leveling assets for its supported units to ensure that one unit is not short while another is excess. Where materiel is identified as excess, the PBO researches for possible redistribution and directs lateral transfer between supported units. Some transfers are command directed; however, the PBO is the office responsible for implementing any directed transfer of property. Supported units cannot transfer property between accounts without PBO approval.
- 5-97. If there is no valid shortage, the PBO issues a turn-in directive for excess property. Typically, PBO SOPs require turn in within a prescribed number of days. Units should maintain copies of turn-in documents to make the correct update to the property book.

Supply Point Excess

5-98. Stock control personnel manage inventory levels to avoid creation of excess. Stock control personnel perform, but are not limited to the following tasks—

- Validate and provide status on dues-in, follow-ups, modifications and cancellation requests for each supported unit.
- Perform modification and follow-up of supported unit requests, data entry, unit of issue conversion, input and output control, inventory adjustments, litigation, catalog build and research, records and files maintenance.
- Interface with the national level to authenticate dues-in and to provide call-in services for expedited requirements designated by the accountable officer.
- Track shipments, submit tracers and supply discrepancy reports on overdue and lost items.
- Conduct, document, and submit causative research of inventory discrepancies (inventory adjustment reports and supply discrepancy reports) to the accountable officer for accountability resolution.

MAINTENANCE

- 5-99. Maintenance involves all actions necessary for retaining an item in or restoring it to a specified condition to ensure equipment readiness and to support the supply system. Typically, Army personnel think of repairing equipment, but maintenance also refers to the safeguarding and security of property whether it is in use or in storage. Supply personnel (all supply classes) routinely conduct inventories and inspections to verify accountability and adequacy of storage facilities for maintaining materiel.
- 5-100. Depending on the type of supplies and the facilities, specific safety and physical security measures must be taken to ensure that accountability is maintained. All supplies must be stored where the items will be protected from theft, fire, weather damage, rodents, and insects. Supplies such as end items, repair parts, ammunition, petroleum products, subsistence, and blood require special handling or storage conditions. Some products are hazardous if stored with other stock or if storage personnel handle them improperly. A multiclass SSA may stock items considered sensitive due to security classification, high desirability and are easily pilfered.

Safety and Security

5-101. Good housekeeping ensures the safety, health and welfare of Soldiers in any organization. Cleanliness is the most effective measure to prevent the establishment of a rodent population. All disposable materials such as spilled food, broken equipment, boxes, trash and garbage should be immediately removed from storage and office areas.

- 5-102. Leaders should address the following on a recurring basis for safety and fire prevention. This list provides a guideline for making the supply point and supply room a better and safer place to work. The appropriate safety office can provide further assistance.
 - Position a fire extinguisher with up-to-date tag, operating instructions, fire orders, appropriate telephone numbers, post primary and alternate operators, and evacuation plans at each fire point.
 - Appoint fire marshals for each separate work site.
 - Keep applicable regulations and publications on hand or on order.
 - Train personnel on what to do in case they are involved in an accident and where to report the accident. This is either a vehicle accident or personnel accident.
 - Ensure all personnel have available and wear personnel protective equipment when working around hazardous equipment (battery acid, forklifts, generators).
 - Ensure unsafe building deficiencies are on valid work order request to the facilities engineers. Attach a 3 x 5 card on or near the deficiencies with date, work order number annotated, and the name of the point of contact for the work order.
 - Attach appropriate safety and warning signs to hazardous materials.
 - Train, test and license drivers.
 - Mark hazardous noise areas as hazardous.
 - Cover all pits and post warning signs.
 - Load, test, and stencil lifting devices.
 - Segregate and secure compressed gas cylinders.
 - Designate and mark authorized smoking areas.
 - Ensure that fuels are not used as cleaning solvent.
 - Post memo with who is authorized to dispense fuel at each fuel dispensing point.
 - Discontinue use of all faulty wiring and electrical outlets and place on work order.
 - Keep petroleum product and paint storage areas s clean and free of ground pollution.
 - Ensure each forklift has fire extinguisher at all times.
 - Post safety posters in the work sites.
 - Post "No Smoking" signs in unauthorized smoking areas.
 - Ensure safety shoes are being worn by all Soldiers who need them.
 - Ensure fire extinguishers are checked and initialed monthly.
- 5-103. One of the basic safeguards in protecting personnel and government equipment is the lock. Secure containers, rooms, buildings containing vulnerable or sensitive items, and vehicles when not in actual use. The effectiveness of a good physical security plan is directly related to the effort that goes into controlling the keys that allow access into the container or rooms.
- 5-104. All Soldiers should keep their areas secure and to restrict access to unauthorized personnel. Post an access roster indicating those personnel granted access to the restricted areas of the supply point. Normally, the accountable officer leads distinguished visitors and visiting dignitaries through restricted areas. Leaders should inspect all work areas at the close of business to ensure that all doors, windows, safes and file cabinets are secured.

Storage Quality Control, Quality Assurance, And Quality Surveillance

- 5-105. Storage areas should be neat and clean. Ensure that maximum use is made of available storage facilities with the fullest utilization of vertical and horizontal space allows for ready access and affords necessary protection of stored materiel. Issue the oldest stock first and ensure that shelf life items are issued according to the earliest date of expiration. Conduct all required inventories and update documentation.
- 5-106. Supply personnel physically control and protect materiel according to requirements for each commodity. Each commodity has different needs. See ATP 4-42.2, Supply Support Activity Operations, ATP 4-41, Army Field Feeding and Class I Operations, ATP 4-43, Petroleum Operations, ATP 4-44, Water Support Operations and ATP 4-35, Munitions Operations and Distribution Techniques, ATP 4-02.1, Army

Medical Logistics, AR 40-61, *Medical Logistics Policies* for detailed information on storage procedures for each commodity. Storage considerations include—

- Store materiel in specific places to ensure that the items can be located quickly and easily for pick and return to storage.
- Secured storage locations for tools and pilferable items.
- Weapons, small quantities of ammunitions and in rare instances other sensitive items approved by the unit commander. See AR 190-11, *Physical Security of Arms, Ammunition, and Explosives* for detailed information for unit arms rooms.
- Vehicle parking areas, separate buildings, and rooms that are issued to hand receipt holders so that
 they have the means to secure property issued to them from the primary hand receipt holder or
 PBO.
- 5-107. Materiel managers should conduct scheduled and unscheduled inspections on storage facilities to monitor and ensure the quality of storage. Materiel managers perform—
 - Specialized inspections of items subject to environmental deterioration.
 - Location surveys and verifications.
 - Physical and record inventories.
 - Causative research.

Arms, Ammunition, And Explosives Control

- 5-108. Commanders are responsible for the security and control of all unit weapons. AR 190-11, *Physical Security of Arms, Ammunition, and Explosives* and AR 190-51, *Security of Unclassified Army Property (Sensitive and Nonsensitive)*, addresses policy for securing arms, ammunition, and explosives. The unit armorer prepares and maintains the documents for weapons control in accordance with AR 190-11 and AR 710-2 and maintains a master authorization list to prevent unauthorized issue or use of weapons.
- 5-109. The unit armorer inventories weapons upon receipt and records serial numbers on the unit property records. Units may store weapons in a consolidated arms room. The commander of the unit in charge of the arms room is in charge of its physical security. This commander controls the locking of the outer doors and the keys for the doors, an SOP that includes key control, and establishes access authorization, and issue times and procedures. Weapons in a consolidated arms room are separated by unit; for example: A Company's weapons cannot be stored in the same racks as B Company's weapons.
- 5-110. Arms, ammunition and explosives are sensitive items that require monthly inventory by serial number. After the inventory, the commander signs a statement showing the inventory results. If the inventory shows a loss, the commander appoints an investigating officer. That person audits the supply actions that occurred since the previous inventory. If accounting error is noted, the records can be corrected. If not, the loss is verified and law enforcement is notified. Law enforcement investigates to determine criminal intent before any administrative or punitive actions can be taken.

Bulk Fuel

- 5-111. Fuel handlers and petroleum laboratory specialists perform and supervise quality surveillance throughout the Army petroleum supply chain. Quality surveillance is the responsibility of every element in the supply chain that receives, stores, and issues bulk fuel.
- 5-112. The Army petroleum units receive, store, transport, and distribute fuel to supported units. Fuel handlers and laboratories routinely test fuel at class III supply points for deterioration or contamination during storage. A series of testing procedures ensures that bulk fuel is of the highest quality, meet the required performance standards, and can be used for intended purpose. Providing fuel within required specifications require checks at the point of receipt, during storage, and prior to issuing to the supported units. Routine surveillance of petroleum storage and distribution systems is essential to detect leaks, sabotage, damage, and pilferage. If bulk fuel is found unsuitable, petroleum laboratory specialists and/or the United States Army Petroleum Center make recommendations for product disposition.
- 5-113. The Quality Surveillance Program guidelines (AR 710-2, Appendix C) are used to monitor the condition of fuel from point of receipt until it is issued to the supported unit. In addition to ensuring that all

petroleum issued to supported units is suitable for its intended use, quality surveillance provides day-to-day information on how well equipment and products are maintained. Military Standard 3004, *Quality Assurance/Surveillance for Fuels, Lubricants and Related Products* dictates the testing frequency and the testing methods for bulk products in transit and in storage

Hazardous Materials

- 5-114. Storage of hazardous materials presents an ongoing safety hazard for supply personnel. Hazardous material is any substance or material that could adversely affect the safety of the public, handlers, or carriers. Improper handling of hazardous materials presents a threat to Soldiers, the mission, and the environment. Leaders at every echelon are responsible for protecting the environment by properly disposing of hazardous waste.
- 5-115. Chemical manufacturers, distributors and importers are required to provide safety data sheets describing the dangers of hazardous chemicals. Leaders should maintain and verify that safety data sheets are available for each fuel, chemical, or hazardous material stored or transported. Unit supply room personnel need easy access to safety data sheets for all chemicals used during day-to-day operations. Each safety data sheet lists—
 - The compound properties.
 - Stability.
 - Health hazards.
 - Safe handling precautions.
 - Control measures.
 - Recommended exposure limits.
 - Signs and symptoms associated with exposure to that chemical.
- 5-116. Units should secure hazardous materials storage areas when not in use and store hazardous materials in accordance with the safety data sheets. Many hazardous materials are incompatible with each other, so common methods of storage, such as by ordering alphabetically, could result in incompatible items stored next to each other.
- 5-117. Proper storage reduces the risks associated with hazardous materials. Units should store chemicals by hazard class and post storage areas to show the exact location of the chemical groups. Labeling of containers is crucial for personnel safety. Materiel managers should label each container with the appropriate warnings for its contents to include the date of receipt and projected date of disposal.
- 5-118. Materiel managers should maintain an inventory spreadsheet of the chemicals stored in the unit supply room. The inventory spreadsheet should indicate the date chemicals are received, date of manufacture, batch or lot number, shelf life expiration date, quantity authorized, and quantity on-hand. Designate a storage location for each chemical, and return it to that location after use. Always use chemicals with the oldest shelf life first.
- 5-119. Shelving should be level, stable, and firmly fastened to the floor. It should not exceed shelving weight limits. Do not store large bottles and containers on shelves higher than two feet from the floor. Never allow containers to extend over the shelf edges. Use spill trays to reduce commingling in the event of spills or leaks.
- 5-120. Upon receipt of hazardous materials supplies, supply personnel should inventory and inspect each container for rust, corrosion, or leakage. Upon receipt of damaged or improperly labelled containers, take appropriate safety measures for the hazardous material type. In some instances, such as a direct vendor delivery, supply personnel should refuse to accept the shipment.

Medical Materiel

5-121. Medical materiel (class VIIIA and class VIIIB) includes items that are considered potency and dated, refrigerated or frozen, controlled substances, precious metals, hazardous, and otherwise regulated. The storage and maintenance of class VIII is subject to DOD and Army policy for quality control as well as Food and Drug Administration and Drug Enforcement Administration regulations and the Geneva Convention.

- 5-122. Class VIII storage must be physically separate from other supply classes. Manufacturer and lot number information must be documented upon receipt to ensure oldest stock is issued first, items close to expiration are suspended, and surveillance actions driven by medical materiel quality control messages can be accomplished. Procedures must be established to ensure temperature-sensitive items remain within prescribed storage conditions. Loss of refrigeration risks significant financial loss as well as loss of vaccines, blood, reagents, and items critical to health protection and care.
- 5-123. Suspended materiel must be physically segregated in an area clearly marked for unserviceable items. Items that have their shelf life extended following testing by the Food and Drug Administration must be quickly relabeled and returned to serviceable stock. Commanders and individuals assigned custody of controlled medical substances such as narcotics and precious metals are responsible for implementing measures to safeguard them in accordance with Army physical security regulations, including the conduct of inventories and reconciliation of balance transactions with suppliers and customers. See AR 40-61, *Medical Logistics Policies*; AR 190-13, *The Army Physical Security Program*, and AR 190-51, *Security of Unclassified Army Resources (Sensitive and Nonsensitive)* for further discussion on medical materiel quality control and security.

Subsistence

- 5-124. The theater or JTF veterinarian manages the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement. Veterinarian personnel inspect bottled water, food production, food storage, and food distribution facilities for potential inclusion in the local and worldwide directories. Veterinary services personnel ensure that facilities meet required audit and product-sampling standards prior to approval for addition to the directory or to procure class I from them.
- 5-125. Perishable and semi-perishable subsistence require different storage standards depending on the type of food item. Although meals, ready to eat and long-range patrol food packets last longer than perishable class I items, they can spoil if improperly stored. In addition, they spoil if stored for excessive periods. Careful, correct storage prevents damage to the items. It also makes it easier to issue the item to the Soldier. Lots should separate shipments. These lots should be marked and stored where the date packed labels are easily seen.
- 5-126. For operational rations, the type of rations used and manufacturing dates determines the class I inspection frequency and coordination for veterinary service personnel to be onsite. Operational rations inspections may be need at the aerial or seaports of embarkation and debarkation.
- 5-127. Materiel managers should rotate food items so that the oldest lot is issued first, unless new lots show signs of spoiling. Temperature changes cause food to spoil quickly, so cases should not be stacked near the ceiling or near heating pipes where the temperature is high. Using pallets and dunnage to raise subsistence off the floor and cross stacking cases will permit free circulation of air and prevent hot spots from forming in the center of the stacks. See ATP 4-41, *Army Field Feeding and Class I Operations*, for details.

Containers

5-128. Containers are intended for deploying equipment only and are not intended for long-term storage during deployment. Positive theater container management requires the designation of container managers at the strategic, operational, and tactical level. Container managers account for containers and ensure they are managed in support of the theater requirements and policies.

ISSUE MATERIEL

5-129. This section discusses establishing a supply point because it influences the effectiveness of the issue process. Every supply point, all supply classes, must adapt to changing locations. It is important to note that every deployment is different and every site is different. When deployed, the supply point will issue supplies to the supported unit from either a developed or an undeveloped location. A developed location will have an infrastructure (roads, buildings) and undeveloped location will lack that infrastructure. Every tactical supply point, regardless of supply class, will use the same basic principles when developing the field layout plan.

5-130. Spend time and effort planning day-to-day operations while developing the storage layout plan. The layout of a supply point can adversely affect the ability to process receipts and issues, but a well-planned layout can reduce handling of items, thereby improving processing times. Sketch the supply point area to show the use of the space (receiving, shipping, hazardous materials storage, yard open storage, office space), and the materiel stored (bulk fuel, bulk water, subsistence, medical supply, repair parts, construction materials, end items). A sketch is a rough drawing that allows the testing of several ideas to zero in on the most likely layouts for the supply point. Include latrines and offices in the sketch. See figure 5-7 for an example of a supply point field site sketch. In this instance the supply is placed in an area with some trees and no roads other than the main road.

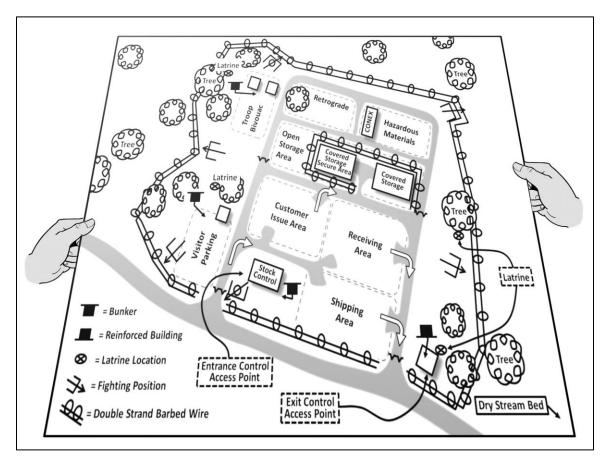


Figure 5-7. Supply point field site

- 5-131. Supply point storage layouts depend upon the supply class and where the supply point is placed on battlefield. However, the following planning considerations apply to every supply point:
 - Establishing a secure perimeter.
 - Designating, marking and enforcing the traffic flow route. Normally, traffic flow will be in one direction to control access to the supply point storage locations.
 - Establishing controls at the entrance and exits to control the flow of traffic. The entrance and exit point may be the same depending on the terrain or other circumstances associated with the supply point site.
 - Placing the parking area near the entrance to control access to the supply point storage locations.
- 5-132. While each supply class has its own set of requirements, the basic principles for issue are similar. Issue sections must carry out the issue activities efficiently if supported units are to receive supplies on time, in the quantity requested, and in a usable condition. If supply point distribution is used, the number of times a unit picks up supplies during a week depends on the distance the unit has to travel and how often it can arrange for transportation. Some nearby units may pick up supplies two or three times a day. If unit

- distribution is used, coordination between the supply point and the supported unit is crucial to ensure that the materiel arrives at the logistics release point on time and with the correct supplies in the correct amount.
- 5-133. Unlike other supply classes, planners must establish the bulk water supply point at the raw material source. Raw water, at its ground or surface source, may be fresh, brackish, or salt water. Prior to issuing to supported units, water support companies purify raw water to make it safe for human consumption. Planning considerations for a water supply point include the raw water source, a water intake point, a treatment area, a storage area, and an issue point.
- 5-134. Bulk fuel supply points range from strategic and operational level storage to refueling a tactical unit engaged in offensive operations. Bulk fuel supply points may consist of ocean tanker loading and unloading facilities, storage terminals, above ground or underground steel tanks, pump stations, pipelines, hoselines, tank vehicles, rail tank cars, fabric tanks, and tactical systems. Each tactical unit refueling operation is unique depending on the refueling system used, number of vehicles, the distance the unit is traveling, and how many times the unit needs refueling.
- 5-135. See ATP 4-42.2, Supply Support Activity Operations, ATP 4-41, Army Field Feeding and Class I Operations, ATP 4-43, Petroleum Operations, ATP 4-44, Water Support Operations and ATP 4-35, Munitions Operations and Distribution Techniques, ATP 4-02.1, Army Medical Logistics, AR 40-61, Medical Logistics Policies for detailed information on issue procedures for each commodity.

REROGRADE OF MATERIEL

- 5-136. Retrograde of materiel is as important as its forward distribution. All classes of supply require retrograde procedures because all units accumulate serviceable, unserviceable, and uneconomically repairable items requiring cross levelling, recycle, return to the supply system, or disposal. Depending on an item's condition, materiel managers for a commodity will direct recycle to original use, recycle for alternate use, redistribution, destruction, or demilitarization based on policy for that commodity.
- 5-137. See ATP 4-42.2, Supply Support Activity Operations, ATP 4-41, Army Field Feeding and Class I Operations, ATP 4-43, Petroleum Operations, ATP 4-44, Water Support Operations, and ATP 4-35, Munitions Operations and Distribution Techniques, ATP 4-02.1, Army Medical Logistics, AR 40-61, Medical Logistics Policies for detailed information on retrograde procedures and requirements.

REPARABLES MANAGEMENT

- 5-138. Reparables management demands leader, supply, maintenance, and finance personnel involvement at all levels. A reparable is an item of supply subject to economical repair and for which the repair is considered in satisfying computed requirements at any inventory level (AR 710-1). Most reparables can be repaired many times before becoming obsolete or uneconomically repairable. USAMC manages the Army reparables process as part of its supply pipeline management mission. Strategic level materiel managers count on sustainment maintenance operations to overhaul reparables as one means to replenish the supply system. Sustainment maintenance is performed by USAMC elements normally comprised of civilians and contractors who restores equipment to a national standard, after which the repair parts (component, accessory, assembly, subassembly, plug-in unit) are placed back into the Army's overall supply system.
- 5-139. Units at all echelons should closely manage reparables because the reparables management process directly affects unit budgets. Army units, regardless of mission, use their OMA funds to purchase reparables from the AWCF. See chapter 1 for discussion on unit budgets, OMA, and AWCF discussion. See this chapter for discussion on funds management. At the unit level, the reparables management process begins when that unit replaces a reparable on its Army equipment. Two items are involved: the new serviceable repair part installed on the equipment and the unserviceable repair part removed from the equipment. The Army uses the Standard Price and Credit process and under this process, the unit is charged the Standard Price (full price) for the new repair part. When the unit returns the unserviceable reparable to the supply system, credit is granted to the unit's OMA budget from the AWCF. With the Army's one-for-one credit policy for reparable items, units should ensure creditable returns are processed as expeditiously as possible to receive maximum credits.

- 5-140. Reparable item management is a critical supply and funds process that requires direct attention at all levels. The following is a list of uses for the GCSS-Army's credit status report. Please note that there are no logistics information systems other than GCSS-Army used for managing reparables below the USAMC level.
 - The commander, commander's designated representative, maintenance manager, or maintenance supervisor should monitor, verify, and manage reparables, which are due for turn-in, using the SSA's weekly credit status report.
 - The SSA accountable officer should ensure all reparable turn-ins are processed in a timely manner and distribute a weekly credit status report to SSA supported units.
 - Commander's designated representative, S-4, and SPO's can track, validate, monitor, and report expected credits by age and by unit with the credit status report.
 - The sustainment brigade, ASC, TSC, and ESC uses the credit status report to monitor, manage, and report on reparable management turn-in compliance for each force element supported by the command.
 - The Directorate of Resource Management, Deputy of Chief of Staff (G-8), and the commander's designated representative can track the expected reparable management turn-in credit status, perform prior year reutilizations, and create cost driver reports several financial management reports.

Note: Under the Army credit policy, serviceable and unserviceable credit values are computed and corresponding credit values are assigned during an annual price update.

5-141. GCSS-Army has reengineered unserviceable reparables tracking by replacing the overage reparable list with an overage reparables process. An overage reparables report can be executed at any time to gather near real time information. Materiel managers and leaders define the criteria for the red, green, and amber traffic lights that will alert them to reparables status. Materiel managers and leaders can choose to list reparables status by SSA or by the supported units of the SSA.

SUPPLY POINT EXCESS

5-142. SSAs play a fundamental role in the redistribution, retrograde and disposal of materiel. The turn-in section accepts turn-ins of unit excess and unserviceable items from supported units. The SSA follows the disposition instructions from the strategic level materiel manager responsible for a given commodity. As units turn-in materiel, storage clerks input the item data into the enterprise system, which provides distribution instructions.

DISPOSAL

5-143. Large-scale combat operations will require a volume of reinforcements, materiel, and equipment significantly greater than other types of operations. It will be more lethal than other types of operations generating mass casualties and replacement of personnel and equipment on a large scale. Large-scale combat operations will require greater precision in our distribution network than other types of operations

GENERAL INFORMATION

5-144. General DOD disposal guidance is to consume or transfer classes II, III (packaged), IV and VI in theater when feasible. Most class III (packaged) items require special handling due to their environmentally hazardous nature. Class VII and IX materiel require redistribution decisions from life cycle management command item managers. Retrograde to CONUS may be required for some items. See DODM 4160.21, Volume 1, Defense Materiel Disposition: Disposal Guidance and Procedures, DODM 4160.21 Volume 2, Defense Materiel Disposition: Property Disposal and Reclamation, DODM 4160.21 Volume 3, Defense Materiel Disposition: Reutilization, Transfer, and Sale of Property, and DODM 4160.21 Volume 4, Defense Materiel Disposition: Instructions for Hazardous Property and Other Special Processing Materiel for specific information on disposal operations. Certain items require demilitarization actions before disposal. See DODM 4160.28, Volume 1, Defense Demilitarization: Program Administration for more information.

CLASS VII EVACUATION AND REPLACEMENT

- 5-145. The fiscal year 2019 DSB force design update added the class VII section to the DSB SPO to increase property asset visibility within the division and provide support to the division G-4 in executing property asset visibility. As units suffer equipment losses during operations, the class VII section supports the division in evacuating unrepairable equipment from the division AO, maintaining asset visibility, and recommending replacement solutions within the division.
- 5-146. Figure 5-8 depicts class VII evacuation and replacement. Each of the numbered objects represent nodes where actions take place. The circles represent supply and property book actions. The squares represent transportation actions. The dotted lines represent transmission of information. The solid lines represent the physical movement of materiel. For simplicity, the process depicted in figure 5-8 and subsequent narrative focuses on a mechanized infantry company team and one unrepairable class VII item. However, this process applies to all units when field-level maintenance cannot repair destroyed equipment. In this scenario, the BCT PBO has reviewed the BCT's property book and determined that there are no replacements within the brigade.

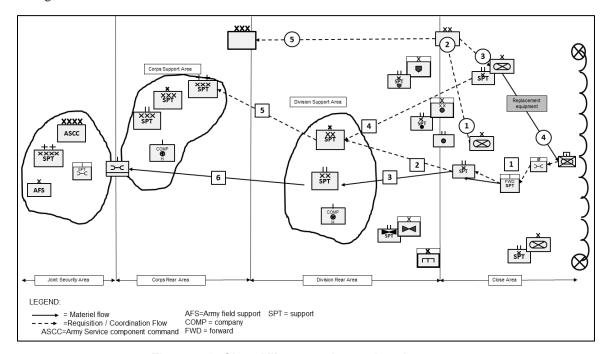
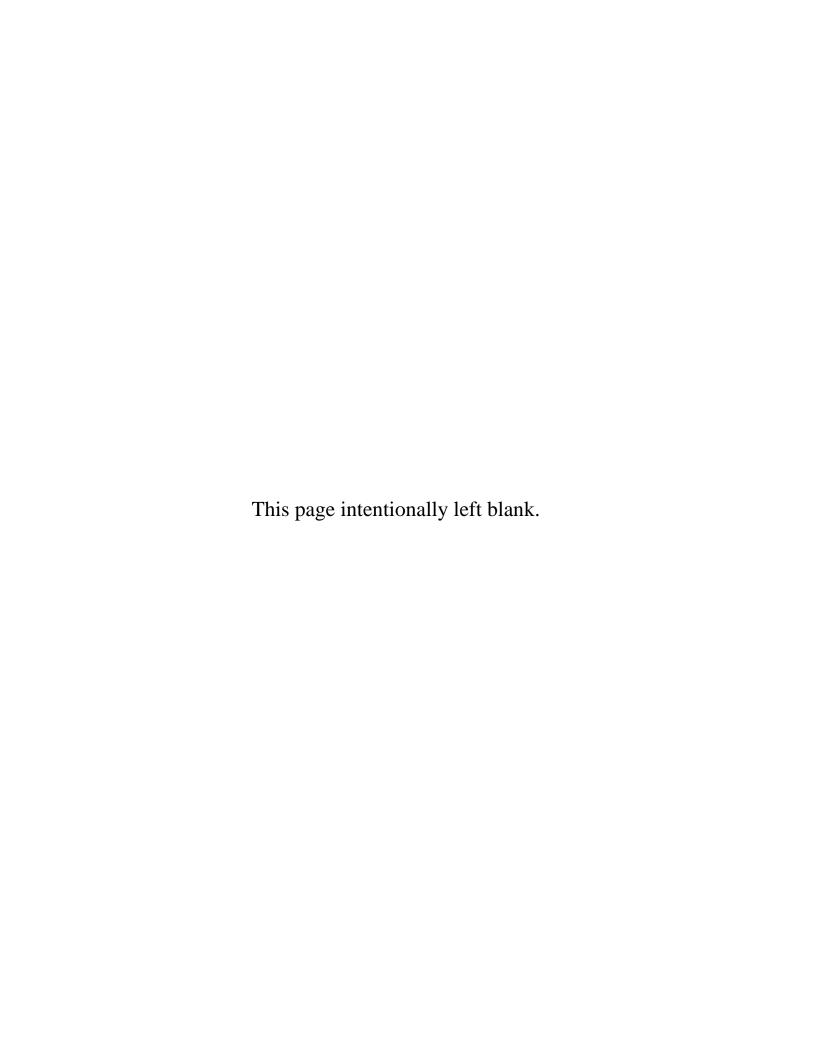


Figure 5-8. Class VII evacuation and replacement

- 5-147. Square 1. A mechanized infantry company team recently involved in an engagement suffered battle damage to one of their M1A2SEP main battle tanks. The supporting field maintenance team conducted a battle damage assessment and determined repairs exceed the maintenance allocation chart tasks at the field maintenance level. The FSC coordinates with BSB SPO transportation section to transport the tank to the brigade support area.
- 5-148. Circle 1. The infantry company supply sergeant completes the turn-in transaction in GCSS-Army, to include maintenance and code-out documentation, and turns in the equipment to the BSB's SSA. At this point, the company commander is relieved of accountability. The BCT PBO forwards the requirement for a replacement to the division G-4.
- 5-149. Square 2. The BCT SPO transportation section coordinates with the DSB SPO transportation operations branch and creates the requirement to backhaul the equipment from the BSA. The DSB SPO transportation operations branch conforms available assets within the DSB and coordinates with the DSB SPO DIB to add the backhaul requirement to the logistics synchronization matrix and the DIB allocates transportation assets to the requirement.

- 5-150. Circle 2. The division G-4, with support from the DSB SPO class VII section, reviews property books across the division to determine if a replacement can be sourced from within the division. The DSB SPO class VII section provides recommendations to the division G-4.
- 5-151. Square 3. The DSB tasks the DSSB to backhaul the tank. The DSSB's composite truck company transports the equipment from the BSA to the DSA to await corps transportation assets and further transport out of the division AO.
- 5-152. Circle 3. If a replacement M1A2SEP is available within the division, the division G-4 initiates a transfer directive and the division G-3 directs the losing and gaining unit to conduct the transfer through orders
- 5-153. Square 4. The losing unit prepares the M1A2SEP for transfer and the BSB SPO coordinates with the DSB SPO transportation operations branch for transportation support. The DSB SPO transportation operations branch receives the transportation support requirement from the losing unit and reviews assets available. The DSB SPO transportation operations branch coordinates with the DSB DIB to add the transportation requirement to the logistics synchronization matrix and the DSB DIB plans and allocates transportation assets. The DSB DIB prioritizes the backhaul of damaged equipment based on priorities of support and priorities of supply established by the division G-4 and synchronized during division movement boards and division logistics synchronization meetings. The DSSB composite truck company is tasked and executes the mission the M1A2SEP from the losing to the gaining company.
- 5-154. Circle 4. Upon receipt of the replacement tank, the gaining unit supply sergeant signs the transfer document and returns it to the losing unit supply sergeant to finalize the supply transaction.
- 5-155. Square 5. The DSB SPO transportation branch coordinates with the corps ESC DMC transportation operations branch to backhaul the damaged M1A2SEP from the DSA to the classification and identification company . The ESC DMC transportation operations branch reviews assets available within the sustainment brigade and coordinates with the ESC DMC DIB to add the backhaul requirement to the ESC's logistics synchronization matrix.
- 5-156. Circle 5. If a replacement M1A2SEP cannot be sourced from within the division, the division G-4 coordinates with the corps G-4 and requests replacement from within the corps. The G-4, supported by the ESC DMC, reviews property books and determines if a replacement can be sourced from another division within the corps.
- 5-157. Square 6. A CSSB CTC is tasked to backhaul the damaged M1A2SEP from the DSA to the classification and identification company to be sorted, classified and inspected in accordance with theater directives and priorities.



PART TWO

Field Services Overview

Field services are essential services that enhance a Soldier's quality of life during operations. They consist of aerial delivery, shower and laundry, mortuary affairs, water purification, and field feeding. The type and level of field services provided depends upon a supported unit's requirements and the existing infrastructure in a theater, theater of operations, or joint operations area. Part Two provides a broad overview of field services, with the exception of shower and laundry. Because of their importance to the delivery of field services, Part Two provides a broad overview on disease prevention through a brief discussion on force protection through preventive medicine and unit field sanitation teams.

Chapter 6 Field Services

This chapter briefly describes aerial delivery (AD), mortuary affairs, field feeding, and water purification and provides the references that address these field services in detail.

PLANNING FOR FIELD SERVICES

- 6-1. Leaders and planners should always consider field services throughout the operations process because, during all four Army strategic roles, field services are critical for combat effectiveness. Quartermaster units protect the force by providing field services and much of the Army's field services units lies in the reserve component. Field services, an element of combat power, enhances unit effectiveness and mission success by providing for Soldier basic needs. Through field services, commanders promote the health, welfare, morale, and endurance of Soldiers with—
 - Carefully packed personnel parachutes.
 - Vital resupply via AD.
 - Food service.
 - Potable water.
 - Warm showers.
 - Clean uniforms.
 - The care and disposition of deceased personnel and their personal effects.
- 6-2. Leaders and planners should integrate and synchronize field services with the commander's objectives to achieve unity of effort in large-scale combat operations. As leaders and planners consider the challenges they face in the execution of the four strategic roles, field services must be included in the operations process to ensure coordinated support. The field service functions are critical to build or rebuild combat power and to restore Soldier morale. Figure 6-1 on page 6-2 illustrates how field services align as elements of combat power.

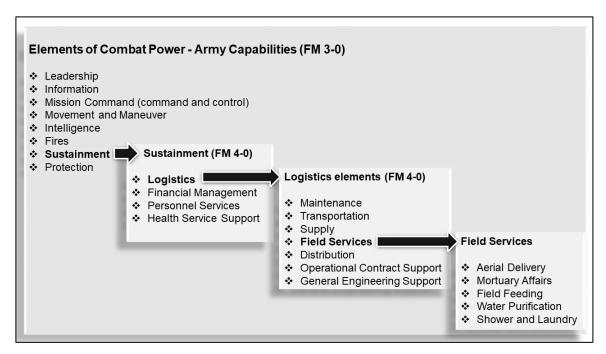


Figure 6-1. Elements of combat power

PLANNING CONSIDERATIONS

- 6-3. Leaders and planners should continuously assess the battlefield for gaps in the provision of field services. Planning considerations vary by field service and by strategic role because each service has different requirements. Establishing field services operations where no prior operations exist presents formidable challenges to sustainment planners. For example, during on-going operations to shape and prevent, sustainment planners negotiate agreements with North Atlantic Treaty Organization nations for provision of field services and for other products and services. The Acquisition and Cross-Servicing Agreement regulates agreements with eligible countries and international organizations. Acquisition and Cross-Service Agreements are applicable worldwide to acquire logistics support, supplies, and services directly from or provide them to a foreign government of organization. Such logistics support "transfers" come into play primarily during wartime, combined exercises, training, deployments, contingency operations, humanitarian or foreign disaster relief operations, certain peace operations under the United Nations Charter, or for unforeseen or exigent circumstances. As a result, Acquisition and Cross-Service Agreements authority is usually exercised by the unified combatant commands. See DODD 2010.9, Acquisition and Cross-Servicing Agreements, provide complete details on responsibilities and procedures for acquiring and transferring logistics support, supplies, and services.
- 6-4. Planners should consider military and political objectives while planning for the field services mission because the consequences of a failed field services mission can have a negative impact on morale, national public support, coalition support, and local national support. For example, prior to offensive and defensive operations, planners should analyze the mission, threat, fatality estimates, duration of the operation, delivery modes, availability of lift assets, and available AD support assets.
- 6-5. Planners should include all five of the field services throughout the operations process summarized in chapter 4. See ADP 5.0, *The Operations Process* and FM 6-0, *Commander and Staff Organization and Operations* for detailed operations process information. Planners should identify field services organizations and capabilities because when, how, and which field services are delivered depends upon the strategic role and a supported unit's position on the battlefield. For example, providing food service to units engaged in offensive operations is high priority, even if only in the form of pushed meals ready-to-eat. Even though they help prevent DNBI, shower and laundry services may have a much lower priority during offensive operations.

Aerial Delivery

- 6-6. Aerial delivery provides operational reach for commanders. The parachute riggers that pack personnel parachutes, cargo parachutes, and rig cargo for airdrop are the element that make aerial delivery a field service. Parachute rigger responsibilities include airborne assault support, parachute packing, aerial delivery equipment repair, and the rigging of supplies and equipment. Aerial delivery is the capability in the distribution system that provides supply to the force when land based lines of communication have been disrupted or the terrain is too hostile. Personnel parachute packer's planning considerations are described in ATP 4-48, Aerial Delivery, AR 56-4, Distribution of Materiel and Distribution Platform Management, AR 59-4, Joint Airdrop Inspection Records, Malfunction/Incident Investigations, And Activity Reporting, and AR 750-32, Airdrop, Parachute Recovery, and Aircraft Personnel Escape Systems.
- 6-7. Planners should analyze which units complement each other when planning whom, when, and where to deploy units. Planners should consider how to deploy rigger units in a timeframe that ensures the theater has AD support. During shape and prevent operations, sustainment planners should consider AD courses of action that range from the optimal time to deploy the rigger units to where to place these units on the battlefield. Since AD cannot be contracted, courses of action should contain planning considerations associated with each strategic role. For example, during large-scale combat offensive operations AD units contain elements that can be deployed separately as far forward as the BSB. During consolidation of gains, AD planning considerations may include deploying reserve component AD support elements early enough to accommodate transitioning of the resupply cycle from deployment accompanying items to replenishment items.

Mortuary Affairs

6-8. Mortuary affairs units assist commanders with the initial care of deceased personnel by evacuating human remains, with personal effects, to mortuary affairs facilities. Figure 6-2 on page 6-4 depicts mortuary affairs operations on a notional battlefield. Planners should consider military and political objectives for the mortuary affairs mission because the consequences of a failed mortuary affairs mission or disrespectful handling of human remains can have a negative impact on troop morale within the losing unit, national public support, coalition support, local national support, and enemy treatment of human remains or prisoners. For example, prior to offensive and defensive operations, planners should analyze the mission, threat, fatality estimates, duration of the operation, human remains evacuation modes, availability of lift assets, and available mortuary affairs assets. See ATP 4.46, Contingency Fatality Operations.

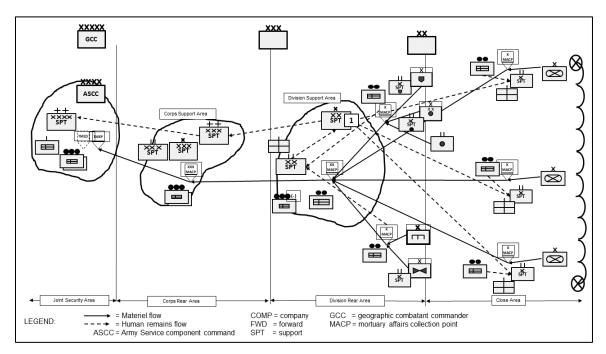


Figure 6-2. Mortuary affairs operations

Water and Field Services

6-9. Commanders fight DNBI by promoting the principles of good personal hygiene and sanitation, proper preparation and storage of foods, and the importance of safe and clean drinking water. Planners at each echelon should consider DNBI prevention while considering courses of action for deploying and placing field services elements on the battlefield. Historical accounts of wars, battles, and military training consistently show that the majority of losses to armies are not the result of combat injuries but rather DNBI.

Water Purification

- 6-10. Impure water may serve as a means for the transmission of various diseases. Water from streams, shallow wells, ponds, swamps, and lakes is especially likely to carry disease organisms. All sources of water must be considered unsafe for drinking until properly treated. Therefore, all water supplies should be treated. Commanders should never permit the drinking of untreated water or not approved by preventive medicine personnel.
- 6-11. The water purification field service plays a crucial role in prevention of DNBI. Planning for water support begins with determining the amount and quality of water required. This depends on mission guidance from the tactical commander, mission scope, mission duration, stage of operation, operational environment, enemy chemical, biological, radiological and nuclear capabilities, and size of the force. The desirability of a water supply depends upon the quantity available, accessibility of source, and type (surface or underground. Water purification units require the following—
 - Drainage to eliminate wastewater from treatment systems.
 - Large enough storage facilities to meet daily supported unit requirements.
 - Road networks for the accessibility of vehicles and personnel.

Food Service

6-12. Food service depends upon purified water for cooking and sanitation. Planning considerations should include potentially deploying reserve component water purification elements early enough to accommodate transitioning of the ration cycle from packaged meals to fresher ingredients.

Shower and Laundry

6-13. Warm showers, clean clothes, and potable water increase morale and help prevent DNBI. The reserve component has the majority of the shower and laundry capability, causing planners to consider deployment priority through time phased force and deployment data. Planning for mobilization of units must take into account the operational requirements, training requirements, equipment status, and the readiness of the units to be mobilized. Historically, these units often lack all authorized equipment and supplies. They may be deficient in prescribed load lists or have a shortage of authorized equipment and supplies. Planners should analyze which units complement each other when planning whom, when, and where to deploy units that provide field services. For example, water purification units support the quartermaster field service companies that provide shower and laundry services.

6-14. Planners should consider deploying quartermaster field service companies in a timeframe that ensures they have water purification support. Planning considerations include transportation priorities, available common-servicing and cross-servicing command agreements, formalized bilateral and multilateral support agreements, personnel attrition factors, and ports of debarkation for planning strategic lift of forces and sustainment. During shape and prevent operations, sustainment planners should consider shower and laundry courses of action that range from the optimal time to deploy the field services and water purification companies to where to place these units on the battlefield. For example, during large-scale combat offensive operations the planners should consider that quartermaster field service companies contain sections that can deploy separately and as far forward as the BSB. Planners should consider that Army Reserve and National Guard composite supply companies consists of six sections and active component composite supply companies currently consist of one section. During consolidation of gains, planners may consider contracting shower and laundry as battlefield hostilities subside.

EXECUTING FIELD SERVICES

6-15. This section describes a broad overview of the aerial delivery, mortuary affairs, field feeding and water purification field services. Each of the field services, except shower and laundry, are detailed in separate ATPs. References are provided throughout this chapter. Army doctrinal publications are updated on a cyclical basis. Sometimes force design and best practices shift prior to a doctrinal publication revision. This section contains some new and some emerging information that require dissemination without waiting for scheduled updates.

AERIAL DELIVERY

- 6-16. Management of parachute operations is a complex process of receiving and issuing parachutes, shakeout and drying, quality control, damaged parachutes, maintenance, inspections, and work orders. Riggers pack a variety of parachutes for airland, airdrop, and sling load operations.
- 6-17. Parachute riggers undergo challenging training to acquire and retain the skills to inspect, pack, and rig personnel parachutes and cargo for airdrop. Airborne forces execute parachute assaults to destroy the enemy and to seize and hold important objectives until linkup is accomplished. Properly packed and rigged cargo parachutes leads to critical resupply of food, fuel, ammunition, and other supplies when ground transportation is not possible or fast enough. Airborne and air assault operations require specially trained parachute rigger personnel see FM 3-99, *Airborne and Air Assault Operations*.

Note: Parachute riggers support forcible entry, deployment, resupply, and special operations missions.

6-18. Aerial delivery of supplies and equipment offers alternatives to challenging ground lines of communication by providing vital resupply capability from supporting units geographically separated from supported units. Operations and logistics planners should consider incorporating the rigger field service function into the operations plan because aerial delivery is practical for emergency and preplanned resupply of all commodities.

- 6-19. When integrated with surface distribution operations, aerial delivery enables maneuver forces to sustain an operational tempo that is not as restricted by geography, supply routes, tactical situations or operational pauses for logistics support. Ground force requirements for airlift normally originate as requests for transportation or resupply support. When requesting airlift for combat support air movements, the G-3 or S-3 develops and coordinates the airlift requirement. Airborne brigade combat teams coordinate airdrop operations through S-4 channels. Non-airborne BCTs coordinate airdrop operations through a TSC or ESC, or more often through a sustainment brigade that is task organized to provide theater distribution. The parachute office receives requests from combat units through the supporting sustainment command for airdrop of supplies and equipment. The parachute office coordinates airdrop with the supporting sustainment command, theater airlift command, special operations forces airdrop support, the operating platoons, other company elements, and supported units.
- 6-20. To be successful, aerial delivery operations require extensive Army aviation and Air Force support structure working as a team. Army aerial delivery includes parachute packing (personnel and cargo), aerial delivery equipment repair, and rigging of supplies and equipment for delivery by both airdrop and sling load. The Air Force controls aircraft loading and provides aircraft assets; the Army orchestrates the preparation and rigging of Army airborne assault and cargo requirements. When applied in addition to surface distribution operations, aerial delivery mitigates the effects of geography, supply routes, or tactical situations and allows maneuver forces to set a high operational tempo. See AR 56-4, *Distribution of Materiel and Distribution Platform Management*, for more information. Exactly how a receiving unit gets the supplies depends, in large part, on the requirements of the unit. These requirements will drive the selection of aircraft, methods, and rigging equipment used. There are six elements of an airdrop operation that must be determined early in the planning phase:
 - Airfield length, strength, capacity, and location.
 - Aircraft availability and capability.
 - Aerial delivery equipment (parachutes, platforms, sling load equipment).
 - Parachute riggers provide a different skillset than engineer riggers.
 - Drop zone, pickup, and landing zone (primary or alternate).
 - Special load considerations (hazardous materials, retrograde planning).

Theater Aerial Delivery Company

- 6-21. The theater aerial delivery company (TADC) supports theater level units with personnel parachute packing services for up to 1,200 personnel parachutes per month. TADCs support theater with cargo parachute packing, inspection, and supply and issue of aerial delivery equipment required for airdrop. This unit also provides aerial delivery support for the Army, Joint Forces, or host nations.
- 6-22. TADC unit capabilities begin with operational planning and supervision of task execution for all aerial delivery operations. Unit personnel can inspect and pack 1,200 personnel parachutes per month. TADCs inspect

Theater Aerial Delivery Company (Airborne)

Role: Supports theater level units with personnel parachute packing services.

Capability: Operational planning and task execution supervision for all aerial delivery operations.

Basis of allocation: One per theater.

Mobility: Capability to transport 50% of its TOE equipment and supplies in a single lift using organic assets.

- services and provide technical assistance for packing, rigging, and loading up to 40 short tons of materiel per day for an airdrop. The TADC has the capability to perform limited sling load, to supplement capabilities of other units if necessary. They supervise and provide technical assistance for retrograde of an airdrop for the Army's portion of the joint airdrop inspection of loads.
- 6-23. TADCs can be assigned to CSSBs. They are dependent upon the appropriate elements within the theater for religious, legal, force health protection, interpreters and translators, finance, personnel and administrative, field level communications-electronics maintenance and supplemental transportation support. Field feeding teams provide field feeding.
- 6-24. Company headquarters provide direction and general supervisory control over all company personnel and equipment. The company headquarters also provides field level maintenance on all organic wheeled

vehicles, cranes, power generators and forklift trucks. The parachute office provides operational planning and task organization for all aerial delivery operations within the company and supported organizations. An issue and receive section provides storage of all parachutes packed by the personnel pack and cargo pack squads. This section issues parachutes to all supported units and receives parachutes after airborne operations. This section conducts routine inspection and shake out tower operations in preparation for repacking by the personnel pack squad or cargo pack squads.

6-25. The personnel pack and aerial delivery equipment repair platoon headquarters provides direction and general supervisory control over all platoon personnel and equipment. The platoon headquarters supports limited requisitioning, receipt, storage, and issue of airdrop equipment. The platoon may provide technical assistance in retrograde of aerial delivery equipment. Each personnel pack squad provides packing of 1,200 parachutes per month in support of theater separate units and can assist with packing for other units within their area of operations. Each aerial delivery equipment repair squad performs inspection, repair and fabrication, and salvage of aerial delivery equipment for theater level units (airdrop platforms, parachutes, and associated equipment).

6-26. The rigging and cargo pack platoon headquarters provides direction and general supervisory control over all platoon personnel and equipment. The platoon may provide technical assistance in retrograde of aerial delivery equipment. Each rigging squad provides rigging platform loads and airdrop containers for airdrop assaults. The rigging squad trains and provides technical assistance to units in preparation of supplies and equipment for delivery by airdrop. Each cargo pack squad packs cargo parachutes for up to 40 short tons per day in support of theater units.

Corps Aerial Delivery Company (Airborne)

6-27. The corps aerial delivery company supports corps and theater level units with personnel parachute packing services for up to 4,500 personnel parachutes per month. Corps aerial delivery companies support the theater with cargo parachute packing, inspection, and supply and issue of aerial delivery equipment required for airdrop. They also provide aerial delivery support for the Army, joint forces, or host nations not to exceed 40 short tons per day. This unit also provides maintenance to aerial delivery equipment, maintains readyfor-issue parachutes, and rigged platforms as directed by the corps commander. The corps aerial delivery company depends on the appropriate elements of the corps or theater for religious, legal, force health protection, finance, personnel and administrative, and logistical services. A support maintenance company provides wheeled vehicle recovery operations support and communications security field maintenance for the corps aerial delivery company. Field feeding teams provide field feeding.

Corps Aerial Delivery Company (Airborne)

Role: Supports corps and theater level units with personnel parachute packing services.

Capability: Operational planning and task execution supervision for all aerial delivery operations.

Basis of allocation: One per Airborne Corps.

Command relationship: Assigned to CSSB.

Mobility: Capability to transport 50% of its TOE equipment and supplies in a single lift using organic assets.

6-28. The company headquarters provides mission command, unit level administration and supply support for all company personnel and equipment. The company headquarters also provides field level maintenance on all organic wheeled vehicles, cranes, power generators and forklift trucks. The parachute office provides operational planning and task organization for all aerial delivery operations within the company and supported organizations. The issue and receive sections provide storage for parachutes packed by the personnel pack squads and cargo pack squad. This section maintains ready-for-issue parachutes and rigged platforms as directed by the corps commander. This section also issues parachutes to supported units and receives parachutes after airborne operations. They perform routine inspections and shake out tower operations in preparation for repacking by the personnel pack platoon or cargo pack squad.

6-29. Personnel pack platoon headquarters provides direction and general supervisory control over all platoon personnel and equipment. The platoon may provide technical assistance in retrograde of aerial delivery equipment. Three personnel pack squads provide packing of up to 1,500 parachutes per month per

squad in support of theater separate units a squad can assist with packing for other units within their area of operations.

6-30. The rigging, cargo, aerial delivery equipment repair platoon headquarters provides direction and general supervisory control over platoon personnel and equipment. Platoon and section personnel may provide technical assistance in retrograde of aerial delivery equipment. Each aerial delivery equipment repair squad. The squad performs inspection, repair and fabrication, and salvage of aerial delivery equipment for theater level units (airdrop platforms, parachutes, and associated equipment). Each cargo pack squad provides sufficient packing of cargo parachutes for up to 40 short tons per day in support of theater units. Rigging squads provide rigging platform loads and airdrop containers for up to 40 short tons per day for airdrop assaults. The squad trains and provides technical assistance to units in preparation of supplies and equipment for delivery by airdrop.

Corps Parachute Office

6-31. The corps parachute office acts as the corps commander adviser on all aerial delivery operations and a liaison between corps staff and division staff for all aerial delivery operations. The corps parachute office provides operational planning and task organization for aerial delivery operations within the airborne corps or supported organizations. It provides continuity of all DA aerial delivery equipment directives as the principal advisor to the corps commander as the airborne lead for all conventional forces.

Division Aerial Delivery Company (Airborne)

6-32. The division aerial delivery company supports an airborne division with cargo parachute packing, maintenance, inspection, supply and issue of aerial delivery equipment required for airdrop. It also provides aerial delivery support for the Army, joint forces, or host nations not to exceed 102 short tons per day. The company depends on appropriate elements of the sustainment brigade or the CSSB for religious, legal, force health protection, finance, supplemental transportation support, and personnel and administrative services.

6-33. The division aerial delivery company headquarters provides direction and general supervisory control over all company personnel and equipment. The company headquarters also provides field level maintenance on all organic wheeled vehicles, cranes, power generators and forklift trucks. The parachutes office provides operational

Division Aerial Delivery Company (Airborne)

Role: Supports an airborne division with cargo parachute packing, maintenance, inspection, supply and issue of aerial delivery equipment.

Capability: Operational planning and task execution supervision for all aerial delivery operations.

Basis of allocation: One per airborne division.

Command relationship: Assigned to CSSB.

Mobility: Capability to transport 33% of its TOE equipment and supplies in a single lift using organic assets.

planning and task organization for all aerial delivery operations within the company and supported organizations. The issue and receive section provides storage of all parachutes packed by the cargo pack squads. It maintains ready-for-issue cargo parachutes and rigged platforms in support of global response force as directed by the corps or division commander. This section provides 24-hour parachute operations to supported units. This section receives parachutes after airborne operations, conducts routine inspection, and conducts shake out tower operations in preparation for repacking by the cargo pack squads.

- 6-34. The aerial delivery equipment repair platoon headquarters provides direction and general supervisory control over all platoon personnel and equipment. The platoon headquarters supports limited requisitioning, receipt, storage, and issue of aerial delivery equipment. The platoon's three aerial delivery equipment repair squads performs inspection, repair and fabrication, and salvage of aerial delivery equipment for the airborne division (airdrop platforms, parachutes, and associated equipment).
- 6-35. The rigging and cargo pack platoon headquarters provides direction and general supervisory control over all platoon personnel and equipment. The platoon headquarters also, supports limited requisitioning, receipt, storage, and issue of aerial delivery equipment. Platoon and section personnel provide technical assistance in retrograde of aerial delivery equipment. Each rigging squad provides rigging of equipment and airdrop containers for airdrop assaults. Each rigging squad trains and provides technical assistance to an

airborne division in preparation of supplies and equipment for delivery by airdrop and limited movement of equipment and supplies rigged airdrop. Each cargo pack squad provide cargo packing for up to approximately 34 short tons per day per squad.

Brigade Aerial Delivery Support Company

6-36. The brigade aerial delivery support company supports an airborne infantry brigade with parachute packing services for up to 3,500 personnel parachutes per month. This unit provides aerial delivery support for the Army, joint forces, or host nations not to exceed 67 short tons per day. It provides personnel and cargo parachute supply, parachute packing, and aerial delivery equipment repair.

6-37. Brigade aerial delivery support companies depends upon the BSB for combat health support, religious, legal, finance, personnel and administrative services. It depends on the BSB field maintenance company for vehicle recovery, communications-electronic, communications-security, and supplemental field maintenance. The BSB distribution company for transportation, class I, II, III (P), III (bulk), IV, VII, and IX support.

Brigade Aerial Delivery Company (Airborne)

Role: Support an airborne infantry brigade with parachute packing services.

Capability: Operational planning and task execution supervision for all aerial delivery operations.

Basis of allocation: One per non-divisional airborne BCT.

Command relationship: Assigned to BSB (airborne BCT).

Mobility: Capability to transport 50% of its TOE equipment and supplies in a single lift using organic assets.

6-38. The company headquarters provides leadership, unit level administration, supply support, limited field maintenance on organic equipment. The parachute office provides operational planning and task organization for all aerial delivery operations within the company and supported organizations. The issue and receive section provides storage for parachutes packed by the personnel pack and cargo pack squads. This section maintains ready-for-issue parachutes as directed by brigade commander. It provides 24-hour parachute operations to supported units. This section receives parachutes after airborne operations, conducts routine inspection, and conducts shake out tower operations in preparation for repacking by the personnel pack or cargo pack squads.

6-39. The personnel pack and aerial delivery equipment repair platoon headquarters provides direction and general supervisory control over all platoon personnel and equipment. In addition, it supports limited requisitioning, receipt, storage, and issue of aerial delivery equipment. The three personnel pack squads provide packing of up to 1,200 personnel parachutes per month per squad. Each of the aerial delivery equipment repair squads performs inspection, repair and fabrication, and salvage of aerial delivery equipment for the airborne infantry BCT (airdrop platforms, parachutes, and associated equipment).

6-40. The cargo pack and rigging platoon headquarters provides direction and general supervisory control over all platoon personnel and equipment. Platoon and section personnel primarily provide technical assistance in retrograde of aerial delivery equipment. The two cargo pack squads provide cargo packing to support approximately 34 short tons airdropped per day per squad. Each rigging squad provides rigging of equipment and airdrop containers for airdrop assaults for up to 67 short tons per day. The rigging squad trains and provides technical assistance to airborne BCT units preparing material for airdrop delivery.

Division Personnel Pack Company (Airborne)

6-41. A division personnel pack company supports an airborne division with personnel parachute packing services up to 13,500 personnel parachutes per month. This company supplements the division aerial delivery company to provide certified airdrop load inspectors and technical assistance for packing, rigging, and

loading of supplies and equipment for an airdrop. It maintains ready-for-issue parachutes in support of global response force as directed by the corps or division commander.

6-42. The company depends upon appropriate elements of the sustainment brigade or the CSSB for religious, legal, force health protection, finance, supplemental transportation support, and personnel and administrative services. A support maintenance company provides back up field maintenance and wheeled vehicle recovery operations. The division aerial delivery company supports with field level maintenance of air items and airdrop equipment.

6-43. The company headquarters provides direction and

Division Personnel Pack Company (Airborne)

Role: Support an Airborne Division with personnel parachute packing services.

Capability: Operational planning and task execution supervision for all aerial delivery operations.

Basis of allocation: One per Airborne Division.

Command relationship: Assigned to CSSB.

Mobility: Capability to transport 33% of its TOE equipment and supplies in a single lift using organic assets.

general supervisory control over all company personnel and equipment. The company headquarters also provides field level maintenance on all organic wheeled vehicles, cranes, power generators and forklift trucks. The parachute office provides operational planning and task organization for all aerial delivery operations within the company and other supported organizations. The aerial delivery equipment repair section performs very limited inspection, repair and fabrication. The issue and receive section provides storage of all parachutes packed by the personnel pack platoons. This section maintains ready for issue parachutes in support of the global response force as directed by the corps or division commander. This section receives parachutes after airborne operations and conducts routine inspection and shake out tower operations in preparation for repacking by the personnel pack squads. The company consists of three personnel pack platoons. Each platoon contains three personnel pack squads. Each personnel pack squad provides the capability to pack approximately 1,500 parachutes per month. During deployed operations personnel pack squads may supplement the division aerial delivery company with certified airdrop load inspectors and technical assistance for packing, rigging, and the loading of materiel for an airdrop.

FIELD FEEDING

6-44. Commanders ensure that Soldiers' food service meets established standards by using area feeding, battalion level feeding, and remote site feeding through the processes embodied in the Army field feeding system. Food advisors should be involved from the earliest planning phases of an operation. See ATP 4-41, *Army Field Feeding and Class 1 Operations*, AR 30-22, *Army Food Program*, and DA Pamphlet 30-22, *Operating Procedures for the Army Food Program*, for detailed information on field feeding.

Contingency Planning

6-45. Class I support plans for contingency operations vary by mission and location. Units may deploy into a developed location with an existing logistics infrastructure, or to an undeveloped location with limited or no host nation logistics support capabilities. Deployment plans for combat operations to an undeveloped AO initially calls for meals ready-to-eat. As the theater stabilizes, plans progress to meal selection from the Army family of rations that includes meals ready-to-eat and unitized group rations with authorized menu supplements and enhancements. Planning and coordination for veterinary services support for Class I is also critical for food safety and defense. As the theater matures, the field feeding menu typically adds fresh ingredients. Depending on location and force protection requirements, commanders may transition field feeding to contractors.

Class I Supply Support

6-46. Class I supply directly links to the field service of food preparation. During the early stages of deployment class I materiel managers typically employ a push system to fill class I requirements. Under a push system, the class I materiel managers use anticipated troop strength, unit locations, type of operations, and feeding capabilities for requirements determination. Daily LOGSTAT reporting provides the information on the quantities and types of rations needed by the supported units. Class I materiel managers typically transition to the pull system as the intratheater distribution system matures and unit capabilities to store and

prepare rations improve. Under the pull system, supported units request the quantities and types of rations desired either manually or through automation.

Force Design Update

6-47. Traditionally, field feeding capability is assigned to all formations, but that is changing due to a field feeding force design update. The force design update addresses an Army shortfall of over 4,000 cooks across the three components. Under the force design update, cooks are removed from EAB units to form field feeding companies. The force design update implementation takes place from 2018 to 2023.

Note: Brigade combat teams, special forces units, watercraft companies, units located within the Military District of Washington, the force provider company, and military police detention units retain their cooks and will not be supported by an FFC.

6-48. The purpose of this force design update is to solve problems associated with providing field feeding in the deployed environment. Historically, each organization had a field feeding capability to bring to the battlefield. However, with modularity, individual elements may deploy without the parent organization's internal support capabilities. Typically, these modular elements do not have cooks or field feeding equipment, which makes them dependent on other units once they arrive in theater. As a result, the AO's field feeding support structure absorbs a higher head count for which they may not be resourced. In other instances, when consolidated field feeding sites are established there is significant difficulty managing cooks from multiple organizations. Additionally, consolidated field feeding is difficult to manage because units come and go at different times. When a unit leaves an area, it take its field feeding assets. The solution prior to this force design update has been contracting, which may not be a viable option during large-scale combat operations.

Field Feeding Company

6-49. FFCs are separate stand-alone modular, scalable companies with the field feeding capability designed for home station and deployed operations. The mission of the FFC is to provide field feeding to EAB operational forces during deployed operations, during field training, and in a garrison environment. When deployed, FFCs plan, manage, supervise, and administer the field feeding operation in their area of operation. FFC food advisors coordinate field feeding requirements through the sustainment brigade SPO, CSSB SPO and supported unit food advisors.

6-50. The standard company design consists of a company headquarters, operations section, and a maintenance section along with two to four platoons. Platoons consists of three to four teams and each team can feed up to 700 Soldiers. Planners use the following guidelines to allocate field feeding elements during operations:

Field Feeding Company

Role: Provides field feeding to Army EAB operating forces.

Capability: Receive requests for field feeding support and allocates field feeding assets according to type of support and level of demand.

Command Relationship: Attached to the CSSB or DSSB.

Basis of Allocation: One per CSSB.

Support Relationship: General support to units within the area of operations.

Span of Operations: JOA to brigade rear boundary.

Mobility: Requires 50% mobility in one lift using organic assets.

- One field feeding team per 700 EAB Soldiers not supported by internal capabilities.
- One field feeding team per 1000 detainees in a theater detention facility.
- One platoon headquarters per every two to five field feeding teams.
- One company headquarters per every two to four platoons.

6-51. Typically, attached to the CSSB or DSSB, the FFC depends upon the appropriate elements within theater for religious, legal, force health protection, finance, and personnel and administrative services. It depends upon the CSSB for chemical, biological, radiological, nuclear, and explosives defense support. An FFC depends on a support maintenance company for field maintenance and a composite truck company for the distribution and return of supplies, multi-temperature refrigerated containers, and empty flat racks. An FFC depends on a composite supply company for class I supply support.

- 6-52. The FFC headquarters provides mission command, unit level administration, unit supply, limited field maintenance, vehicle recovery, and supervision of field feeding operations. OPORD or FRAGORD issued by the CSSB identify supported units, the support relationship with each unit, priority of support, attachments and detachments to the FFC as required. The FFC commander and key leaders use troop-leading procedures to conduct mission analysis, develop courses of action, plan field feeding support, and direct subordinate elements.
- 6-53. Each platoon consists of a platoon headquarters and four teams consisting of 15 Soldiers in each team. The platoon leader coordinates mission support with the company headquarters operations officer and supported unit. At home station, the platoon leader serves as the dining facility accountable officer. The platoon headquarters is assigned two vehicles and two assault kitchens that can be used by teams to provide support to remote locations.
- 6-54. Field feeding teams provide field feeding to supported EAB units. At home station, the field feeding teams operate garrison dining facilities supporting EAB Soldiers on the installation. Each field feeding teams consists of 15 personnel, four trucks, two mobile kitchen trailers, two water buffalos, two field sanitation centers, and two assault kitchens. Each field feeding teams provides support for up to 700 personnel at one site; however, it can be split to provide field feeding at multiple smaller sites. It can provide field feeding for up to 300 at two smaller sites, or can be further separated to provide support utilizing one of the two assault kitchens assigned to the platoon headquarters. See figure 6-3.

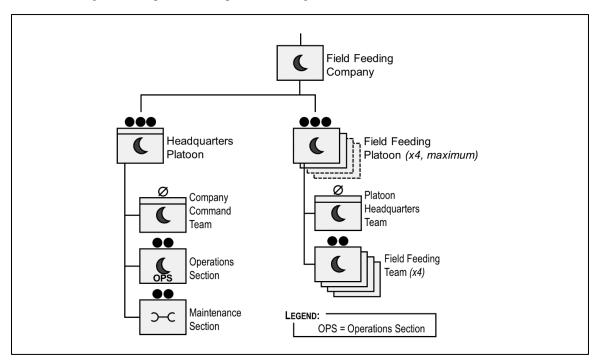


Figure 6-3. Field feeding company

MORTUARY AFFAIRS

6-55. Mortuary affairs (MA) provides for the care and evacuation of military and civilian fatalities and the safe handling of their personal effects under the jurisdiction of the United States Armed Forces. This field service includes search, recovery, establishment of tentative identification, collection, contamination mitigation, preparation, evacuation, temporary burial, interment, disinterment, reinterment, and disposition of human remains of persons for whom the Services are responsible by status or Executive Order.

- 6-56. The GCC is responsible for control and coordination of joint mortuary affairs in its AOR in accordance with 10 USC 164(c), *Commanders of combatant commands: assignment; powers and duties*. This responsibility includes: delineating Service component responsibilities within the AOR; giving authoritative direction on mortuary affairs to all assigned or attached forces; assigning responsibilities, tasks, and assets; and organizing commands and forces as necessary to execute mortuary affairs operations. Depending on mission requirements, the GCC appoints a mortuary affairs executive agent authority to be the lead Service. In most cases, the Army Service component command has the lead with an authorized mortuary affairs officer and senior mortuary affairs NCO that is designated to monitor and provide guidance on mortuary affairs functions in the joint operations area.
- 6-57. Requirement and placement considerations include casualty estimates from the theater Army G-3, force structure, and with input from the theater Army G-4 mortuary affairs office on developing the mortuary affairs concept of support. TSC planning ensures sufficient capacity to retrograde personal effects, not only for killed in action, but also wounded in action, separations, incarcerations, and other unanticipated theater departures.
- 6-58. Commanders of all U.S. Army units have the responsibility to treat all fatalities within their AO with dignity, reverence and respect. This responsibility includes the search for, recovery, and evacuation of fatalities and their personal effects to the nearest MA facility. All commanders should appoint a unit recovery team, consisting of one NCO and five Soldiers that are trained on MA. Personnel assigned as recovery team members are responsible for ensuring the required personal protective equipment (PPE) and hygiene sanitation supplies are on hand and serviceable. Commanders are responsible for the following tasks—
 - Maintain sufficient unit MA supplies, for example, human remains pouches.
 - Recover remains.
 - Evacuate remains (always ensure with an escort).
 - Report loss to higher headquarters for casualty feeder report.
 - Safeguard the personal effects.
 - Treat all fatalities with dignity, reverence and respect.

6-59. For additional information, refer to JP 4-0, *Joint Logistics*, the DODD 1300.22, *Mortuary Affairs Policy*, AR 638-2, *Army Mortuary Affairs Program* and ATP 4-46, *Contingency Fatality Operations*.

Search and Recovery

- 6-60. Unit commanders are responsible for initial search and recovery operations within their AO. Search and recovery is a systematic process of searching for human remains and personal effects, plotting and recording their location, and moving them to an MA facility. These actions are conducted by MA organizations as well. In situations when a unit is unable to recover its own human remains, the unit coordinates with the appropriate higher headquarters to request search and recovery support from a supporting MA activity. Based on the tactical situation, the supported unit may be required to provide security for the MA personnel during the search and recovery operation.
- 6-61. After recovery, human remains and personal effects are moved to the nearest MA site. Human remains should be transported in the most expedient manner available. However, use of medical and food-bearing vehicles should be avoided. Fixed or rotary wing aircraft are the preferred method to evacuate human remains.

Mortuary Affairs Collection Point

6-62. A mortuary affairs collection point, commonly known as MACP, provides receipt, processing, tentative identification, and evacuation of human remains and their accompanying personal effects, usually to a theater mortuary evacuation point. To accomplish this mission, mortuary affairs collection points are established in one of two ways. Mortuary affairs collection points that provide support to a BCT are highly mobile and usually collocate with the BCT BSB. Mortuary affairs collection points that have a general support relationship with multiple units are more stationary in their operation and typically locate at large support areas. These points may be task organized with increased receiving, processing, refrigeration, and evacuation capacities to serve as a transit or intermediate point for mortuary affairs collection point s

providing support to forward elements. While these points are more fixed in nature, they maintain the capability to deploy forward.

6-63. When tasked, a mortuary affairs collection point conducts or provides personnel to perform or supervise search and recovery missions.

Mortuary Affairs Contaminated Remains Mitigation Site

6-64. A mortuary affairs contaminated remains mitigation site may operate near a chemical, biological, radiological nuclear contaminated environment and has the capabilities to support the Armed Forces Medical Examiner in determining positive identification and processing human remains to mitigate contamination for safe handling and potential evacuation to the CONUS for final disposition. They depend upon a chemical, biological, radiological and nuclear company to provide augmentation personnel for the contamination mitigation of personnel and equipment.

Theater Mortuary Evacuation Point

6-65. A theater mortuary evacuation point provides theater wide support in the receipt and evacuation of human remains and their accompanying personal effects to a military mortuary. The theater mortuary evacuation point also performs quality assurance checks on existing processing documentation and initiates any additional processing documentation that is required to evacuate human remains.

6-66. Theater mortuary evacuation points are usually located near aerial ports of embarkation to facilitate the movement of deceased U.S. military and civilian personnel to CONUS or OCONUS military mortuaries.

Personal Effects Depot

6-67. The primary mission of the personal effects depot is to receive, safeguard, inventory, store, process, and evacuate to the CONUS Joint Personal Effects Depot (Dover Air Force Base, Delaware) for final disposition. The handling of personal effects in a theater depends upon the MA support structure that may require the personal effects depot to be collocated with a theater mortuary evacuation point within the theater.

6-68. Under special circumstances, a theater personal effects depot from within the combatant command may process personal effects for permanent disposition.

Ouartermaster Mortuary Affairs Company

6-69. The mortuary affairs company is designed to process up to 400 human remains per day from up to 20 mortuary affairs collection point locations. The mortuary affairs company may establish a main collection point at corps or division support areas to evacuate human remains to the theater mortuary evacuation point, and operates the theater mortuary evacuation point with the ability to process up to 250 human remains daily. See figure 6-4.

6-70. The mortuary affairs company is generally attached to a DSSB or CSSB. One mortuary affairs company is allocated per corps. Mortuary affairs companies are dependent upon the appropriate elements of the division, corps, or theater for religious, legal, engineer, explosive ordnance disposal, combat

Quartermaster Mortuary Affairs Company

Role: Perform the full spectrum of mortuary affairs operations.

Capability: Process and evacuate remains. Recover, secure, account for, and evacuate personal effects.

Command Relationship: Attached.

Basis of Allocation: As required to perform mortuary affairs operations.

Support Relationship: General support to units within the area of operations.

Mobility: 100% of its equipment and supplies in a single lift using organic assets.

health support, finance, personnel and administrative services, and supplemental transportation support. They depend upon a chemical, biological, radiological and nuclear company to provide augmentation for personnel and equipment contamination mitigation and to provide technical support to the mortuary affairs collection company. This company is organized with the following capabilities:

 Company headquarters section that provides mission command, unit level administration, supply, chemical biological radiological and nuclear defense support to unit personnel.

- Maintenance section that performs field level maintenance on organic unit vehicles and equipment.
- Operations section that coordinates mortuary affairs field service operations.
- Each of the five platoon headquarters provides supervision, coordination and scheduling for operational elements of the platoon.
- A total of four collection teams conduct limited search, recovery, and evacuation operations of deceased U.S. military, certain U.S. civilian and allied personnel. Each team is capable of receiving, inventorying, and coordinating the evacuation of deceased personal and their personal effects. The teams may be combined to operate a mortuary affairs decontamination point, main collection point, theater mortuary evacuation point, or personal effects depot. The platoon can be tasked to perform any one task. It cannot perform the tasks concurrently. With civilian augmentation, the platoon can set up and operate an in-theater mortuary.

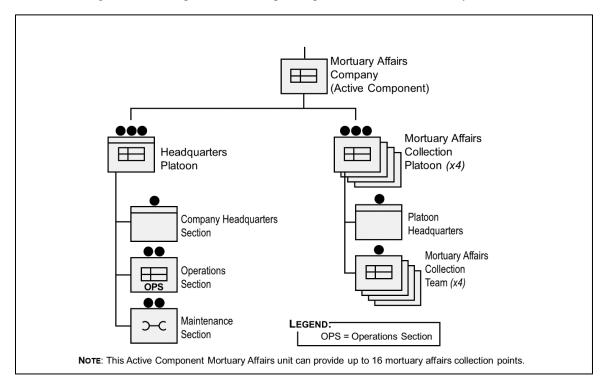


Figure 6-4. Mortuary affairs company

WATER PURIFICATION

- 6-71. Pathogens are biological agents that cause disease or illness to its host. Waterborne pathogens can cause diseases that constitute a serious health threat to Soldiers in the field. They are significant in military environments where their effects can cause mission failure. It is for these reasons that all water must be properly treated to avoid disease outbreaks among Soldiers in the field.
- 6-72. Water support companies develop water sources and water points; determine treatment and treats water for purification purposes. Water treatment specialists perform water purification, water storage, and water distribution. Bulk water materiel managers establish and validate bulk water requirements. They assist in determining equipment and transportation requirements for water production, storage and distribution operations for supported units. Bulk water materiel managers provide bulk water support operations oversight and guidance to the command in support of sustainment operations.
- 6-73. Water treatment and purification is the combination of one or more processes employed to improve the quality of water. Treatment involves removing suspended and dissolved contaminants and killing or inactivating microorganisms, usually with the goal of making the water potable and palatable. The water

support mission is a key component of sustaining forces on the battlefield. The lack of adequate quantities of potable water can produce significant numbers of casualties far more quickly than the lack of food, rest, combat stress, or operational stress. Providing adequate quantities of potable water to deployed forces is critical to maintaining the health and readiness of those forces. If the water support mission is not properly executed, DNBI numbers increase because of illness and performance degradation caused by either poor water quality or dehydration. Dehydration is one of the greatest nonbattle threats to combat force superiority. Physical work, environmental stress, clothing, and equipment all increase body water losses and can lead to dehydration.

6-74. Water is a required commodity for numerous activities in deployed environments. The most important of these is personal consumption. Water intended for drinking must be readily available and consumed in adequate quantities to prevent dehydration. Drinking water must be potable or it may have adverse health effects on those who consume it. It must also be palatable so personnel will be willing to drink it in adequate quantities, and not choose to drink from unapproved sources that may taste better but may cause illness because of chemical, microbiological, or radiological contamination. Radiological contamination is can cause illness if unapproved sources are used. Radiological contamination is one of the parameters tested for as part of the production facility's inspection.

6-75. For more information and current doctrine regarding water support operations, see reference ATP 4-44, *Water Support Operations*, TB MED 577, *Sanitary Control and Surveillance of Field Water Supplies*, ATP 4-02.8, *Force Health Protection*, and ATP 4-25.12, *Unit Field Sanitation Teams* for more information about water purification.

Planning For Water Support

6-76. Commanders must have confidence in Army supplied drinking water. They must advocate and implement established field water doctrine to prevent their personnel from consuming water that could cause disease or illness.

Water Support Company

6-77. The role of a quartermaster water support company is to produce, store, and distribute potable water to supported units within a designated area. The company has three platoons, each capable of producing potable water (maximum of 150,000 gallons per day from fresh water source and 100,000 gallons per day from a brackish or contaminated source) with organic water systems (two reverse osmosis water purification unit s and one tactical water purification system per platoon). Currently, each platoon can store a maximum of 40,000 gallons with two 20,000-gallon bags or the future modernized 100,000 gallons system with two 50,000-gallon bags with organic water storage systems. The organic distribution capability for each platoon is 20,000 gallons per day (or 40,000 gallons with two turns). The water distribution sections are the dedicated distribution assets in a division. The water support company will normally be attached to a CSSB or petroleum support battalion and have a general support relationship with supported units. Water support companies are designed to expand capabilities by drawing

Water Support Company

- Role: Produce, store, and distribute potable water to units within a designated area.
- Capability: Produces between 300-450,000 gallons of water, stores 300,000 gallons using 50,000 gallon water tanks, and distributes 20,000 gallons in one turn with organic equipment.
- Parent: CSSB or petroleum support battalion.
- Command Relationship: Attached.
- Support Relationship: Area support.
- Span of Operations: Theater support area to the field trains.
- **Mobility:** Capability for 50% mobility in one lift using organic assets.

additional potable water storage and distribution systems from operational project stocks requested and assigned to specific combatant commands.

6-78. In addition to the three platoons, a water support company may have command and control of a tactical water distribution system detachment. The Tactical Water Distribution System detachment provides additional potable water distribution by establishing, maintaining, and operating up to 10 miles of hoseline up to the corps rear. The tactical water distribution system is designed to move large volumes of water from a water treatment area to a storage or distribution point. The majority of water support companies are located in the Army National Guard and Army Reserve.

6-79. Figure 6-5 shows the wire diagram structure of a water support company; note that there are three identical platoons in a water support company.

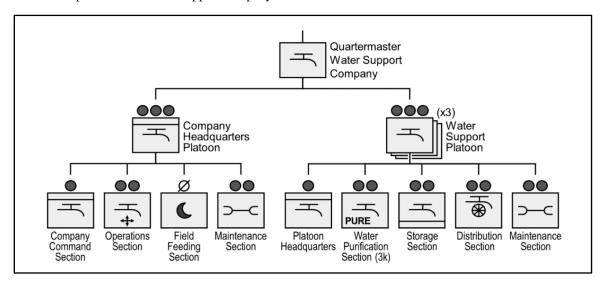
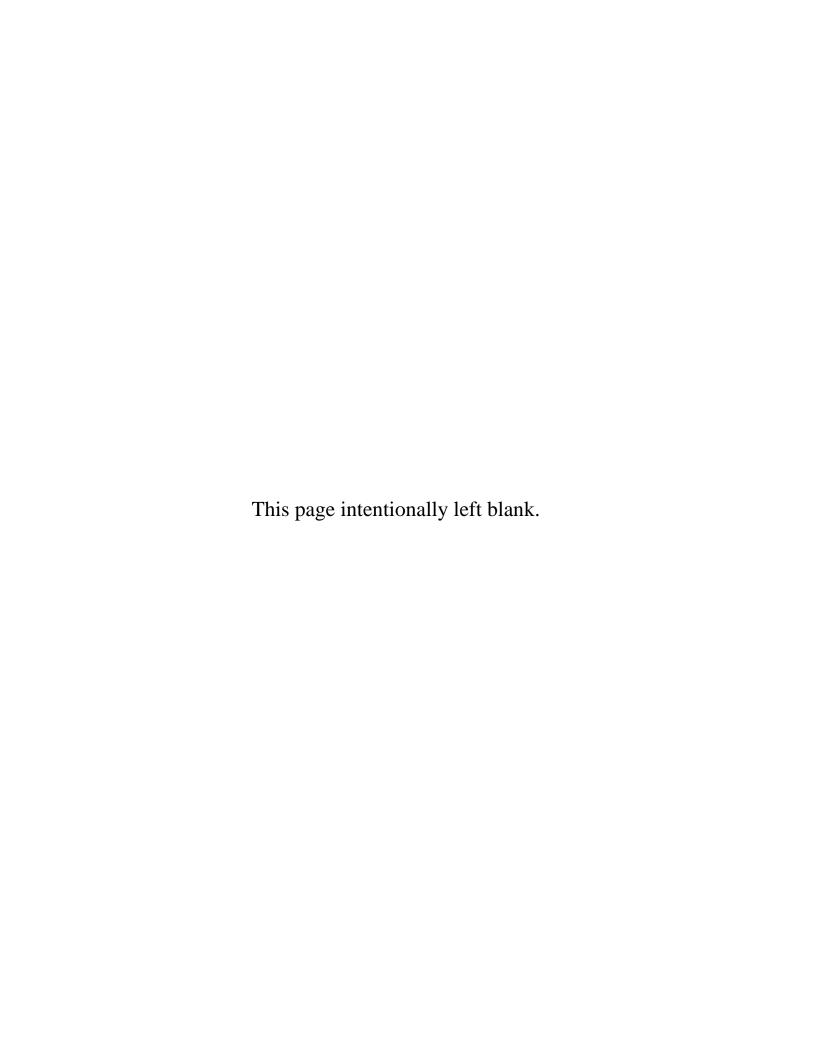


Figure 6-5. Water support company



Chapter 7

Preventive Medicine

Field feeding, shower and laundry, and water purification contribute to mission success by providing fundamental needs for Soldiers serving in some of the harshest conditions on earth. Many of these locations present health threats that can result in the spread of disease and other nonbattle related injuries. Field feeding, shower and laundry, and water purification units depend upon veterinary services personnel, preventive medicine personnel, and unit field sanitation teams for guidance and assistance in safely providing their field services. The drop in DNBI rates over time is due largely to the efforts of veterinary services personnel, preventive medicine and well-trained, appropriately equipped, and command supported unit field sanitation team members.

PROTECTION WARFIGHTING FUNCTION

7-1. The protection warfighting function is the related tasks and systems that preserve the force so the commander can apply maximum combat power. Preserving the force includes protecting personnel (combatants and noncombatants), physical assets, and information of the United States and multinational military and civilian partners. The protection warfighting function intersects with the sustainment warfighting function through force health protection.

FORCE HEALTH PROTECTION

- 7-2. Force health protection is defined as the measures to promote, improve, or conserve the behavioral and physical well-being of Soldiers. Its mission is under the protection warfighting function. Force health protection processes enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards. Preventive medicine services prevent casualties from disease and nonbattle injury through medical surveillance, occupational and environmental surveillance, health assessments, preventive medicine measures, and personal protective measures. The following list provides high-level information about the overall AHS mission. Food service, water purification, mortuary affairs, and shower and laundry units assist in the force health protection mission by providing services that directly affect Soldiers health and well-being.
 - Preventive medicine (medical surveillance, occupational and environmental health surveillance).
 - Veterinary services (food inspection, animal care missions, prevention of zoonotic disease transmissible to Soldiers).
 - Combat and operational stress control.
 - Laboratory services (area medical laboratory support).
 - Major force health protection measures include—
 - Preventing and controlling diseases.
 - Assessing occupational and environmental health.
 - Determining force health protection activities.
 - Employing preventive medicine toxicology and laboratory services.
 - Performing health risk assessments.
 - Disseminating health information

EXECUTION OF PREVENTIVE MEDICINE

- 7-3. Quartermaster units with the assistance of medical logistics companies execute field services operations based on priorities and support relationships established by sustainment commanders. See FM 6-0, Commander and Staff Organization and Operations, for more information about command and support relationships. Methods to prevent disease are embodied in effective field services through field hygiene, sanitation practices, waste management, and pest and vector control. The key to preventive and protective care is information, which provides the capacity to assess the current health environment and properly. Planners considering field services support should always include preventive medicine in their operational planning process.
- 7-4. Veterinary services are provided to enhance the health of the command through three broad-based functions-food inspection services, animal medical care, and veterinary preventive medicine (to include the prevention of zoonotic diseases transmissible to man). As the DOD sole provider, Army veterinary services personnel provide veterinary public and animal health services in support of all of the military Services (except for the food inspection mission on U.S. Air Force installations), U.S. Navy, U.S. Marine Corps, and Army forces, as well as other federal agencies, host nation, and multinational forces, when directed.

DISEASE AND NONBATTLE INJURY PREVENTION

7-5. Veterinary services personnel perform the food protection mission. Control of DNBI rates depend upon the efforts of veterinary services, preventive medicine personnel, and unit field sanitation teams. Field services planners should include veterinary services detachments and preventive medicine in their planning considerations because food service, shower and laundry, and water purification cannot function effectively without these units. Most of the veterinary services capability is assigned to the reserve component.

Note: While veterinary services detachments, preventive medicine units, and unit field sanitation teams do not perform field services, these are key to providing the safe and sanitary conditions that prevent foodborne and waterborne diseases.

PREVENTIVE MEDICINE SERVICES

- 7-6. Preventive medicine is one of many functions under the AHS. See FM 4-02, *Army Health System*, for more information on the AHS. The preventive medicine functions are to identify health hazards, protect the force from those health hazards, prevent injury and disease, and enable a healthy and fit force. Field preventive medicine focuses on improving and sustaining the health and fitness of the force and the operational management of health risks. The overall objectives of field preventive medicine are to provide commanders with healthy and fit deployable forces; to sustain health and fitness in military operations; and to prevent casualties from non-battle injuries. Field preventive medicine services are offered according to the policies and responsibilities established in AR 40-5, *Preventive Medicine*, and DA Pamphlet 40-11, *Preventive Medicine*. There is a sizable list of preventive medicine services, however, only the services appropriate to field feeding, shower and laundry, mortuary affairs, and water purification are listed below:
 - On-site water quality analysis.
 - Monitoring of water and field ice production and distribution.
 - Food safety, defense, quality, and sanitation inspections of field feeding sites.
 - Monitoring and guidance on proper field sanitation and waste disposal techniques.
 - Training and certification for field sanitation team and food service personnel.
 - Surveillance inspection for CBRN contamination of class I.
 - Presumptive microbiological and chemical laboratory analysis of food and bottled water.
- 7-7. Force health protection is a command responsibility that is supported by sustainment and AHS formations. Sustainment formations manage field services critical to health protections and incorporate standards to ensure field sanitation and safety of food and water. The AHS plans, coordinates, and synchronizes health service support capabilities supporting force health protection, including preventive medicine, veterinary services, area medical laboratory, and class VIII (vaccines and prophylactic drugs).

- 7-8. The TSC, ESC, and sustainment brigade, surgeon section plans, coordinates, and synchronizes delivery of field services that are critical for force health protection and coordinates with AHS units that provide preventive medicine and veterinary services used for food and water inspections and surveillance. Veterinary services should be a planning consideration for field services due to dependence on those units to ensure the safety of food and water supplies.
- 7-9. The AHS units supporting the operational area may not have an established command relationship with the TSC, ESC, or sustainment brigade. The surgeon section coordinates AHS support for the command and serves as the link to the MEDCOM (DS), MEDBDE, and higher command's surgeon and to subordinate levels of command to ensure that AHS support and field services are synchronized. The corps surgeon works with the medical brigade (the AHS support integrator for the corps) and ESC (the sustainment integrator for the corps) to ensure the corps sustainment plan protects the health of the command and minimizes DNBI.
- 7-10. The medical detachment veterinary service support is the sole provider of veterinary services to the DOD. This unit is important for field services operations because it inspects commercial food sources for DOD procurement; conducts food protection, quality, and sanitation inspections; conducts food defense vulnerability assessment and food and water risk assessments; provides field confirmatory microbiological and presumptive chemical laboratory analysis of food and bottled water; and manages veterinary public health programs such as endemic zoonotic and foreign animal disease epidemiology surveillance and control. This unit consists of a headquarters, one food procurement and laboratory team, five veterinary service support teams, and, one veterinary medical and surgical team and is normally assigned to a medical battalion (multifunctional), medical brigade (support), MEDCOM (DS). This unit or its subordinate teams can be attached or assigned to United States Navy, Air Force, or Marine Corps units. The medical detachment veterinary service support provides comprehensive Role 1-3 care for military working dog and DOD contracted working dogs; however, this publication will not discuss that mission.
- 7-11. The headquarters, medical detachment. veterinary services support provides command and

control, to include mission analysis,

organization, supervision, and responsibility for mission accomplishment of the unit's subordinate teams. Senior veterinary personnel assist civil authority with animal agricultural and public health infrastructure. The headquarters has the capability to transport 60% of its equipment and supplies in a single lift using organic assets.

- 7-12. The food procurement and laboratory team provides field confirmatory microbiological and presumptive chemical laboratory analysis of food and bottled water to provide assurance of food protection, which includes food safety and defense. The food procurement and laboratory team provides expertise for conducting food protection audits of commercial food facilities and sanitation inspections for military food facilities. The food procurement and laboratory team provides expertise in food protection, food diagnostics, and infrastructure reestablishment, particularly with respect to food facilities, distribution, and sanitation. The team is assigned to the headquarters, medical detachment veterinary service support, may be directly assigned to a MEDCOM (DS), medical brigade (support), or a medical battalion (multifunctional).
- 7-13. The veterinary service support team provides early entry capability of initial theater food protection requirements. Each veterinary service support team has the modularity and flexibility to disperse food

Medical Detachment Veterinary Service Support

Role: Provides equipment and personnel to provide dispersed food protection, quality, and sanitation inspections; food defense vulnerability assessments; food and water risk assessments; veterinary public health guidance; and veterinary care to military and contracted working dogs and food and water risk assessments.

Capability: Commercial food source audits for DOD procurement; food safety, quality, and sanitation inspections; field confirmatory microbiological and presumptive chemical food and bottled water laboratory analysis; provide veterinary public health guidance; endemic zoonotic and foreign animal disease epidemiology surveillance and control; and comprehensive Role 1, 2, and 3 veterinary care for DOD military working dogs and DOD contracted working dogs.

Basis of allocation: One per 60,000 personnel or one per 300 military working dogs and DOD contracted working dogs in support of all U.S. forces, DOD components and other units and organizations as directed.

Command relationship: Assigned to medical command (deployment support), medical brigade (support) or medical battalion (multifunctional).

Mobility: Varies by subordinate table of organization and equipment for its mobility requirements.

inspection teams to two locations to maximize food protection support throughout AOR. This team provides the following food protection support:

- Food safety, defense, quality, and sanitation inspections.
- Presumptive microbiological and chemical laboratory analysis of food and bottled water.
- Food protection audits of commercial food facilities and sanitation inspections of military food facilities to include assessment of potential military construction sites for food production or storage; installation food defense vulnerability assessments.
- Food and water risk assessments.
- Maintains the capability to provide surveillance inspection of CBRN contamination of class I subsistence.
- 7-14. This team is assigned to the headquarters, medical detachment veterinary service support, may be directly assigned to a MEDCOM (DS), medical brigade (support), or a medical battalion (multifunctional).
- 7-15. The veterinary medical and surgical team and the veterinary service support team are assigned to the medical detachment veterinary service support and provide comprehensive care to military working dogs and DOD contracted working dog. This mission of both teams is outside the purview of supply support.

UNIT FIELD SANITATION TEAMS

- 7-16. Establishing and employing unit field sanitation teams is covered in AR 40-5, *Preventive Medicine*, AR 350-1, *Army Training and Leader Development*, and DA Pamphlet 40-11, *Preventive Medicine*. These publications direct commanders of all deploying units to train at least two field sanitation teams (primary and alternate) prior to deployment. See ATP 4-25.12, *Unit Field Sanitation Teams*, for detailed information about unit sanitation field team roles and responsibilities.
- 7-17. Countering health threats confronting Soldiers is as simple as implementing and enforcing unit-level field hygiene and sanitation practices and monitoring individual preventive medicine measures. These are the reasons for which the unit field sanitation team was created and that continue to make it the most effective tool that commanders have at their disposal to ensure that Soldiers remain healthy and fit to accomplish the mission. It is absolutely critical that commanders—
 - Provide command emphasis regarding the importance of field hygiene, sanitation and preventive medicine measures.
 - Set the example of the importance of the program for their Soldiers.
 - Enforce the standards set for the use of preventive medicine measures.
- 7-18. The mission of the unit field sanitation team is to assist commanders in maintaining the health and well-being of Soldiers assigned to the unit. There is a sizable list of the unit field sanitation team's roles and responsibilities, however, only the services appropriate to field feeding, shower and laundry, and water purification are listed below:
 - Performing arthropod and rodent management control measures.
 - Supervising the disinfection of unit bulk water supplies and monitoring residual chlorine levels.
 - Inspecting unit-level food service personnel, feeding facilities, and food service equipment.
 - Supervising the placement, construction, and maintenance of unit-level garbage disposal facilities and soakage pits.
 - Assisting in the selection of unit field sites and reporting the presence and location of suspected toxic industrial materials as necessary.
 - Reporting findings of inspections to the unit commander.

PART THREE

Shower and Laundry Operations

Part Three focuses on managing and planning shower and laundry operations to include personnel, equipment, reports, environmental impediments and viable solutions, and maintenance requirements in a deployed environment.

Chapter 8

Shower and Laundry Overview

Shower and laundry operations directly support the health and morale of all deployed Soldiers. This chapter provides an overview of the shower and laundry field service operations within the Army.

SUPPORT REQUIREMENTS

- 8-1. Soldiers trained in the shower and laundry MOS field may be assigned to a staff position in an S-4 or G-4, support operations, hospital center, combat support hospital, a Force Provider unit, composite supply company, field service company, or any forward shower and laundry point during the course of their careers.
- 8-2. 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 and facility cleaning and disinfection.

HEALTH AND HYGIENE

- 8-3. Field hygiene contributes to the protection warfighting function by protecting Soldiers from diseases caused by improper hygiene and those transmitted by vectors found in field environments. Vectors are organisms that transmit diseases and parasites to other organisms. An organism is an animal, plant, or any single-celled living thing. Field hygiene enhances the quality of life for deployed Soldiers, improves morale, and further demonstrates leader concern for the health and welfare of Soldiers. Field hygiene is as a factor in the prevention of DNBI. Personal hygiene consists of steps taken to safeguard health, especially in a deployed environment. Good personal hygiene protects against illness by preventing disease-causing bacteria from spreading. Providing shower and laundry services and facilities support to Soldiers and enforcing personal hygiene standards reduces the threat to Soldier health. Failure to follow good hygiene standards contributes to DNBI.
- 8-4. The Office of the Surgeon General recommends a minimum of one shower and one change of clothing at least every seven days. Showers and clean clothing breaks the cycle for insect borne diseases, such as louse-borne typhus. However, from a morale standpoint, commanders may desire frequent shower and laundry services. Field hygiene, showers, hand washing, and laundry facilities depends upon a potable water supply for operations. Sustainment planners base logistics requirements on the available water source (produced by military or contracted services or procured from local municipalities) and the frequency that Soldiers are offered showers and clean clothing. See TC 4-02.3, *Field Hygiene and Sanitation*, for more information about field hygiene.

8-5. Sustainment planners consider the impacts of force structure and water consumption associated with providing hygiene support. Planning considerations for shower services include access to daily showering for food service personnel and hospital staff. Laundry support to these groups includes a higher weight allowance per week since uniforms require daily changing. The recommended water consumption factor for hot, cold, or temperate climates is six and a half gallons per Soldier per day for laundering of clothing and three gallons per Soldier per day for showers. If the shower frequency increases, then either the time per shower or the water consumption per week must change. For laundry, the water use would change based on the type laundry cleaning equipment used. Sustainment planners should monitor any changes to planning factors associated with providing shower and laundry services and refer to the appropriate equipment technical manual for planning water consumption.

LAUNDRY SERVICES

- 8-6. Laundry services consists of washing, drying, folding, and the returning of personal laundry. The first priority for laundry support is personal clothing, but laundry support for organizational clothing and individual equipment, seasonal, and special-purpose clothing is sometimes provided.
- 8-7. Laundry service provided by a deployed laundry element is similar to commercial service. Mobile laundry units provide services on a nonreimbursable basis in overseas areas and on rare occasions to supplement government owned laundry facilities. Nonreimbursable means that the Soldier does not have to pay for the laundry service.
- 8-8. Sustainment planners measure washer and dryer capacities in pounds per hour, rather than by the piece. AR 700-135, *Soldier Support in the Field*, dictates that Soldiers may turn in a maximum of 15 pounds of laundry per week for cleaning. Fifteen pounds of laundry is approximately two jackets, two trousers, three sets of underwear, three pairs of socks and two towels.

Types of Laundry

- 8-9. Individual laundry service is like commercial service because the laundry section returns each Soldier's personal clothing after it is washed, dried, and folded. AR 710-2, *Supply Policy below the National Level*, defines personal clothing as military-type clothing and personal clothing such as headgear, underwear, service uniforms, and complement items prescribed by the Secretary of the Army and provided to enlisted members.
- 8-10. Bulk laundry consists of clothing and textile items that are laundered and returned to stock. Laundry specialists sort bulk laundry by color and type of fabric before laundering and separates by size after laundering. Bulk laundry items may be bed linens, towels, hospital gowns, pajamas, and robes, for a supported hospital center or combat support hospital.
- 8-11. When a unit sends its laundry to the mobile laundry facility in bulk form, the laundry is called organizational laundry. This kind of laundry is handled differently than bulk laundry. It is washed separately so the same items are returned to the unit that sent them to the laundry point. Organizational laundry differs from individual laundry in the laundry point is not responsible for keeping each Soldier's clothing separate.
- 8-12. AR 210-130, *Laundry and Dry Cleaning Operations*, describes medical laundry as any health care linen item that is laundered or dry-cleaned. This includes, but is not limited to, sheets, pillowcases, towels, washcloths, blankets, mattress pads, pajamas, drapes, wraps, laundry bags, curtains, gowns, surgical scrubs, tunics, pants, and surgical protective garments.

Contaminated Laundry

8-13. Ordinary laundry refers to any fabric soiled through routine use, to include items fouled by bodily excretions or secretions (feces, urine, blood, vomit) from non-infectious persons. Contaminated laundry is often referred to as infectious laundry and includes any item used with patients known or suspected to have an infection, including gastrointestinal infections such as Norovirus, diarrhea, tuberculosis, methicillin-resistant Staphylococcus aureus, Hepatitis A, and other notifiable (highly infectious) diseases. All soiled laundry is "contaminated laundry", whether ordinary or medical laundry. TB MED 531, Facility Sanitation Controls and Inspections requires ordinary laundry facilities to provide a minimum hot water temperature of

140 degrees at the point of use and use a hot water cycle to launder all items. However, hospital settings present greater hazardous risks to laundry workers. Medical laundry heavily saturated in blood or used during management of a patient having a highly infectious disease, present the greatest risk to laundry handlers..

Note: All soiled laundry (soil, chemical residues, body fluids, microorganisms, parasites, mold, and any other debris that renders a surface or fabric unclean) exposes laundry workers to an unsanitary condition.

• All medical laundry requires application of a high heat wash, use of a sanitizing agent during rinse, and heated drying. TB MED 531 requires a water temperature of 160 degrees for a minimum wash time of 25 minutes (with detergent) to kill pathogens. Laundry generated from nonsymptomatic persons is treated as ordinary laundry. Infected laundry contaminated with the Ebola virus disease may be incinerated rather than risk potential exposure to workers or contamination of laundry facilities. Technical Bulletin Medical 531 also requires that contaminated laundry generated from persons diagnosed with viral hemorrhagic fevers such as Lassa, Ebola, or Marburg must be managed as Infectious Substances Category A and disposed at a permitted facility.

SHOWER SERVICES

- 8-14. Showering with warm water and soap at least every seven days promotes health and boosts Soldier morale. Showering regularly helps to reduce bacteria that are resident on the skin and can help to prevent infection from scrapes, cuts, punctures, and cracked skin.
- 8-15. Shower teams meet the hygiene needs of supported units by providing warm showers. Shower operations provide services for male and female Soldiers by providing separate shower facilities or by separate scheduling, whichever is most practical. Force Provider has separate sections for male and female Soldiers, which enables both sexes to use the shower simultaneously.

SHOWER AND LAUNDRY GENERAL HOUSEKEEPING

- 8-16. Daily cleaning of shower and laundry facilities and equipment using an appropriate detergent solution breaks down soils and residues that harbor odor- and disease-causing microbes. The presence of soil creates a barrier around microbes and will prevent adequate disinfection. See DA Pamphlet 40-11, *Preventive Medicine*, for more information about how to reduce the incidence of preventable infections.
- 8-17. Unless dealing with infectious agents, laundry units should instruct supported units (or hospital staff) to remove the majority of any solid mass (specifically feces and vomit) deposited on laundry before the laundry is turned in. Other than wearing gloves, there is no special treatment or processing required for removal of feces or vomit from regular shower operations: remove the gross contaminant, clean with a detergent, and disinfect with bleach or other Environmental Protection Agency-approved disinfectant.
- 8-18. Emergency procedures are needed for laundry and shower support scenarios in which a highly infectious agent may be involved (Operation United Assistance Ebola). In these situations units should, develop an emergency cleanup procedure for incidents when shower or laundry surfaces are contaminated with blood, feces, or vomit. Additionally, each shower and laundry section should have a cleanup kit with appropriate supplies and PPE for conducting a gross contamination cleanup. All personnel should be given an orientation on the emergency cleanup procedure and the location(s) of associated supplies. Consult with supporting preventive medicine personnel for assistance in developing the procedures.
- 8-19. For daily cleaning and sanitizing of shower and laundry facilities surfaces (outside of a healthcare setting) use ready-to-use chlorine bleach solution to disinfect surfaces. Many cleaning products are formulated with a minimum free available chlorine concentration that typically exceeds 500 parts per million; products identified on the Environmental Protection Agency List G and L are formulated at significantly higher concentrations. The Center For Disease Control recommends application between 500 and 5,000 parts per million free available chlorine, depending on the amount of organic material (blood, urine, or mucous) present on the surface. In the typical shower and laundry operation personnel will use 500 parts per million free available chlorine for general housekeeping of the facilities.

- 8-20. Disinfection is a process of inactivating or destroying harmful microorganisms (germs) from nonliving or inert surfaces. It is not the same as sterilization, which is the removal or destruction of all forms of life to include bacterial spores. There are many chemical products specially formulated for disinfecting surface types and textiles. The effectiveness of the product to destroy different types of harmful microorganisms depends on the disinfecting agent, the chemical concentration, and contact time; therefore, selecting an appropriate product for the intended application is important. A chlorine disinfecting solution can easily be prepared using plain, household bleach, and is more cost effective than purchasing ready-to-use commercial products.
- 8-21. Glove use is recommended as the minimum PPE when preparing bleach. To prepare a 500 parts per million solution from a chlorine product with a base strength of 5.25%, mix ½ cup (59 milliliter) of bleach with one gallon (3.8 liter) of water. To prepare a 500 parts per million solution from a chlorine product with a base strength of 8.25%, mix 1.5 tablespoons (22 milliliter) of bleach with one gallon (3.8 liter) of water. Prepare disinfecting solutions fresh each day. Take care to not produce overly concentrated solutions as this can cause respiratory irritation and induce an asthma attack in susceptible individuals. Ensure area is well ventilated during use. Clean surfaces using a detergent solution prior to applying the disinfectant. Clean, rinse, and then apply the disinfectant using a spray bottle or wiping application. Allow a one-minute contact time to ensure adequate disinfection and then rinse residual disinfectant from the surface using clean water. Refer to TB MED 531 for additional information.
- 8-22. Coordinate with the personnel responsible that identify and remedy plumbing leaks to prevent attracting pests such as rodents and cockroaches.

ORGANIZATIONAL RELATIONSHIPS

- 8-23. Shower and laundry support requires close coordination between those providing and those receiving the support. Shower and laundry sections support their parent units as well as supporting units on an area support basis and as directed by higher headquarters. Operational relationships are critical when coordinating and managing mission requirements with supported units. Figure 8-1 depicts the relationships between higher headquarters and the shower and laundry sections and between supported and supporting units. While the hospital center and combat support hospital is also depicted to show medical laundry support, it has no command or reporting relationship with the other units shown. The combat support hospital is a supported unit of the shower and laundry section that coordinates with their higher headquarters to gain access to shower and laundry support.
- 8-24. Soldier hygiene capabilities are organic to the tactical and operational field services company and the composite supply company assigned to a sustainment brigade, in support of the division, and to the TSC. The DSSB has an organic composite supply company that supports units operating in the division support and consolidation areas. However, the shower and laundry capability is being removed from the active component composite supply company. The DSSB also supports the BSB in the brigade area. Shower and laundry sections can be pushed forward to support BCT during mission staging operations that last at least 48 hours or in support of established forward operating bases.
- 8-25. Shower and laundry support requests are generated from the brigade combat team to the sustainment brigade. In the event that the sustainment brigade cannot support the brigade combat team the TSC provides supplementary support with other available assets in the theater. The sustainment brigade supporting the brigade combat team requiring the support generates requests for the supplementary support. The force provider company also has Soldier hygiene capabilities but are not discussed in this section.
- 8-26. During deployment, preventive medicine personnel, in coordination with the field sanitation team, ensure setup or construction and maintenance of showers, latrines, and handwashing devices meet field sanitation requirements. See TC 4-02.3, *Field Hygiene and Sanitation* and ATP 4-25.12, *Unit Field Sanitation Teams* for details. Preventive medicine is the anticipation, prediction, identification, prevention, and control of communicable diseases (including vector-, food-, and waterborne diseases); illnesses; injuries; and diseases due to exposure to occupational and environmental health threats, including nonbattle injury threats, combat and operational stress reactions, and other threats to the health and readiness of military personnel and units. Preventive medicine includes sanitation and hygiene.

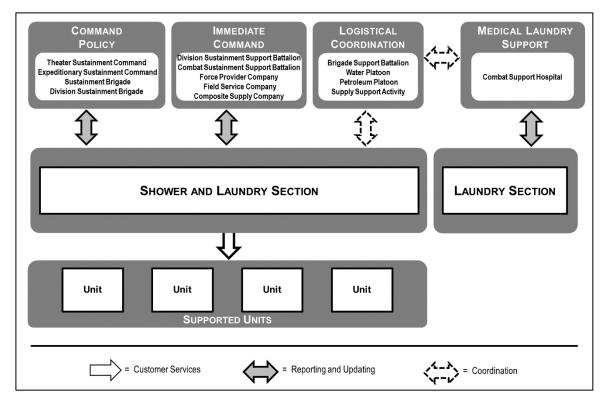


Figure 8-1. Organizational relationships

THEATER SUSTAINMENT COMMAND

8-27. The TSC and ESC surgeon section advises the commander on the health of the force. Force health protection is a component of the AHS under the protection warfighting function. Force health protection encompasses measures to promote, improve, conserve or restore the behavioral and physical well-being of Soldiers. Among the many duties associated with AHS support, the TSC surgeon section monitors and coordinates preventive medicine operations. The TSC and ESC surgeon section performs or oversees many medical functions that are not apropos to this ATP. See ATP 4-94, *Theater Sustainment Command*, for indepth information about the TSC and ESC surgeon section. See also FM 4-02, *Army Health System*, for information AHS.

SUSTAINMENT BRIGADE

8-28. The sustainment brigade surgeon section plans, coordinates, and synchronizes force health protection. These measures also include the prevention aspects of a number of Army Medical Department functions to include select preventive medicine and veterinary services used for food and water inspections and surveillance. The sustainment brigade surgeon section performs many medical functions that are not apropos to this ATP. See ATP 4-93, *Sustainment Brigade*, for in-depth information about the sustainment brigade.

FORCE PROVIDER COMPANY

8-29. The force provider company basis of allocation varies because each platoon can be detached to operate separately and in austere environments. Force provider companies consist of heavy and light platoons. Each platoon has the capability to support 600 Soldiers for food service, laundry and shower, and water distribution. Heavy platoons each have two shower and laundry sections. Light platoons each have four force provider squads with shower and laundry capabilities, see chapter in this publication. See ATP 4-45, *Force Provider Operations* for in-depth information about the force provider company.

QUARTERMASTER COMPOSITE SUPPLY COMPANY

8-30. The mission of the composite supply company is to provide class I, II, III (bulk and packaged), IV, VII, IX, water purification, water supply support, and shower and laundry services. See chapter 3 of this publication for composite supply company details. See figure 3-11 on page 3-32 for a composite supply company graphic. Reserve component composite supply companies provide shower and laundry services in addition supply support and water purification.

Note: Shower and laundry capabilities are being removed from all active component composite supply companies, leaving this capability solely within reserve component units.

QUARTERMASTER FIELD SERVICE COMPANY MODULAR

8-31. The field service company provides shower and laundry support within the sustainment brigade or DSB and to supported units on an area basis. Quartermaster field service companies consist of six shower and laundry teams. If deployed intact, the field service company supports approximately 21,000 troops per week. Quartermaster field service companies depend upon a quartermaster supply company or a quartermaster water purification and distribution company for the water required to support the shower and laundry mission.

8-32. The basis for allocation is one per 21,000 troops supported. Field service companies are normally attached to CSSBs, DSSBs, sustainment brigades or DSBs. The field service company depends upon the appropriate elements of the CSSBs, DSSBs, and sustainment brigades or to DSBs for religious, legal, finance, personnel, administrative services, and field

Quartermaster Field Service Company

Role: Provides shower and laundry services.

Capability: Laundry service totaling 315,000 pounds of laundry per week based on 15 pounds per Soldier per week in support of troops. Six Shower and Laundry sections/teams, each section/team can support 500 troops per day/3500 troops per week.

Command Relationship: Assigned to CSSB,

Basis of Allocation: One per 21,000 troops supported.

Support Relationship: General support to units within the area of operations.

Mobility: 100% of its equipment and supplies in a single lift using organic assets.

feeding support. The medical company area support provides Role 2 medical support and the medical logistics company provides class VIII support. The field service company has the capability to transport 100% of its equipment and supplies in a single lift using organic assets.

- 8-33. The field service company headquarters provides command, control, unit level administration, supply, field maintenance, and chemical, biological, radiological, nuclear, and field feeding support. The company headquarters reports information and status on company operations to the CSSB, DSSB, sustainment brigade, or DSB commander and staff.
- 8-34. There are two shower and laundry platoons. Platoon headquarters provide supervision and coordination for mission operations with supported units for services. Each platoon headquarters is capable of managing three teams simultaneously.
- 8-35. The shower and laundry teams may deploy separately and as far forward as the BSBs. There are six shower and laundry teams. Each team can support 3500 troops per week at 500 troops per day. The laundry service can clean 315,000 pounds of laundry at 15 pounds per Soldier per week. Each shower and laundry team consists of 12-head shower unitand one LADS. The laundry unit operates 20 hours per day. The shower unit operates 10 hours per day. The remaining operating time is for equipment maintenance.

PERSONNEL ROLES

- 8-36. The responsibility for shower and laundry functions begins at the sustainment brigade level where operations are planned, organized, controlled and directed. Brigade planning responsibilities include—
 - Determine the general area for site selection by coordinating with other elements to make sure that water, parking, and other requirements are met.

- Arrange to have water tested by preventive medicine personnel or water treatment specialists.
- Arrange for shipping water to laundry and shower units, if adequate fresh water supply is not available.
- Notify supported units when help is needed to set up tents or laundry equipment.
- Publish the source of supply for laundry supplies and fuel.
- Publish SOPs that give requirements for records and reports.
- Incorporate the loading plans for the LADS in the battalion-loading plan.
- Coordinate the location of wastewater drainage of laundry and shower units with water purification units in the same area.
- Coordinate with supported units and plan for the movement and defense of operating sites.
- Coordinate release times, communications and possible succeeding missions for the laundry unit.
- 8-37. The SPO at the sustainment brigade advises the commander on shower and laundry support. The SPO briefs the command on the brigade's shower and laundry capabilities to support units in a theater environment. The SPO at the brigade support battalion advises the BSB commander on shower and laundry support to the brigade combat team.
- 8-38. The supported unit S-4 requests shower and laundry services. The S-4 coordinates with the shower and laundry sections for a schedule that supports the battalion's operational mission. When requesting shower and laundry support, the S-4 provides the following to inform the supporting unit of the requirement:
 - Number of Soldiers supported for each service date.
 - Proposed site location.
 - For DA Form 1687 (*Notice of Delegation of Authority Receipt For Supplies*), signature cards for laundry pick up and turn in.
 - Type of laundry to be turned in to unit may be individual or organization:
 - Individual personnel laundry turned in by unit supply sergeant using DA Form 2886 (*Laundry List for Military Personnel*) and organized on DA Form 3136 (*Roster and Statement*).
 - Organizational and bulk consolidated laundry items organized by the supported unit supply NCO and itemized on DA Form 1974 (Laundry List [Medical Treatment Facility and Organization]).

COMPANY COMMANDER

8-39. Company commanders verify that preventive medicine personnel or water treatment specialist test the water supply. They should evaluate operations, in part, by periodically inspecting the shower and laundry equipment. Company commanders should ensure that there are adequate amounts of shower and laundry supplies.

PLATOON LEADER

8-40. Platoon leaders supervise preventive maintenance for laundry, and shower equipment and supervises the establishment of shower and laundry facilities. Platoon leaders estimate platoon supply requirements and supervises receipt, storage, and issue of supplies and equipment. Platoon leaders are responsible for the maintenance and accountability of assigned LADS and shower units, water storage equipment, and assigned vehicles.

PLATOON SERGEANT

- 8-41. Platoon sergeants select field sites for platoon operations and supervise site selection for shower and laundry operations. The platoon sergeant coordinates and oversees the shower and laundry section work by spot-checking operations and conducting routine inspections. Platoon sergeants assist the platoon leader with implementing the company plan for local security at the shower and laundry site. The platoon sergeant supervises, monitors, and advises the chain of command on shower and laundry operations. The platoon sergeant—
 - Selects field sites for platoon headquarters.

- Supervises site selection for platoon operations.
- Assists in preparing the shower and laundry LOGSTAT.
- Coordinates scheduling needs with supported units for the platoon sections.
- Inspects shower and laundry field sites.

SECTION CHIEF

8-42. Section chiefs supervise equipment layout and setup to include the posting of signs to identify the different areas such as parking and signs to show traffic flow. The section chief supervises daily section operations, coordinates laundry schedules with supported units, and supervises equipment preventive maintenance. Section chiefs determine supply requirements by keeping records of supplies used during the shower and laundry daily operations. The section chief. The section team chief works under the supervision of the platoon sergeant. The section chief—

- Supervises the layout and setup of the shower and laundry site, which includes advising on and conducting operational inspections; and, ensures the section is complying with environmental standards directives from higher headquarters.
- Prepares and submits LOGSTAT reports as required to the platoon sergeant or platoon leader.

SHOWER NONCOMMISSIONED OFFICER

8-43. .The shower NCO, supervised by the section chief, manages the day-to-day shower activities to include issuing daily shower work orders. The shower NCO performs the following tasks—

- Assists on selecting operating sites.
- Supervises the layout and setup of the site.
- Sets up shower and equipment load plans.
- Enforces operational safety rules and precautionary measures to include executing environmental standards.
- Develops and distributes the work schedules.
- Ensures that a separate shower schedule is set up for males and females.
- Notifies the shower and laundry section chief on any problems regarding site operations.
- Prepares, maintains, and submits required reports.
- Determines shower supply requirements and forwards requests through supply support channels.
- Obtains flooring materials for the building of duckboards or pallets for walkways and shower tents.
- Obtains materials for building storage bins and shelves as needed to expedite shower operations.
- Coordinates with supported units personnel.
- Coordinates with preventive medicine personnel to test water.
- Inspects section's equipment and supervises daily preventive maintenance activities.

LAUNDRY NONCOMMISSIONED OFFICER

8-44. The laundry NCO, supervised by the section chief, manages the day-to-day shower activities to include issuing daily laundry work orders. The laundry NCO performs the following tasks:

- Assists on selecting operating site.
- Supervises the layout and setup of the site.
- Sets up laundry equipment load plans.
- Enforces operational safety rules and precautionary measures to include executing environmental standards.
- Develops and distributes work schedules.
- Notifies the shower and laundry section chief on any problems regarding site operations.
- Determines laundry supply requirements and forwards requests through supply support channels.
- Prepares, maintains, and submits required reports.

- Inspects section's equipment and supervises daily preventive maintenance activities.
- Ensures laundered items are returned to appropriate personnel or organization within 24 hours.

SHOWER AND LAUNDRY SPECIALIST

8-45. Shower and laundry specialists sort washable laundry from laundry that cannot be washed. They review laundry lists for accuracy of contents for each Soldier's laundry bag. Shower and laundry specialists install, inspect, operate, and maintain mobile laundry and shower equipment (washers, dryers, and showers).

SHOWER AND LAUNDRY EQUIPMENT

8-46. The following section describes the equipment used by shower and laundry specialists. Please consult the appropriate technical manuals for operating and maintenance instructions.

LAUNDRY ADVANCED SYSTEM

8-47. The LADS is a trailer mounted laundry system, consisting of two combination washing and drying drums, designed to clean clothing in the field. The prime mover for the LADS is the M1088, 5-ton truck tractor. System components are mounted on an international standards organization frame, which is mounted to a 22-ton M871 semi-trailer. LADS includes trailer mounted container for storing accessories, auxiliary equipment, and consumable supplies.

8-48. LADS cleans up to 400 pounds of individual clothing per hour while operating for a maximum of 20 hours per day. Wastewater is recycled through a distillation process to recapture 90% of water used for laundry operations. Four hours per day are needed for maintenance of the LADS. The LADS is also capable of cleaning organization clothing and individual equipment. See TM 10-3510-221-10, *Laundry Advanced System (LADS)*, for more information.

CONTAINERIZED BATCH LAUNDRY

8-49. The containerized batch laundry, commonly known as the CBL, used in support hospital center and combat support hospitals, has two 50 pound capacity washers, two 75 pound capacity dryers, exhaust fan, pumps, water heater, water reuse and filtration systems, all hoses and connections mounted in one side opening 8x8x20 International Organization for Standardization container. It will also have maintenance enhancements for the water reuse system and boiler, as well as the washers and dryers.

8-50. The containerized batch laundry launders 150-200 pounds per hour of mixed loads of medical surgical gowns, drapes and linens, bed linens, and patient and duty personnel work garments during conventional operations. The containerized batch laundry will allow for the performance of all laundry functions including collection, sorting, folding, and distribution. The containerized batch laundry will provide a climate-controlled work area and have a voltage switching capability to operate on foreign and domestic electrical currents. The system may be required to move every fourteen days. The containerized batch laundry is employed at corps hospital center and combat support hospital locations, will be capable of providing laundry support for 248 patients, 506 Soldiers, and all linen and surgical clothing requiring cleaning. The containerized batch laundry functions in temperature, humidity, and solar radiation conditions of hot to basic climate types (-25 degrees Fahrenheit to +120 degrees Fahrenheit). The containerized batch laundry requires two hours for setup or take down with a crew of three personnel. See TM 10-3510-226-10, *Operator Maintenance Manual for Containerized Batch Laundry (CBL)*, for more information.

12-HEAD SHOWER SYSTEM

8-51. The 12-Head Shower is a portable shower with six two-person shower stalls. Each shower stall base uses a frame assembly with showerheads attached to support a cover assembly. The six showers are joined to make a 12-person walk through shower facility. An electric pumping assembly provides water supply and draining. The portable shower module is typically installed inside a temper tent. Heated water is provided by a portable hot water system.

- 8-52. The 12-Head Shower provides seven-minute hot showers for 500 Soldiers per day. The shower facility is capable of deploying and operating in temperatures ranging from 32 degrees to 120 degrees Fahrenheit. In temperatures below 32 degrees Fahrenheit, plan for additional heaters and tents to prevent shower components from freezing, or ensure proper draining procedures are followed. The system requires a 3,000 gallon fresh water tank or other reliable source of fresh water, available power source supplying 208 volts alternating current, 3 phase, 60 hertz, and a tent for privacy while dressing and undressing.
- 8-53. The 12-Head Shower is employed in hospital modules and field service units at EAB. This system is capable of being moved into a brigade support area to provide forward shower. Normally, transported by organic unit assets. The item is transportable by land, sea, and rail, air (C-130, C-17, and C-5) or externally slung under a CH-47 helicopter.

EXPEDITIONARY SHOWER SYSTEM

8-54. The Expeditionary Shower System provides four shower stalls and two sinks per system container. Two systems and clothing changing tents are provided with each 150-person module for climate-controlled showering and shaving purposes. Up to 24 Soldiers per hour can be accommodated with 10- minute showers. Set-up time is 30 minutes with two personnel.

EXPEDITIONARY BATCH LAUNDRY SYSTEM

8-55. The Expeditionary Batch Laundry System is a self-contained batch laundry system capable of washing and drying 100 pounds of laundry per hour. It consists of one 50-pound capacity washer and one 75-pound capacity dryer that are rated at industrial commercial grade. Set-up time is 15 minutes with two personnel.

SHOWER WATER REUSE SYSTEM

8-56. The Shower Water Reuse System is container-based and uses the same micro-filtration, reverse osmosis and chlorine injection components as the Army standard tactical water purification system. This reverse osmosis water purification technology enables processing of grey water from showers and the recycling of 75% of the water for reuse.

Chapter 9

Establishment of a Shower and Laundry Site

Base the shower and laundry section plan on guidance and instructions from higher headquarters on the specific mission, situation, and location. This chapter discusses establishing a shower and laundry section in a developed and an undeveloped area. It also describes tasks associated with redeploying the section.

DEPLOY TO AN UNDEVELOPED AREA

9-1. It is important to note that every deployment is different and every site is different. Every shower and laundry team adapts to changing conditions. Shower and laundry teams may operate within secure fixed facilities in the joint security area, austere combat outposts, or joint service stations. When deployed, shower and laundry teams will provide showers and clean clothes to the supported unit from either a developed or an undeveloped location. A developed location will have an infrastructure (roads, buildings) and undeveloped location will lack that infrastructure. Safety, security and natural terrain will shape the shower and laundry field layout. Mission requirements and environmental conditions often dictate site selection.

ENVIRONMENTAL CONCERNS

- 9-2. Shower and laundry leaders consider actions to reduce adverse effects on the environment by assessing and managing planned activities for potential environmental risks and hazards. They identify environmental hazards during the site selection survey and report the potential of polluting the air, soil, water, and degrading natural resources to higher headquarters.
- 9-3. Whenever possible, leaders should check with local authorities for regulatory requirements and comply with environmental standards applicable in the host country. The main environmental concern with shower and laundry operations waste water disposal. Wastewater treatment processes are designed to inactivate or remove infectious diseases. Wastewater generated from shower and laundry operations may not require specialized treatment prior to discharge. Units should discard wastewater in an approved sanitary sewer or appropriate field waste water system.
- 9-4. In some situations, wastewater must be stored or hauled to an approved dumpsite or disposed of through the use of an approved sewage system. Before discharging any water on the ground, leaders should check with local environmental engineers. Shower and laundry specialists ensure that drainage ditches are dug around equipment to control water discharge. The proper use of detergents, bleaches, and other chemical supplies will also mitigate environmental impact.

UNDEVELOPED AREA

- 9-5. Knowledge of the terrain is critical to planning prior to employment. Shower and laundry units should conduct a site survey, and identify hazards that can result in injury, illness, or death of personnel. Hazards may also can lead to damage, loss, or destruction of equipment and other assets and may result in degradation of capabilities or mission failure. Hazards can be associated with enemy activity, accident potential, weather or environmental conditions, health, sanitation, and equipment. Leaders should identify hazards and take steps to mitigate them as part of the risk assessment process.
- 9-6. If a site survey is not possible, use maps to conduct a map reconnaissance of the selected site. Once on the site, use the map during the terrain analysis and use the information gained to communicate relevant information to the unit commander and higher headquarters. If the site will be used for an extended period, units should coordinate with engineers to assist with terrain analysis. That analysis should measure the

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potential site's dimensions to establish approximate locations for the shower and laundry equipment. Seldom will logistics base locations contain the ideal mixture of desired characteristics. Site selection tasks include assessment of—

- Available space.
- Site layout to ensure effective land use.
- Soil conditions for proper draining.
- Road networks for trafficability.
- Existing facilities for usage.
- Existing terrain for protection.
- 9-7. Effective shower and laundry support requires careful risk management during site selection and layout. Risk is an expected or estimated loss, danger or peril, due to hazards. Risk is measured in terms of hazard severity, probability, and the potential consequences of an accident. Risk management reduces losses in combat and training by incorporating safety and mitigating risks within these activities. Risk management is the process of making high-risk operations safer by eliminating or reducing risks while accomplishing the mission. Formal risk management process encompasses—
 - Identifying the risks in unit mission, collective and individual tasks, and routine unit activities that create the potential for accidents.
 - Assessing the risk associated with each hazard. Develop, review, and assess techniques, practices, procedures, or plans that reduce accidents but still allow mission accomplishment.
 - Making decisions and developing control measures by selecting and implementing the techniques, procedures, or plan most likely to eliminate unnecessary accident risks while conducting the unit mission, collective and individual tasks, or operation in question.
- 9-8. Risk assessments confirm and reconfirm critical information that effects field layout plan decisions. See ATP 5-19, *Risk Assessment* for more information

SITE SELECTION

- 9-9. Shower and laundry specialists may deploy with a Force Provider unit. For deployment missions, the Force Provider modules are classified as Army pre-positioned stock, available for deployment by air, land or sea, from either depots or pre-positioned ships. Site selection takes place at the strategic level, but many of the same considerations apply that apply to forward shower and laundry sections. See ATP 4-45, chapter 4 for force provider site planning and site selection considerations.
- 9-10. The shower and laundry operational area should be firm, sloping, well drained, and capable of bearing vehicles and equipment in any weather. The operating site should include enough space for parking vehicles, room for the vehicles to turn around, and room for handling the projected numbers of supported Soldiers. A one-way traffic flow is usually the best, especially, when blackout or restricted light conditions exist. Site selection identifies sufficient space for latrines, tents, vehicle parking, and vehicle turn-around area. The shower and laundry section team chief should pay attention to where wastewater will drain; the runoff may draw attention to the operational area.

Note: Shower and Laundry sites should be at least 300 feet downwind and down slope from the dining facility and at least 100 feet from the border of the troop billeting area [and unit ground water sources].

9-11. Normally, the shower and laundry unit selects a site with an ample supply of water. In arid environments, the shower and laundry point depends on line haul or local water treatment units for potable water supply when commercial sources are not available. Preventive medicine personnel should test all water sources for purity. If the water is non-potable for drinking, shower personnel must post signs advising Soldiers not to drink it. When operating in an area without a supply of fresh water, the shower and laundry unit employs the 3,000 gallon collapsible water tank. Whenever possible, leaders should take advantage of existing buildings for all or part of the shower and laundry point operation. In an area with infrastructure, the laundry unit may take advantage of municipal water capabilities.

9-12. Figure 9-1 depicts a notional shower and laundry point. This graphic is not to scale and is not intended to show every potential shower and laundry point. The notional graphic, however, includes features that may be needed in austere or disbursed conditions. Shower and laundry specialists must know how to establish a site to operate in any location under any conditions.

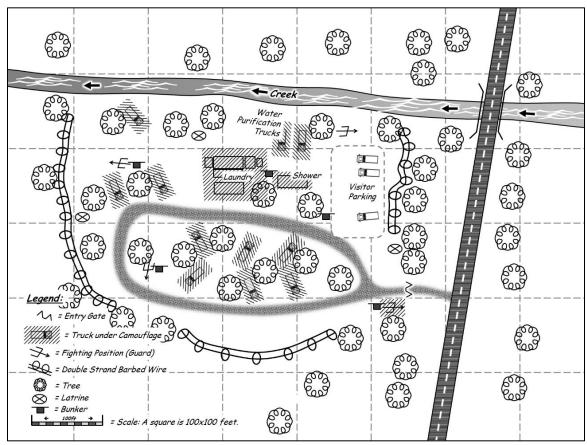


Figure 9-1. Shower and laundry point

SHOWER AND LAUNDRY FIELD LAYOUT PLAN

- 9-13. Establishing a shower and laundry site requires detailed planning. Placement of equipment in a straight line will simplify work flow and personnel movement. Units should continuously look for ways to improve the layout after occupying the site.
- 9-14. A shower and laundry layout has to be organized and disciplined. A poor layout can adversely affect the ability to efficiently process laundry and personnel for showers, but a well-planned layout can improve processing times. As part of the planning process, leaders should prepare detailed area sketches to facilitate efficient use of available space.
- 9-15. Shower operations may be established at a fixed site or a tactical location in a field environment. Leaders should coordinate for preventive medicine tests to ensure that it is free from disease-producing organisms, poisonous substances, and chemical or biological agents and radioactive contaminants. Preventive medicine's primary function is to ensure the water supplying shower and laundry operations meet TB MED 577 standards. The Defense Occupational and Environmental Health Readiness System is a part of the Defense Health Services Systems that is responsible for entering, assessing, managing and reporting occupational and environmental. This *system* offers a comprehensive tool, the *Field Shower Point Sanitation Report*, that shower and laundry personnel can use to ensure sanitary conditions, monitor the cleaning of soiled materials, monitor how the workspaces are cleaned, monitor how spills are managed, and ensure cleaning supplies are properly stored. Additionally, the *Laundry Dry Cleaning Report* applies to field laundry.

These two reports also provide corrective actions that the shower and laundry point facility will need to undertake to be in compliance.

9-16. Shower and laundry operations manage bulk water stored in support of their operations and maintaining appropriate sanitary controls. When water is supplied in bulk rather than by pipeline delivery units must test stored water to ensure the minimum prescribed chlorine residual is maintained. Site operators (or designated personnel other than preventive medicine) are responsible for re-chlorinating bulk-stored water when residuals fall below minimum standards. This is typically the function of the unit field sanitation team, for all company-sized elements in accordance with AR 40-5, *Preventive Medicine*. See ATP 4-25.12, *Unit Field Sanitation Teams* for more information.

9-17. Locate operational areas at or near a plentiful water source, or make arrangements for delivery from the supporting water point. Through reduced water usage technology, using about 540 gallons of water per 20 hours of operation, the laundry section can launder approximately 400 pounds per hour.

WORK FLOW

9-18. An effective layout will establish shower operations in a logical manner that allows supported units' personnel to flow through the shower operations as expeditiously and safely as possible. Establishing the laundry workflow maintains sanitary control and prevents unintentionally exposing cleaned articles to unclean surfaces.

Shipping and Receiving Area

9-19. Leaders should design and organize laundry operations to achieve sanitary control throughout the laundry process. The laundry area as small as is practical, with separate areas for receiving and shipping. Separating the receiving point from the return and reissue point minimizes the potential for cross contamination. A receiving point may be a turn-in counter, a designated collection bin for dropping off bagged laundry, or a large staging area for bins and carts. Cross contamination is likely to occur from soiled bins, carts, and the exterior of bags containing soiled laundry.

Laundry Work Area

9-20. The laundry work area should locate next to the shipping and receiving tent. The laundry work area is where the laundry is washed, dried, extracted, and prepared for shipping back to the supported unit. Leaders should establish surfaces and to prevent cross contamination of clean items when establishing the laundry work area.

ACCESS CONTROL POINTS

9-21. The access control point should include guard personnel to verify identities of employees or supported units before entry into the shower and laundry point. See AR 190-13, *The Army Physical Security Program*.

DEPLOY TO A DEVELOPED AREA

- 9-22. In a joint security area contractors may perform the shower and laundry services. As the theater begins to mature, shower and laundry specialists may be tasked to identify specific support requirements or to determine which services may be performed by contractors. If the commander decides the shower and laundry facilities will be staffed with contractors, the requiring shower and laundry element typically works with the contracting support brigade to develop requirements. See ATP 4-10/MCRP 4-11H/NTTP 4-09.1/AFMAN 10-409-O, *Multi-Service Tactics, Techniques, and Procedures for Operational Contract Support,* for more information about operational contracting support.
- 9-23. Army laundry specialists may develop performance work statements, statements of work, or statement of objectives for contracts. Contractors may want to augment or replace military laundry systems with residential-grade (household) washers and dryers. The use of residential-grade equipment is not recommended for contracted laundry operations. Residential machines are less durable than commercial

equipment and may be less efficient at achieving the desired standards for washing and drying when the machines are heavily used on a consistent basis.

REDEPLOYMENT

9-24. A shower and laundry element may be required to move from one location to another within the theater in order to support the maneuver commander's logistics requirements or redeployed to its home station. When the order is received to redeploy, the shower and laundry section initiates redeployment activities. Actions taken will depend on where it is redeploying.

PREPARATION FOR MOVEMENT

9-25. To meet contingency support requirements, units develop movement plans and SOPs. An effective movement plan contains sufficient detail to prepare units to execute deployments while the SOP outlines functions that normally occur upon notification of a unit movement. Units should maintain deployment binders containing the unit movement plan; unit movement SOP; appointment orders; training certificates; recall rosters; copies of load cards and container packing lists, special handling permits; and blocking, bracing, packing, crating, and tie-down requirements. The deployment binder also serves as a continuity bridge from one section leader to the next. The SOPs cover pre-movement checks, pre-movement inspections, who to report to, and who executes which tasks. SOPs address standard locations, location of mission essential equipment, and vehicle load plans. The SOP address all roles and responsibilities for the deployment. During training exercises review, rehearse, revise and validate the SOP so that every Soldier understands the deployment process.

9-26. Having the movement plans and SOPs is not enough. Units should rehearse the plan and track the plan's results during the execution of the plan. Every Soldier should know his part of every mission. Every leader should practice troop-leading procedures. Rehearsal, pre-combat checks and pre-combat inspections cannot be emphasized enough. Rehearsals ensure greater success in the redeployment. Develop a key task list and ensure that all Soldiers are trained on the key task list. During training exercises and rehearsals ask questions about commander's intent and end state. Learning to ask these questions during rehearsals ensure that the shower and laundry site is ready when the commander needs it during a real world mission. Shower and laundry elements should rehearse basics and add specifics to the rehearsals as details emerge. Each shower and laundry element is responsible for developing specific battle-oriented pre-movement checks focused on specific requirements. As a minimum, each Soldier should understand the nature of the operation:

- Who is participating?
- Time of the operation.
- Assigned tasks.
- The route should be briefed to all drivers.
- Call signs, password, number combinations.
- Location of objective.
- Individual's job and job of immediate leader.
- Location of leaders.
- Location of other friendly units (situational awareness).

9-27. When the orders to move are received, shower and laundry specialists should prepare the equipment for transport by disconnecting the equipment, being sure to drain water from the water heaters and water pumps. Fuel should be drained from fuel lines before loading according to the approved load plan.

9-28. Leaders should conduct pre-combat inspections to determine full preparation for tactical operations. Pre-combat inspections are conducted in the assembly area prior to movements. Pre-combat checks and inspections are integral to every mission. The platoon leader designates the time for pre-combat inspections as part of the platoon OPORD. Dispose of fuel in accordance with unit SOP and applicable petroleum and environmental regulations.

LOAD PLANNING

- 9-29. Good planning is the key to mission accomplishment. There may not be enough transportation capability to move the whole shower and laundry element in one trip. Leaders either arrange for additional transportation resources or arrange the move in serials.
- 9-30. Load planning is a critical part of deployment planning. Prior to the move, perform a 100% inventory to know what it is moving and where every item is packed. Upon arrival at the destination, perform a 100% inventory to ensure that nothing was lost in transit. Leaders prepare a detailed loading plan and ensure that all personnel are familiar with the plan. The load plan details all supplies and equipment by container or bumper number to maximize vehicle and container load capacities. The packing list may change from mission to mission, but the majority of the items on the list are necessary for the completion of every mission. See figure 9-2 for notional load plan.

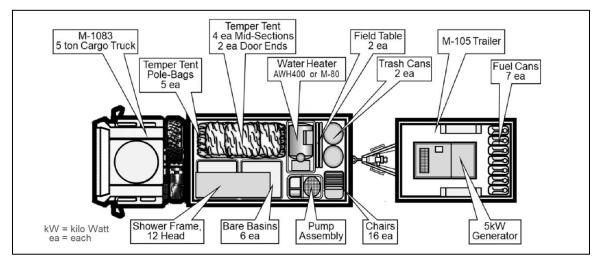


Figure 9-2. Load plan

- 9-31. It is the joint responsibility of the shipper and the carrier to ensure safety of the cargo, equipment, and personnel during loading, in transit, and on arrival at the destination. Ensure best use of the shipping containers and vehicles to safeguard equipment and supplies by not exceeding loading limitations. The delivery of cargo in good condition depends on the manner in which the truck or trailer was loaded and on the care which was taken in preparing for the loading. Identify hazardous, sensitive and classified cargo for packaging, labeling, segregating, and placarding for movement. Identify bulk cargo that needs to be moved, and develop packing lists. Block, brace, and tied-down all crates, containers, boxes, barrels, and loose equipment on a vehicle must be to prevent shifting during transit. For example, stow and secure the shower components of end item on trailer surrounding five-kilowatt generator set. Always check the trucks, vans, trailers, and containers for serviceability. Areas to check include—
 - Are the sideboards and floorboards present, and are they serviceable?
 - Do the doors close properly, providing a waterproof seal?
 - Is the container large enough for the cargo or equipment to be shipped (length, height, width, and load limitations)?
 - Are there enough tie-downs, and are the tie-downs serviceable?
 - Is the canvas roof leak proof?
 - Are tires serviceable? Are there spare tires available?
 - Do all brakes work properly?
 - Are all brake lights and running lights operable?

Chapter 10

Shower and Laundry Procedures

Shower and laundry sections provide services to approximately 3,500 Soldiers per day. A shower section can provide a maximum of 500 showers per day. Laundry sections wash, dry, and fold laundry. This chapter describes the actions required to conduct shower and laundry operations.

SHOWER AND LAUNDRY REPORTING

10-1. Shower and laundry leaders should stress the importance of daily logs because these daily logs provide information for decision making. Daily shower and laundry logs capture historical information used to schedule resupply of water, fuel, oil, lubricants, and treatment chemicals. In addition, the log is used to schedule maintenance services.

LogBook

- 10-2. Accurate records keeping provide valuable information for field service planning at higher headquarters. Daily production reports provide information for LOGSTAT reporting.
- 10-3. Shower and laundry personnel should obtain the required logistics status information from their higher headquarters. Even a pen and ink shower and laundry logbook can be formatted to collect the appropriate information to make LOGSTAT reporting easier. As a minimum each logbook should include the following:
 - Name of supporting shower and laundry element.
 - Name of unit supported.
 - Date and time.
 - Contact information (Unit, point of contact name, unit address, location, phone number).
 - For the shower element, number of personnel processed (male and female).
 - For the laundry element, amount of laundry processed, cleaned and returned.
 - Any equipment issues discovered during daily preventive maintenance checks or while in operation.
 - Frequency of operation; daily, weekly, or monthly.
 - Number of operating personnel. Record present for duty, not present for duty and reason, and augments.
 - Hours of operation.
 - Types and quantity of supplies used.
 - 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.

LOGISTICS STATUS REPORT

10-4. The LOGSTAT is a status report that provides visibility on critical shortages and logistics complications, used by higher headquarters to plan for crucial supply support, potential reallocation of resources, and to inform courses of action. Disciplined asset reporting via the LOGSTAT is essential to usable forecasting because accurate and timely information enables and drives material decision making.

10-5. LOGSTATs are a snapshot taken in time. LOGSTAT reports account for each unit's specific requirements based on task organization, equipment density, and assigned mission. LOGSTATs include the unit's on hand stockage levels, and what the unit expects to have over the next 24, 48, and 72 hours. The reports must be detailed enough to be useful but simple enough for everyone to prepare and understand. LOGSTAT reports should provide commanders with enough information to support decision making and be tied to the commander's critical information requirements. The reports should not contain superfluous information that is irrelevant and makes compiling the report too difficult or time consuming. Information submitted as a LOGSTAT include, but is not limited to, personnel status to include critical military occupational skill shortages, status of critical supplies, status of major weapon systems, and status of critical support equipment. Examples include transportation assets, materials-handling equipment, water treatment resources, maintenance test sets, and funding authorities.

10-6. LOGSTAT reports are submitted using available command and control or sustainment information systems. The content of the reports generated are based upon the needs of the commander and staff. Reports may be submitted via radio if required. Commanders plan for LOGSTAT report submission during periods of degraded communications. Analog reports are a means for providing status reports during degraded operations. Effective LOGSTAT reporting requires command emphasis. The timing of sustainment status report submissions is based on both the commander's requirements and unit rhythm of military operations. Typically, these reports are submitted at least once daily as well as whenever a significant change occurs. During periods of increased intensity, the commander may require more frequent status updates. See appendix E for LOGSTAT reports.

10-7. At the company level, each platoon submits a LOGSTAT to the executive officer. The executive officer consolidates the company's status for submission to the battalion S-4. Battalion S-4s consolidate the battalion's status into one battalion LOGSTAT for submission to the brigade S-4 who submits it to the division G-4. The battalion S-4 may also submit a copy of the LOGSTAT to the supporting SPO. LOGSTATs give sustainment planners, materiel managers, and maneuver leaders a daily snapshot of consumption, on hand quantities, and upcoming requirements. A disciplined LOGSTAT reporting process enables leaders to monitor the readiness and logistics posture of subordinate units. Figure 5-5 on page 5-13 depicts a high-level view of the LOGSTAT reporting process.

STANDARD OPERATING PROCEDURES

10-8. Units should publish and update internal and external SOPs as necessary to meet changing conditions or to modify existing practices. Internal SOPs cover shower and laundry section responsibilities, policies, product storage, administrative and work controls, protective clothing and equipment, accident reporting, first aid procedures, waste disposal, safety, and housekeeping procedures. The external SOP provides policies, procedures, and guidance to supported units of the shower and laundry operations and expectation for them.

10-9. SOPS should address hours of operation. Regular operating hours must be flexible to meet the needs of the supported unit. The SOPs should include a point of contact and instructions for obtaining services required beyond established operating hours. Units should set aside at least four hours daily for cleaning, refueling, water replenishment and maintenance for all equipment. Typically, a shower team works two 10-hour shifts with two hours of maintenance time per shift. Maintenance is normally performed one hour before operation and one hour after operation.

10-10. SOPs should contain information addressing the health and safety of the assigned shower and laundry specialists.

SUPPLY

10-11. Prior to any mission, shower and laundry personnel should assess the supported unit size and duration of the mission in order to determine the amount of cleaning supplies needed. They should also review appropriate equipment technical manuals' recommended packing lists. All shower and laundry equipment, required cleaning products, and related support equipment should be on hand or on order.

- 10-12. Shower and laundry managers should carry 90 days of supplies for effective 24-hour operations in an immature theater. Storage and transport of 90 days of supplies may be challenging because of space and because manufacturers recommend a maximum amount to keep on hand. Units should avoid storing quantities above those recommended by safety data sheets. If it is not possible to carry a 90-day supply, prior to deployment learn which SSA will be providing the supplies. If possible, units should coordinate with the SSA prior to deploying to avoid scrambling to purchase supplies from non-supply system sources. If the SSA knows the shower and laundry section's consumption history, it can have required stocks on-hand or in the supply pipeline. The shower and laundry section may be assigned to an element that also has a multi-class SSA. If it is not possible to coordinate with the SSA prior to deployment leaders should meet them personally soon after arriving in the undeveloped or the developed theater.
- 10-13. The quantity of supplies needed for shower and laundry services are based on the quantities used during daily operations. Units should maintain an inventory spreadsheet of the shower and laundry cleaning products that indicates the date products are received, date of manufacture, batch or lot number, shelf life expiration date, quantity authorized, and quantity on-hand. Shower and laundry supplies should be stored in a systematic manner in order to be located quickly and easily for issue.
- 10-14. Storage of hazardous materials can create safety hazards and extended term storage may lead to environmental hazards. Units should store hazardous materials in original or approved containers. All containers must be clearly labeled with the appropriate safety data sheet information. Flammables and corrosives should not be stored together. Opened containers with unused product should be stored properly to avoid contamination of other supplies. DLA Disposition Services provides guidance for local turn in of hazardous material. Unused hazardous materials, such as cleaning supplies, petroleum products or paint, should never be thrown away. Hazardous materials facilities are better equipped to handle disposition or shipment of hazardous materials.
- 10-15. Units should store flammable liquids at least 100 feet from wooden structures and 50 feet from noncombustible structures. Compressed gases should be stored separately. All vehicles and equipment should be bonded and grounded prior to using if near hazardous material.
- 10-16. Batteries are perishable items. Proper storage extends battery life by ensuring that the battery is charged and ready for use when issued. Leaders should inspect and test lot samples when the issue date exceeds the expiration date. Unsuitable dry batteries should be disposed of because continuing corrosion can create health and safety hazards.

SHOWER OPERATIONS

10-17. Commanders should coordinate with supported units to match the shower operations hours with the unit's requirements. A well-prepared schedule shows the unit supported, the dates the shower will be available to that unit, and a separate time for males and females. Each supported unit should receive a scheduled time for shower operations to ensure that services are provided in an orderly manner, and coincide with supported units' availability. If a unit schedule is not possible, a general schedule can be implemented with separate hours for males and females.

SHOWER TRAFFIC FLOW

- 10-18. Shower guidelines should direct Soldiers to leave helmet, valuables, and boots in the reserved dressing area. Soldiers then enter the shower area for a shower for as long as seven minutes. Soldiers may leave used soap in the available disposal can or other designated container. Soap is the responsibility of the individual Soldier.
- 10-19. Planners should prepare and post the traffic flow chart at the entrance to the shower point (when required). The traffic flow chart should show the lay out of the shower station, the station's name, and directional arrows or dots to show traffic flow.
- 10-20. Supported units must provide their own guards to protect their valuables and weapons.

SHOWER SCHEDULE

10-21. Section chiefs implement shower schedules so that shower support is not interrupted and to ensure that all supported units are serviced as scheduled. Supported units provide personnel to secure weapons and personal valuables. Female Soldiers are scheduled separately from male Soldiers, but both are allocated the same shower time and resources. If a routine unit schedule is not feasible, a general schedule is implemented to accommodate separate times for males and females. Supported units are responsible for acquiring health care (sundry) packs and furnishing all of their Soldiers personal hygiene items as necessary. The shower site traffic flow runs from the changing area to the shower area to the changing area.

NUCLEAR RADIOACTIVE FALLOUT DECONTAMINATION

- 10-22. 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 provides shower support for decontamination follow these techniques to provide effective and safe operations.
- 10-23. Setup of a shower area for contaminated personnel affected by radiation fallout will be located in an area outside the normal shower section's operational area. The S-3 of the battalion to which the company providing shower support is attached or assigned will assign the shower decontamination location and mission. The battalion S-3 will coordinate for—
 - Engineer support.
 - Preventative medicine support.
 - Field sanitations support.
 - Medical support.
- 10-24. The battalion S-3 must plan for shower and laundry radiological fallout operations and internal procedures should be outlined in the unit tactical SOPs. The unit monitors radiation levels at the shower decontamination site using its organic radiological detection equipment and may request advice and assistance from chemical, biological, radiological, and nuclear personnel on the decontamination or disposal of radiologically contaminated clothing, personal equipment, textiles, and wastewater management. 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. DODI 6490.03, *Deployment Health*, and DODD 6490.02E, *Comprehensive Health Surveillance*, describe the requirements for documentation of CBRN exposures for all DOD personnel. Shower operations personnel may be exposed to radiation during this operation and should have their exposure levels documented.
- 10-25. Shower personnel must wear appropriate PPE when conducting decontamination showers or handling radiologically contaminated clothing or equipment. Standard production reports 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 way to dispose of heavily radiologically contaminated items is by burial. However, units should coordinate with a chemical, biological, radiological, and nuclear support element for advice on proper disposal. A chemical, biological, radiological, and nuclear decontamination element will normally be in the area assisting in monitoring radiation levels and may be tasked to assist in the disposal operation.
- 10-26. Water used for shower decontamination contains radioactive matter. This water must not be allowed to drain into any fresh water source. Engineer and chemical, biological, radiological, and nuclear support personnel should construct a drainage pit or interlocking drainage pits to dispose of this contaminated wastewater. The location of the wastewater site must be reported to higher headquarters, local and host nation environmental agencies. The disposal site must be clearly marked with the appropriate nuclear markers and reported to higher headquarters accordingly. 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

10-27. Standard laundry processes reduce microbial contamination and parasite infestations picked up on fabrics worn by Soldiers. Laundry personnel, depending on where assigned, will routinely handle ordinary laundry and infected laundry.

HOSPITAL LAUNDRY

- 10-28. Laundry personnel assigned to hospital units should use caution when handling soiled hospital laundry. Potential health hazards associated with hospital laundry include physical hazards such as needles, exposure to blood borne pathogens from articles that have gross blood contamination, and the transfer of harmful microorganisms from articles used during management of patients diagnosed with a highly infectious diseases. Shower and laundry specialists wear protective gloves when handling laundry to prevent coming in contact with biological and chemical contamination that may be present.
- 10-29. Laundry personnel may be exposed to soiled laundry containing sharps. Sharps are needles or lancets contaminated with blood. Laundry teams supporting hospital units should implement procedures for handling sharps, such as keeping a needle container available where needles may be found. Supervisors should ensure that laundry specialists always wear the appropriate personal protection equipment. Laundry personnel must wear PPE when receiving soiled hospital linen and clothing. A hair cover is also recommended for individuals with long hair to prevent accidental contact with soiled hospital linens during handling.
- 10-30. Use of an N-95 or N-100 facemask is required when managing soiled hospital laundry labeled as "infective." Particles containing harmful microbes can become aerosolized during handling and inhaled by laundry workers. Only an N-95 or N-100 rated facemask assures protection from aerosolized particles. Use of surgical masks or other face coverings will not provide appropriate protection.
- 10-31. A checker receives soiled clothing and linen on a DA Form 1974 or DA Form 2886. Procedures must be in place to inform medical personnel of their responsibility for ensuring soiled articles are appropriately sorted on-site at the point of generation. Items are sorted by type (sheets, pillowcases, gowns) and are further segregated based on ordinary soiling versus items used with infective patients. Medical personnel should inventory, sort, consolidate, and transport soiled hospital clothing and linen to the laundry in large plastic bags or trashcans. Contaminated linen and hospital clothing identified as "infective" is placed in clearly marked bags by the user prior to turn-in. laundry personnel should not count hospital laundry until it is washed and dried.
- 10-32. Laundry personnel should coordinate with the preventive medicine or the field sanitation team to test water daily, and before any water is resupplied to water trailers or water blivets for chlorine residual and chemical contamination.

PERSONAL PROTECTION AND HYGIENIC PRACTICES

- 10-33. Soldiers' hands, uniforms, faces, and hair may become contaminated when processing loose laundry and linens. Laundry personnel should protect open cuts and any unhealed abrasions or burns on their hands and exposed portions of their arms by using impermeable bandages. Hand washing is essential for minimizing exposure to infectious and other harmful agents and reducing potentially cross-contaminating clean items. Personnel should wash their hands thoroughly with soap and water after handling soiled laundry and before handling clean laundry. Disposable gloves should be changed after handling soiled laundry and before handling clean laundry. Hands should be washed each time disposable gloves are removed. Soldiers' should use a hand sanitizer containing a minimum of 60% ethyl alcohol between glove changes, but not when changing tasks between handling soiled and clean laundry.
- 10-34. The minimum recommended PPE for all laundry personnel include disposable gloves and smock or outer garment to prevent contamination of personal clothing. Additional PPE such as facemask, head covering, and eye protection is recommended for laundry operators responsible for emptying soiled laundry bags into washers and when sorting soiled laundry.
- 10-35. Products used for cleaning laundry and for general housekeeping present health hazards to laundry personnel if not handled properly. The right health protection measures allow shower and laundry personnel

to work with hazardous materials with no ill effects. Since shower and laundry elements stock a variety of cleaning substances, all personnel should be knowledgeable about each product. In addition to government regulations, Soldiers should understand all manufacturer instructions for using and storing hazardous materials.

CUSTOMER SERVICE

- 10-36. Leaders should schedule receiving and reissue operations at different times during the day to avoid cross contamination between soiled and clean laundry.
- 10-37. Communication between the supported unit and the shower and laundry section helps the process work more smoothly, especially during unexpected surges. The shower and laundry NCO should coordinate closely with supported units to provide detailed instructions on laundry service procedures to ensure that the process moves as swiftly and easily as the situation permits.
- 10-38. Leaders should develop contingency plans in case the supported units relocate prior to delivery. Laundry support requires the following documentation from the supported units.

DA Form 1687 (Notice of Delegation of Authority - Receipt For Supplies)

10-39. Prior to receiving services, commanders designate a unit representative on DA Form 1687, commonly referred to as a signature card, authorizing an individual to pick-up and turn-in laundry. Laundry personnel must work with supported units to ensure that DA Form 1687s are up-to-date to avoid breaks in service.

DA Form 3136 (Roster and Statement)

10-40. Laundry section chiefs plan the work flow based on individual bundles (or bulk or organizational laundry support). The unit's representative must submit a listing of all personnel requiring laundry support on the DA Form 3136, prior to the unit receiving services. The listing will include the full name, last, first, middle initial, rank and DOD identification number for every Soldier. The DOD identification number is the 10 -digit number on the back of the common access card.

DA Form 2886 (Laundry List for Military Personnel)

- 10-41. Soldiers fill in the DA Form 2886 for processing individual laundry. This form includes three copies.
 - The first copy is the bundle copy. The supported unit 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.
 - 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 Soldier until the clean laundry is returned.

Loss or Damage Claims

10-42. If individual Soldiers discover that laundry is lost or damaged while in possession, custody, or control of the laundry point, it should be reported through the individual's unit supply sergeant to the laundry section NCOIC. The individual's copy of DA Form 2886 must be maintained in order to substantiate claims. Once items have been determined, damaged or missing the Soldier submits a DA Form 3078 (*Personal Clothing Request*), through the unit supply sergeant, to the laundry section NCOIC. See AR 700-84, *Issue and Sale of Personal Clothing*, for more information regarding personal clothing lost or damaged by government owned, government operated laundry facilities.

RECEIVING LAUNDRY

10-43. Leaders should design and organize the laundry point to achieve sanitary control throughout the laundry process. In addition to properly removing contamination from fabrics, sanitation controls protect personnel from aerosolized hazards and illness from contact with contaminated surfaces and to prevent cross contamination of clean items. Laundry point personnel must wear smocks with sleeves to prevent contamination of personal clothing and should change into clean smocks between receipts and reissue tasks.

10-44. Laundry section chiefs should advise supported units to remove excessive soil, such as solid matter, feces, and vomit from the fabric before submitting laundry for cleaning. Supported units should roll or fold soiled laundry to contain heaviest soil in the center of the laundry bundle before placing in collection bags or submitting for laundry turn-in. Soiled laundry items should be handled with a minimum of agitation and shaking, as this may cause microbial contaminants to be inhaled by laundry personnel.

- Laundry personnel should not handle or shake laundry items in any way that may aerosolize infectious agents.
- Checkers must avoid direct contact with their bodies and personal clothing while handling soiled items being handled.
- Contain soiled items in a laundry bag or designated bin.
- The unit's representative and the receiving section NCOIC should jointly inventory the quantity
 of bundles received.

10-45. Detainees and displaced personnel may have extensive soil, insect, microbial contamination, and face greater risk of having an undiagnosed infectious condition. If the laundry supports detainees their first laundry should be handled as infectious laundry, using the same laundry process and chemicals applied to hospital laundry. Subsequent laundering in support of detainee and displaced persons should be treated as regular laundry unless it meets the definition as infectious laundry.

CHECKING AND MARKING LAUNDRY

10-46. A checker receives, sorts, classifies, and prepares soiled items for laundering. Laundry personnel should always be aware of the hazards from potentially dangerous objects (ammunition, needles, broken glass, and razor blades) when receiving soiled laundry, carrying bags that were filled by supported units, and loading bags into the washing machine.

10-47. Mesh laundry bags should not weigh more than 7.5 pounds. Overfilled bags significantly reduce the effectiveness of detergents and water from removing and washing away soil from fabric. It also prevents all areas of the fabric from exposure to required heating temperatures to thoroughly dry fabrics and kill residual microbes and parasites after washing.

10-48. Laundry that is turned in using a mesh bag should be washed in the bag. Using numbered mesh bags to identify each Soldier's laundry ensures the correct clothing is returned to the Soldier. When mesh bags are not available, supported units should submit laundry in a plastic bag or fabric laundry bag. The checker should remove the DA Form 2886 from the bag and check each item to be sure the laundry list matches the items in the bag. Receiving section personnel verify DA Form 2886 quantities for each bundle. During the DA Form 2886 verification process, the receiving personnel should remove any items left in pockets that can fall out and clog the washing machine's plumbing.

WASHING AND DRYING LAUNDRY

10-49. The laundering process is designed to remove and destroy harmful microorganisms from fabrics. Its effectiveness depends on the following actions: proper load management, proper execution of prescribed procedures when using military or commercial laundry systems, application of detergents formulated for laundering textiles at prescribed temperatures, use of hot water during wash and rinse cycles (when possible), application of a heated drying system, and ensuring laundry is sufficiently dry before reissue.

10-50. Dilution and agitation of textiles in water alone removes substantial quantities of microorganisms. Soaps and detergents help to suspend soil away from the fabric and contain some microbiocidal properties that destroy the cells of microorganisms. Hot water and bleach are each an independently effective means of

destroying microorganisms. The recommended hot water wash temperature with detergent is 160° Fahrenheit (71° Celsius) for a minimum wash cycle of 25 minutes.

- 10-51. A typical laundry process requires water, detergent (or alkali), and agitation to dislodge ordinary soil and other matter from fabrics. The soapy solution releases soil from fabric, holds it in suspension in the wash water, and enables its removal when wastewater is drained and fabric undergoes a rinse and extraction cycle. Although using hot water during the wash and rinse cycles is recommended, lower temperature water may also be effective in destroying microorganisms when the procedure is properly controlled. The effectiveness of a low- temperature wash to destroy microorganisms depends upon use of detergents specifically formulated for colder water and application of chlorine or oxygen bleaches.
- 10-52. The rinse stage helps to remove suspended soil from fabrics. Microbial contamination and insect infestations are also reduced by dilution, depending on the number of rinse cycles used and the type of rinse water treatment.
- 10-53. Removing moisture from washed fabrics inhibits the growth of microorganisms that were not removed during washing. Application of heat also destroys the cells of live microorganisms and insects (bed bugs and lice), to include insect eggs, that may remain on the fabric after washing. Properly washed laundry should be tumbled dried using the highest heat setting possible to maximize the antimicrobial effects of the laundering process. A minimum drying temperature of 140 ° Fahrenheit (60 ° Celsius) should be applied until the laundry is completely dry.
- 10-54. Due to the nature of the Army's laundry equipment, military uniforms and miscellaneous issue clothing services are subject to damages. Water and dryer temperatures are set very hot, causing synthetic materials to burn. Section chiefs should advise supported units that civilian underclothing is the only civilian clothing accepted for services. Female Soldiers must be advised that non-military issue bras may be ruined if laundered in the field laundry equipment. Straps on bras come out of the mesh causing multiple bags to become tangled. Under wires from bras may rip out and clog up the drum drain plumbing.
- 10-55. Excessively soiled clothes should be laundered using the prewash cycle to better clean the clothing and prevent buildup of dirt within the machine. Prewashing consumes more water and generates more wastewater because it is not recycled, but it is better for the equipment. Water from excessively soiled clothes causes more frequent cleaning of the water tanks due to clogged drains and filters.
- 10-56. Laundry personnel should prevent laundry bags from sitting in drums after drying. Removing the bags from the drums and removing laundry from the bags immediately after cycle completion will prevent excessive wrinkles. After the laundry has been washed and dried, it should be transferred to the shipping area to be processed for pickup by the individual supported Soldier or designated unit representative.

LAUNDRY CHEMICALS

- 10-57. Laundry detergent formulations are a mixture of builders, surfactants, and bleaches. Detergents may also contain organic enzymes that aid in breaking up soil.
 - Alkali builders are chemicals that change the quality and properties of wash water to allow detergents and bleaches to work more efficiently. Builders neutralize acids in the wash water by raising the overall potential of hydrogen (pH) to a value greater than neutral (7.0). Increasing the wash water pH helps to cut through dirt, grease, proteins, and other organic material by rupturing the chemical bonds of oil and fat molecules. The increased pH also results in the death of some pathogenic microorganisms.
 - Surfactants are compounds that can loosen, emulsify, and suspend soil in solution. Surfactants
 lower the surface tension between two liquids or between a liquid and a solid. As a result, organic
 compounds such as oils and grease become soluble in water and are removed from the fabric. The
 separated soil is suspended in the wash water and eliminated during the drain and rinse cycles.
- 10-58. Bleaches enhance laundry performance by breaking down the molecular bonds in soil. Bleach components found in a laundry detergent are generally "color-safe" and do not contain chlorine. Nonchlorine or chlorine-free bleaches are made of peroxides (hydrogen peroxide, sodium percarbonate, and sodium perborate) or other oxygen-releasing compounds such as oxalic acid and bromates. Application of a bleach product following the wash cycle will further reduce the microbial load on fabrics.

- Chlorine-based bleach is considered the most effective laundry disinfectant. Hypochlorite in chlorine bleach causes proteins to lose their structure; microbes are killed through the inactivation of proteins.
- Oxygen-based bleach is considered to be environmentally safe because it is non-toxic. Oxygen-based bleach must be registered with the Environmental Protection Agency for proven effectiveness as a laundry disinfectant.

Note: Do not use bleach in the LADS because bleach destroys the plumbing system causing catastrophic failures in the system.

10-59. Sours are acidic chemical compounds with a pH less than 7.0 (generally 3.0-4.0), which may be added during a wash or rinse cycle to return the water to a more neutral pH. Neutralizing the pH increases the effectiveness of chlorine bleach, decreases degradation of fabric fibers, minimizes development of mineral stains on fabric, and reduces the potential for skin irritation. Mineral acid-based sours, those containing hydrochloric, sulfuric, or phosphoric acid, are prohibited due to the potential to form hazardous gases and byproducts that can be extremely harmful to laundry workers and the environment.

LAUNDRY PROCESS

- 10-60. Mesh bags should be half full, overstuffing bags will not allow all surfaces of laundry to be exposed to the washing, rinsing, and drying resulting in poorly laundered clothing. The overstuffing of bags may also cause inefficiencies in drum balancing that lead to longer cycle times.
- 10-61. Laundry sections should use trial and error to find a loading combination that works, and then stay with that loading plan. Over or under loading drums causes balancing problems and drum inverter faults. These conditions may lead to longer cycle times. A typical load of laundry should be 26 to 30 properly loaded mesh bags. Sections should avoid cleaning an uneven number of bags causes the drums not to balance. Drum balance problems also occur when cleaning loose sheets or blankets the item do not distribute evenly in the drum.
- 10-62. Excessively soiled includes sand, dust, and mud; it does not include items soaked in fuel, oil, or other chemicals. Laundry sections should not wash items soaked in petroleum products because the machines are not designed for industrial purposes. It is safe to wash coverall or uniforms with fuel or oil stains as long as the items have not been soaked. If clothing or other textile items are soaked in fuel or oil, or caked with grease, they are considered unserviceable and should be discarded.

Note: Wash coveralls or uniforms exposed to oil or fuel as the last cycle of the day, and immediately purge and clean the LADS still and water tanks at conclusion of laundry cycles.

- 10-63. If soapsuds are visible during rinsing steps laundry personnel should reduce the amount of detergent added. Too much detergent will cause excessive foam in still and water tanks. Too much foam in the still can cause boil-overs and rapid consumption of pre-filters and coalescing filters. If the water pump strainers are not clean, water will not transfer properly during laundry cycles. This will cause poorly washed, rinsed, and dried laundry. Operators should change the water in the LADS on a regular basis.
- 10-64. If lint filters are not clean, then air cannot flow through the drum, and the laundry will not dry. Operators should check labels and set drying temperatures compatible with laundry and use lower temperatures when not drying full loads. Using too high of a drying temperature will shrink laundry.
- 10-65. Laundry personnel should minimize cross contamination when removing cleaned items from washers.

SANITATION CONTROLS

10-66. Laundry operations should be designed and organized to achieve sanitary control throughout the laundry process. Section chiefs should maintain laundry facilities in a clean and sanitary condition. Operators

should keep walls, floors, ceiling, equipment, and fixtures free of mold and mildew and buildup of dust and lint. Empty trash receptacles and cleaning up standing water as required throughout each shift to avoid vectors in the laundry point.

10-67. Laundry processes may generate excessive heat, release noxious vapors, and result in excess moisture throughout the facility. Additionally, dirt, mold, yeast, bacteria and other microbes, animal and human dander, and some insect eggs that are attached to soiled laundry can easily be released into the air, exposing laundry workers to allergens and potentially infectious materials and resulting in contamination of other areas of the laundry operation. Section chiefs should use local exhaust and area (dilution) ventilation to control occupational exposures to heat and chemicals and to control indoor mold growth due to high moisture conditions. Ensure airflow within the laundry facility moves from the clean side of the operation to the soiled side. The soiled side includes receiving, sorting, if performed, and loading laundry into washers. The clean side begins where laundry is put either into an extractor or into the dryer and includes pressing, folding, and laundry reissue, delivery or pickup.

10-68. Section chiefs should maintain a physical separation between soiled and clean laundry:

- Use separate carts to manage soiled and cleaned items. Clean and sanitize common-use carts prior to use with clean laundry.
- Cover carts that are used to move cleaned items or temporarily hold laundry prior to immediate pressing or folding.
- Use separate tables from soiled laundry items to fold clean laundry.
- Keep storage locations dry and free from soil and other substances that can contaminate clean laundry.
- Do not store clean laundry on the same shelves or in the bins that are used to receive soiled laundry.
 Clean and sanitize bins that are used for soiled laundry before using them for clean laundry.

MAINTENANCE

10-69. Preventive maintenance checks and services refers to the care, servicing, inspection, detection, and correction of minor faults before these faults cause serious damage, failure, or injury. An effective maintenance program relies upon the operators to perform required preventive maintenance checks and services at the right intervals to prevent equipment from experiencing premature or undetected failure, and endangering personnel and mission accomplishment.

10-70. Shower and laundry section leaders, platoon leaders and commanders at all echelons, with assigned shower and laundry elements should establish command emphasis to ensure shower and laundry equipment is maintained to standards. Refer to AR 750–1, *Army Materiel Maintenance*, for more information on individual responsibilities for the maintenance of Army materiel. The NCOIC should conduct spot checks and follow-up inspections of all shower and laundry equipment. Preventive maintenance checks and services on equipment ensure equipment is functional or identifies any issue with equipment. If equipment does not function, operators should troubleshoot according to the technical manual and promptly report deficiencies, malfunctions or failures for evacuation according to the local maintenance guidelines.

10-71. When performing preventive maintenance checks and services, shower and laundry personnel can fix problems within responsibilities for operator maintenance. The following are common problems that can be detected by a visual inspection:

- Continuously check for looseness of bolts, clamps, nuts, and screws. Look for chipped paint, bare metal, rust, or corrosion around bolt and screw heads and nuts. Tighten them when loose.
- Check welded areas for chipped paint, rust, corrosion, or gaps.
- Tighten loose connectors. Look for cracked or broken insulation, bare wires and broken connectors. If any problems are found, notify unit maintenance.
- Look for wear, damage and leaks in the hoses and fluid lines, and make sure clamps and fittings are tight. Wet spots mean a leak. A stain by a fitting or connector can also mean a leak.
- Ensure the shower and laundry equipment receives all scheduled and unscheduled services. It may require extra services and care when operated under harsh conditions, such as high or low temperatures, long periods of hard use, or continued use in sand, water, mud, or snow.

• Monitor the condition of mesh laundry bags for serviceability. Replace bags when there are holes or the zippers do not work.

SAFETY PROGRAM

- 10-72. All leaders share responsibility for ensuring safety through workplace inspections; safety and health training; and risk management assessments. Effective unit safety programs provide a safe and healthy environment for all personnel and to prevent or control damage to equipment and facilities. Commanders are responsible for the protection of all personnel, facilities and materiel under their charge. They must ensure compliance with all Army safety and occupational health regulations.
- 10-73. 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.
- 10-74. Leaders should check with higher headquarters safety and occupational health specialists for information on implementing, executing and managing safety and health programs. Higher headquarters command safety offices publish, update, and revise safety policies and procedures that are consistent with federal guidelines. The command safety office may inspect equipment, facilities and operations for compliance with safety regulations.

DAY-TO-DAY SHOWER AND LAUNDRY POINT SAFETY MEASURES

- 10-75. Leaders should instill a sense of safety awareness and every Soldier must watch for unsafe acts or conditions, make on-the-spot corrections, and report unsafe acts or conditions to a first line supervisor. Shower and laundry managers should inspect work areas daily for safety hazards. Managers and supervisors must enforce safety rules and all personnel must be aware of safety guidelines. All personnel should know and apply the following safety precautions when performing shower and laundry operations:
 - Always exercise care when operating equipment or using tools.
 - Do not use equipment unless licensed for or authorized to operate.
 - Always remove watches, rings, earrings, and any item that may cause any safety hazards.
 - Always wear the appropriate PPE for the job being performed.
 - Wear shoes with non-slip soles when working around slippery water and soaps.
 - Use special care when lifting or carrying supplies.
 - Always check vehicle contents for unsafe loads before attempting to offload.
 - Always use chock blocks for parked vehicles.
 - Always use ground guides for all vehicle movement within the shower and laundry area.
 - Never engage in horseplay when on the job, especially when operating equipment of any kind.
 - Always maintain good housekeeping practices.
 - All personnel should be familiar with the location and operation of fire extinguishers.
- 10-76. Good housekeeping serves to minimize exposure to hazards. The following housekeeping tasks can either prevent or mitigate exposure to hazardous materials:
 - Clean floors and counters throughout the work day.
 - Inspect the eyewash station daily.
 - Never block access to exits, emergency equipment and utility controls.
- 10-77. In addition, leaders at every echelon should enforce the following safety precautions:
 - Ensure that fire extinguishers are on hand and positioned ready for use. All personnel should know the location of every fire extinguisher in the area.
 - Examine fire extinguishers at least twice a year.
 - Monitor dates when fire extinguishers were last inspected.

- Conduct night and day fire drills to ensure all personnel know what to do to safeguard lives and property.
- 10-78. Do not use flammable liquids, such as gasoline, as a solvent or cleaning agent. Use only those cleaning and lubricating agents listed in the equipment technical manuals. Rags, patches, or other cleaning material contaminated by cleaning solvents, lubricants, or preservatives will be handled and disposed of as hazardous waste. Such items will be placed in plastic bags and stored in marked airtight containers pending disposal according to local hazardous waste SOP. Any spill of cleaning agents, lubricants, or preservatives will be immediately cleaned from the floor or work area and disposed of in the manner prescribed according to local hazardous waste SOP.
- 10-79. Detergent, sanitizer, and anti-foam are irritants. Impermeable gloves and eye protection must be worn when handling or dispensing these items. Manufacturer safety data sheets should be available for all hazardous materials utilized in the maintenance and operation of shower and laundry equipment. Applicable precautions as specified in the safety data sheets must be enforced in the handling, utilization, storage, and disposal of all materials. Failure to follow this warning may result in personal illness or injury.
- 10-80. Only maintenance personnel shall conduct servicing, beyond troubleshooting on electrical controls and circuits. Contact with energized connections will result in serious personal injury or death.
- 10-81. Vapors and liquid may ignite or explode. Do not smoke or use open flames when connecting fuel hoses, refueling, or when performing maintenance. Flames and fire can occur resulting in severe burns, personal injury, or death.
- 10-82. Never climb into the laundry drum. Personnel must keep their hands, feet, clothing, and loose personal items clear while equipment is operating. Failure to follow this warning may result in serious personal injury, death, and damage to equipment.
- 10-83. Exhaust discharge contains deadly gases. Do not operate the equipment in an enclosed area unless exhaust discharge is properly vented outside. Severe personal injury or death due to carbon monoxide poisoning could result. When the equipment is operating in a sheltered environment the noise levels could cause noise induced hearing loss. Hearing protection must be worn at all times when working near this equipment.
- 10-84. Wastewater generated during laundry operations may contain chemical and biological materials. When maintaining or servicing water plumbing or associated components, personnel must wear impermeable gloves and goggles for protection. Failure to follow this warning may result in serious illness.
- 10-85. Precautions must be taken when working with pressurized (air, water, steam, or thermal fluid) systems. Residual pressure must be vented or isolated to prevent release before hoses, fittings, or equipment are connected or disconnected. Failure to follow this warning may result in personal injury or death.
- 10-86. Keep hands and fingers away from hinge points on ladder halves when opening and closing. Keep hands and fingers away from inner and outer rungs of ladder when adjusting. Never climb on ladder unless knobs and inner locking devices are properly tightened, footings are placed securely upon ground, and ladder is placed securely upon equipment to prevent slipping. Failure to observe this precaution may result in severe personal injury.
- 10-87. Compressed air used for cleaning or drying purposes, or for clearing restrictions, should never exceed 30 pounds per square inch. Wear protective clothing (goggles, shield, gloves), and use caution to avoid injury to personnel.
- 10-88. Exhaust discharge contains deadly gases. Do not operate the LADS in an enclosed area unless exhaust discharge is properly vented outside. Severe personnel injury or death due to carbon monoxide poisoning could result. The LADS can be operated at ambient temperatures between 33 and 120 degrees Fahrenheit outside of a shelter. If ambient temperatures are below 33 degrees Fahrenheit, or environmental conditions such as blowing dust, sand, rain, and solar radiation are present, then the LADS may be operated in a Modified Lightweight Maintenance Enclosure.

FIRE PREVENTION

10-89. Commanders should appoint and train personnel to establish and manage the fire prevention program. The program should be designed to ensure unit personnel are trained in fire abatement and prevention programs to reduce the probability of fires to an acceptable level. A good fire prevention program is designed to detect, eliminate, and minimize unsafe conditions that could cause the loss of life, serious injury, or destruction of property by fire. It requires the personal interest and concentrated effort of every individual. Carelessness is the leading cause of fire. The disregard for established safety procedures is the most common cause of recurring fire loss.

10-90. Commanders should establish a detailed fire prevention policy and procedures in unit SOPs that include a fire prevention checklist. 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: improper storage or ventilation of hazardous or combustible materials; use of faulty or unapproved lighting, heating or other electrical equipment; use of defective material 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.

TOXIC HAZARDS

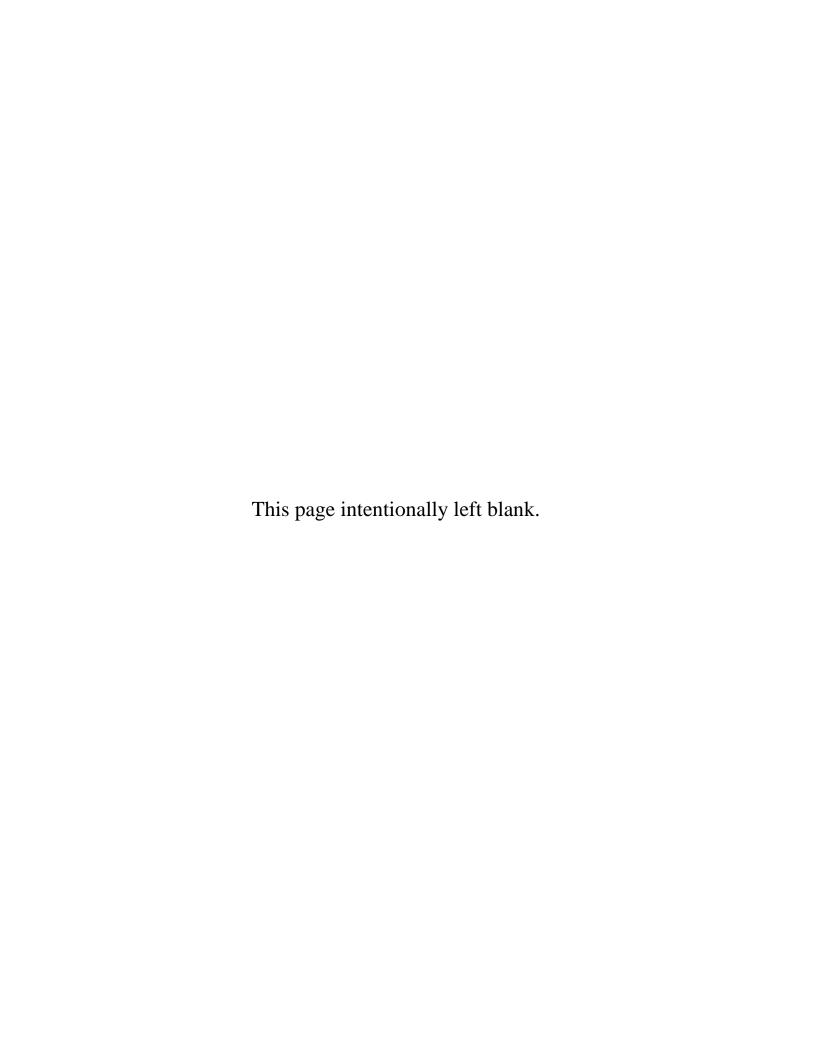
10-91. Shower and laundry specialists routinely handle hazardous materials and generate toxic waste. Petroleum-based fuels are employed to power organic vehicles, material handling equipment, tactical generators, and functional support equipment. Fuels pose personnel hazards in the form of contact, flammability, ingestion, and inhalation. Fuels must be handled with care at all times, with their storage areas clearly marked and designated as non-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.

10-92. 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.

10-93. Wastewater generated from the operations of the shower and the laundry systems is considered gray water. Gray water contains detergents, bleaches, and other substances that 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

10-94. The setup, operation, and dismantling of shower and laundry operations are labor intensive. Shower and laundry equipment requires significant amounts of heavy lifting. Many equipment systems associated with these missions, such as water heaters and pumps, weigh in excess of 490 pounds and require a forklift or a minimum of a six-person lift to position. The erection of operational tents also requires extensive amounts of physical effort. Supervisors ensure that all Soldiers employ proper lifting techniques and body mechanics when setting up, operating, and dismantling operational systems. Soldiers are tasked in teams suitable to the lifting requirements of each task. Forklifts, cranes and other material handling equipment are employed whenever possible to reduce the risk of injuries to operational personnel. Ground guides are always used whenever material-handling equipment is in operation to ensure safety during automated lifting and supply stock and operational equipment repositioning tasks.



Appendix A

Distribution Management

Appendix A is intended to be used as a stand-alone hip pocket summary of the distribution management process. It pulls together the distribution management functions defined in chapter 1 and the operational planning process described in chapter 4. In addition, appendix A provides those functions along with specific tasks by supply class and echelon. However, none of these lists are all inclusive because of the many details and variables at play within each function and task.

THE DISTRIBUTION MANAGEMENT PROCESS

- A-1. Distribution management is a logistics function used to develop an executable plan to distribute supplies from the source of supply throughout a theater of operations. To be effective, distribution management must be integrated into all phases of the operations process. The distribution management process applies to all commodities and at all echelons. The distribution management process includes material management, transportation management, and distribution integration functions.
- A-2. The process begins with identifying a materiel requirement and ends at the time the materiel is either consumed or disposed. The distribution management process is a methodology for ensuring that materiel reaches supported units. Approaching distribution as an enterprise takes into consideration the integration of organizations and functions associated with distribution from the battlefield back to the suppliers, to include the industrial base. It is a complex process in which materiel managers should understand the supported commander's priorities and requirements to plan, prepare, integrate, and distribute within the operational environment. The effectiveness of the overall distribution system is diminished by inefficiency in any of the supporting networks. Distribution management includes—
 - A number of independent and mutually supporting networks (Physical, Communications, Information, and Financial).
 - A complex of joint and service military organizations, civilian sector, working groups, sections, facilities, methods, and procedures.
 - The broad range of activities, described below, affect effective and efficient provision of materiel and personnel:
 - Procuring, storing, maintaining, and issuing materiel to equip and sustain the force from deployment through combat operations and redeployment.
 - Synchronizing multi-nodal, multi-modal, inter-theater, and intra-theater transportation operations for moving materiel and troops in the assigned area.
- A-3. Materiel managers determine and validate materiel requirements for distribution to supported units, obtain materiel to be distributed by appropriate commodity and quantity, and coordinate its distribution according to command priorities. Transportation managers identify units with adequate modes of transportation to meet distribution requirements and verify routes suitable for the distribution plan. Distribution integrators use the information provided by the materiel and transportation managers to develop a distribution plan that will satisfy the materiel requirement by commodity, quantity, priority, recommended mode, routes, and nodes. This information is communicated to the unit operations office for inclusion in the OPORD concept of operations.
- A-4. The distribution management plan must be synchronized with the supported headquarters operation and across all warfighting functions. Failure to achieve this synchronization may result in an un-executable distribution plan that is not realized until the operation begins.

- A-5. The process described in this ATP describes fundamental materiel management, distribution integration, and transportation operations functions that apply to all supply classes and are executable at any echelon. The process may be supported by an automated sustainment information system, but is not system dependent; it may be executed in absence of automation. This is advantageous during periods of degraded communications. Distribution managers, materiel managers, and transportation managers should understand the entire process and all associated functions as it extends from the division close area to the strategic support area. This is important because effective execution of the process captures materiel requirements (by commodity, quantity, and priority) from operational units at the lowest level. The process compiles supply demands and requirement forecasts at each echelon and either directs materiel distribution from theater supply stocks or communicates an actionable demand signal to strategic providers.
- A-6. Distribution management synchronizes and optimizes transportation, its networks, and materiel management with the warfighting functions to move personnel and materiel from origins to the point of need in accordance with the supported commander's priorities. In order to satisfy materiel requirements distribution managers continuously assess distribution capabilities to develop strategies for mitigating issues as they arise.
- A-7. When deployed, sustainment leaders materiel managers, and transportation managers operate in complex environments. By executing the functions within the distribution management process, leaders and materiel managers ensure supply support through a higher degree of accuracy and timeliness in potentially ever-changing operations. The TSC is the distribution manager that plans distribution operations to resupply the theater. If an ESC is deployed, it is the distribution manager for its specified joint operations area. The ESC plans for resupply of the joint operations area. Sustainment brigades plan distribution throughout an AOR or joint operations area (JOA) based on command relationships with an ESC or TSC. DSBs plan distribution to resupply division operations. The medical formations, medical brigades, and multifunctional medical battalions task-organize, control, and execute AHS support through an integrated, end-to-end Army Health System. The MEDCOM (DS) is the senior medical command and control element, providing liaison to the TSC or ESC through a forward team of the medical logistics management center. The combat sustainment support battalion. The CSSB, DSSB, and BSB execute distribution in their respective areas. The distribution managers—
 - Synchronize materiel and movement management operations by maintaining a common operational picture.
 - Ensure visibility of distribution assets to include aerial delivery platforms and palletized loading system flatracks.
 - Enforce priorities established by the supported headquarters.
 - Maintain continuous liaison with medical formations at echelon, to ensure Class VIII distribution enables uninterrupted execution of AHS support.
 - Maintain continuous liaison with supported units to ensure the uninterrupted flow of materiel, units, personnel, mail, and other goods.
 - Coordinate directly with the theater aviation command or designated theater aviation brigade G-3 or S-3 to move commodities via rotary or fixed-wing aircraft.
 - Advise the commander on the use of air movement to support distribution operations.
- A-8. Figure A-1 illustrates the four components of the distribution management process. DMC and SPO logisticians integrate materiel management and transportation management functions to execute the distribution management process. This figure lists materiel, distribution integration, and transportation management functions. The functions are not executed by a single staff section or organization; division of responsibility varies by organization. Materiel management functions are on the left. Materiel managers control end-to-end supply support through the monitoring and managing of receipts, storage, and issue of all supply classes. Transportation management functions are listed on the right. Transportation managers allocate transportation assets and regulate movements according to command priorities and battlefield conditions. Materiel managers and transportation managers engage in the details associated within their specialty independently of one another. The middle oval lists the combined activities of materiel and transportation managers to integrate and synchronize schedules to align personnel, materiel, and movement to fill the requirements of supported units. Distribution managers integrate the functions of transportation

and supply to move cargo from the source of supply to the supported unit. The triangle represents distribution managers working closely and consistently with supported units' operations and logistics staff offices.

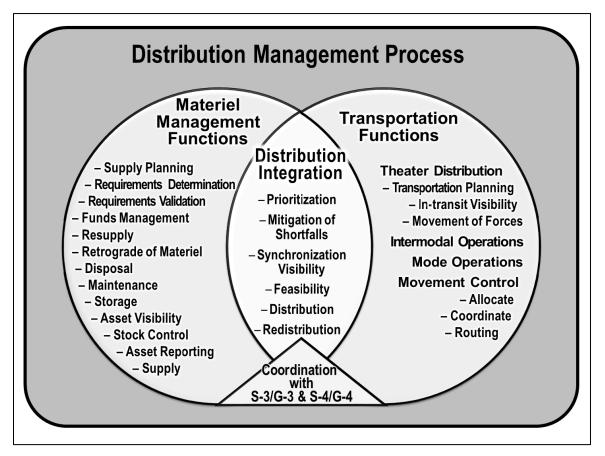


Figure A-1. Distribution management process

MATERIEL MANAGEMENT FUNCTIONS

A-9. Materiel management is the continuous situational understanding, planning, and execution of supply and maintenance capabilities to anticipate, synchronize, and direct all classes of supply to maximize combat power, and enable freedom of action in accordance with the supported commander's priorities. Materiel management is executed during all four Army strategic roles to support the range of military operations. The materiel management component of the distribution process—

- Is executed in the TSC, ESC materiel management branch of the distribution management center.
- Is executed by the sustainment brigade and DSB SPO materiel management branch.
- Is executed in the CSSB and BSB support operations office.
- Is executed by the MEDCOM (DS), medical brigades, multi-functional medical battalions, hospital centers, combat support hospitals, and medical logistics companies.
- Requires coordination between the medical command (deployment support), (MEDCOM (DS)), MEDBDE, MMB, and sustainment headquarters for integration of class VIII into the supply planning process.
- Encompasses coordination between the supported units, the supporting units, materiel managers, distribution managers, and operations staff at all echelons to synchronize with all warfighting functions.

A-10. In the interest of administrative and operating efficiency, materiel management is divided into the functions described below. All of these functions contribute to the application of the fundamentals of supply

and taken together comprise the supply support mission. The functions of feeding, clothing, equipping, and arming the Army brings materiel managers into close relationships with practically every organization in the DOD as well as other federal agencies, host nations, and the industrial base.

A-11. Materiel management is divided into the functions described below—

- Supply planning is forecasting to establish supply stock levels at each support echelon to meet
 mission requirements. Supply planning translates an operating force's composition and mission
 into specific supply requirements. Planning ensures that adequate supplies and transportation
 assets are available.
- Requirements determination is all activities necessary to develop, consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating force. It is based upon requirements communicated from operating forces and forecasted by sustainment organizations supporting these forces.
- Requirements validation is the confirming of requirements and the prioritizing of available
 materiel assets against an established or forecasted requirement. Requirements validation is
 critical to avoid excess materiel and to avoid misuse of logistics transportation and maintenance
 assets. It ensures that no requests for logistics support are passed to a higher headquarters until it
 is determined on-hand assets are insufficient to meet the requirement. Requirements validation
 also includes establishing controlled rates of supply if necessary.
- Funds management is the managing of obligations, expenses, and disbursement of funds by contracting officers with warrant authority, finance officers, and Army leaders at all levels in support of supply operations.
- Resupply is obtaining supplies to meet operational requirements through acquisition, the
 requisition process, cross-leveling, contracting, and local purchase. Resupply is executed by
 supply support organizations and activities.
- Retrograde of materiel is an Army logistics function of returning materiel from the using unit back through the distribution system to the source of supply, directed ship-to location, or point of disposal. (ATP 4-0.1). Retrograde of materiel is executed by supply support organizations and activities.
- Disposal is the systematic removal of uneconomically repairable or obsolete materiel through the
 process of demilitarizing, transferring, donating, selling, abandoning, or destroying materiel. It is
 normally directed through program management channels, but may also be a command decision
 if the operational environment dictates.
- Maintenance is all actions necessary for retaining an item in or restoring it to a specified condition
 to support the supply system. Supply points maintain stocks through quality surveillance and
 control measures in accordance with commodity specific requirements.
- Storage is the organizing, sorting, and safeguarding of materiel. Storage includes warehouse
 management, receiving, storing, issuing, securing, inventory management, and accounting for
 materiel. Warehousing does not imply the use of fixed facilities. Tents, containers, and open areas
 also serve as warehouses.
- Asset visibility provides materiel managers with information on the location, movement, status, and identity of materiel, which facilitates the capability to act upon that information to improve overall performance of the Army supply system. Asset visibility through asset reporting is monitored by the medical logistics management center, TSC and ESC materiel management branches and in the sustainment brigade, DSB, CSSB, DSSB and BSB support operations office.
- Stock control is the maintaining of the proper location and identification of materiel within storage
 locations regardless of class of supply. Materiel managers need correct identification and location
 of materiel stored in warehouses to ensure the proper item of supply is issued to meet requirements.
 Unidentified, improperly stored items result in excess or shortage of items being ordered by
 materiel managers.
- Asset reporting is the vertical and horizontal reporting of on-hand assets and is a critical
 component for asset visibility, requirements determination, and requirements validation. Asset
 reporting occurs from unit supply, PBO, and from all commodity's supply points in accordance
 with the frequency and by commodities directed by the command. Asset reporting is executed by

- the TSC, ESC, sustainment brigade and DSB materiel management branches and in the in the CSSB, DSSB and BSB support operations office.
- Supply is the provision of materiel to supported units by supply support organizations and activities. It involves requesting, receiving, storing, issuing, maintaining, and establishing accountability of all classes of supplies required to execute a unit's assigned mission.

DISTRIBUTION INTEGRATION FUNCTIONS

A-12. Distribution integration aligns personnel, equipment, and materiel requiring distribution (in terms of commodity, quantity, and priority) with adequate transportation capabilities to synchronize distribution to support the concept of operations. Distribution integrators in the various support operations staffs develop the distribution plan for inclusion in the G-3 or S-3 OPORD. This includes, but is not limited to assistance with course of action development and analysis. This function queues the materiel to be moved in accordance of priority and ensures transportation modes with adequate haul capacity are allocated to distribute the materiel. Distribution integration efforts provide the transportation personnel with commodity, quantity, priority, and recommended mode.

A-13. The DIB develops the distribution plan for the supported higher headquarters and contributes information towards the development of the headquarters' movement plan. The DIB integrates the transportation assets anticipated to be available (by mode and node provided by the transportation operations branch) with the forecasted materiel and service requirements (provided by the materiel management branch). By integrating the transportation assets anticipated to be available, against the forecasted materiel, service, and movement requirements, the DIB can develop a distribution plan that; 1) satisfies the future requirements by priority, 2) identifies shortfalls, and 3) informs the supported headquarters G-4 or S-4 of the risk associated with the shortfalls. This enables the G-4 or S-4 to justify requesting additional transportation while in the mid-range planning horizon. The DIB supports the G-4 or S-4 by significantly contributing to the development of the division movement plan. This branch receives all transportation requirements for prioritization and integration into a movement plan. The DIB must receive all transportation requirements for personnel, equipment, unit movement, or resupply in order to determine all movement requirements for the next planning horizon and to begin forecasting movement requirements for a future planning horizon.

A-14. Effective distribution integration synchronizes materiel management and transportation operations by maximizing containerization; increasing standardized transportation and material handling equipment; integrating aerial resupply as a routine method of delivery; synchronizing and integrating retrograde operations across all available transportation modes; reducing storage; reducing transportation mode transfer handling requirements; and increasing in transit visibility. The distribution integration component of the distribution process is—

- Executed in the TSC or ESC materiel management branch of the DMC.
- Executed through coordination among the MEDCOM (DS), MEDBDE, and MMB for class VIII priorities.
- Executed through collocation of the MLMC forward team with the TSC or ESC DMC to ensure that medical requirements are fully integrated into theater distribution operations.
- Executed by the sustainment brigade and DSB SPO distribution integration branch.
- Executed in the CSSB and BSB support operations office.

A-15. Executed by transportation organizations. The following functions shape allocation decisions:

- Prioritization is executed by the DIB in the TSC, ESC, sustainment brigade, and DSB. It is
 executed by the support operations office in the CSSB, DSSB and BSB. This function ensures
 commodities to be distributed are organized and queued in order of priority as determined by the
 command. Priority is expressed as both commodity and unit priority.
- Mitigation of shortfalls is executed by the DIB in the TSC, ESC, sustainment brigade, and DSB.
 It is executed by the support operations office in the CSSB, DSSB and BSB. This function links materiel management to transportation in terms of commodity, quantity, and priority. It ensures that adequate transportation assets are identified and obtained against the requirement deficiency.
- Synchronization is executed by the DIB in the TSC, ESC, sustainment brigade, and DSB. It is
 executed by the support operations office in the CSSB, DSSB and BSB. This function ensures that

- distribution is synchronized with transportation operation cycles to ensure modes with sufficient capacity are available when commodities are positioned for movement. It also synchronizes distribution with operational tasks, phases, and objectives.
- Feasibility determination is executed by materiel management branches in the TSC and ESC. It is
 executed by the support operations office in the sustainment brigade, DSB, CSSB, DSSB and
 BSB. It is also executed by transportation organizations. This consideration determines whether
 the capability exists to move forces, equipment, and supplies from the point of origin to the final
 destination within the time required. If transportation is not feasible, this fact is reported from the
 DIB to the materiel management branch.
- Distribution is the integration of the logistics functions of transportation and supply. It is dependent on materiel management and movement control. The operational process of synchronizing all elements of the logistics system to deliver the "right things" to the "right place" at the "right time" to support the commander. Distribution is planned by the DIB in the TSC, ESC, sustainment brigade, and DSB. It is planned by the support operations office in the CSSB, DSSB and BSB. It is executed by transportation organizations.
- Redistribution is the reallocation excess materiel to other locations in theater using all transportation assets available. Managers may use excess materiel in theater to fill shortages and meet operational requirements.
- Visibility is executed by the DIB in the TSC, ESC, sustainment brigade, and DSB. It is executed
 by the support operations office in the CSSB, DSSB and BSB. It is also executed by transportation
 organizations. This provides the materiel manager current status of commodities that are queued,
 prioritized, and have transportation allocated for movement.

TRANSPORTATION OPERATIONS FUNCTIONS

A-16. The transportation operations branch supports the higher headquarters G-4 or S-4 by significantly contributing to the development of the movement plan. This branch assesses the transportation system to determine the workload capacity of each route by mode and the capabilities at each node. Information on transportation capabilities at each node must include available transportation assets, loading and unloading capability (materials handling equipment, ramps) storage capability, and any other factors that affect transportation services. As required, this branch produces transportation overlays that display the transportation nodes and routes by mode available to support transportation requirements. The transportation operations branch updates the transportation assessment provided in operation orders with new information (if available) prior to developing the next movement plan. If required, the branch will recommend additional checkpoints and critical points be added to main supply routes and alternate supply route if they are necessary to execute movements. These additions should be coordinated up the chain of command all the way to the theater Army to maintain a common list of all checkpoints along all main supply routes and alternate supply routes. This branch determines transportation capabilities available at each node, to operate by each mode for each applicable planning horizon, Transportation capabilities may include Army trucks, aircraft, and watercraft as well as available joint, host nation, multi-national partner, and contracted transportation platforms (to include rail) that are tasked or contracted to support division operations. Transportation managers use the information provided by the distribution integration or support operations staff to coordinate for and allocate modes by commodity, quantity, and priority to ensure timely distribution of the materiel.

A-17. Transportation management is planning, prioritizing, directing, and executing associated functions to transport materiel and personnel by air, ground, and water assets, based on situational understanding of operational requirements and resources, in accordance with commander's priorities. The transportation component of the distribution process—

- Is executed in the TSC, ESC, DMC transportation operations branch.
- Is executed by the sustainment brigade and DSB SPO transportation operations branch.
- Is executed in the CSSB and BSB support operations office.
- Is executed by transportation organizations.

A-18. In the interest of administrative and operating efficiency, transportation management is divided into the functions described below. Transportation management is divided into the functions described below—

- Theater distribution is the flow of equipment, personnel, and materiel within the theater to meet the geographic combatant commander's mission. The TSC, ESC, and DSB transportation operations branches typically establish movement boards to manage transportation policies, priorities, lines of communications status, convoy protection and synchronization, and transportation asset allocation to support theater distribution operations. The SPO mobility section of the sustainment brigade, CSSB, DSSB, and BSB oversees the execution of movements and has direct oversight of movement control operations that includes the flow of personnel, equipment, and materiel within a theater to meet the GCC missions.
- Transportation planning is a logistics function that includes movement control and associated
 activities to incorporate military, commercial, and multinational motor, rail, air, and water mode
 assets in the movement of units, personnel, equipment, and supplies in support the concept of
 operations. When planning motor transportation operations, managers should compare capabilities
 versus requirements, which will identify excesses or shortfalls. When excess or shortfalls exist,
 planners can mitigate these by changing vehicle types to maximize carrying capacity.
- In transit visibility is executed by transportation operations branches in the TSC, ESC, sustainment brigade and DSB. It executed by the support operations office in the CSSB, DSSB and BSB. The ability to track the identity, status, and location of materiel, equipment, personnel, and forces from origin to either consignee or destination. This includes force tracking and status of convoys, unit cargo and equipment, containers and pallets, and transportation assets. In transit visibility provides transportation planners and executors with the capability to anticipate and manage transportation flow over lines of communication.
- Movement of forces is planned by transportation operations branches in the TSC, ESC, sustainment brigade and DSB. It is planned by the support operations office in the CSSB, DSSB and BSB. It is executed by transportation organizations. The operational movement of units within an operations area to quickly and efficiently shift forces and deliver them in a high state of readiness to the desired destination. Transport units move units in an operational area as far forward as mission and operational variables permit.
- Intermodal operations is the process of using multiple modes and conveyances to move troops, supplies and equipment through expeditionary entry points and the network of specialized transportation nodes to sustain land forces. TSC, ESC, sustainment brigade and DSB Intermodal operations is planned by transportation operations branches in the. The CSSB, DSSB and BSB support operations offices plan intermodal operations.
- Mode operations is the execution of movements using various conveyances (truck, railcar, aircraft)
 to transport materiel, equipment, personnel and forces planned by transportation operations
 branches in the TSC, ESC, and DSB and in the sustainment brigade, CSSB, DSSB and BSB
 support operations offices.
- Movement control is the dual process of committing allocated transportation assets and regulating movements according to command priorities to synchronize distribution over lines of communication to sustain land forces. Movement control, as a transportation subordinate function, provides commanders a mechanism to synchronize movements for deployment, redeployment, and distribution operations to support unified land operations and provides them situational understanding to effectively influence the movement in their area of responsibility. Movement control is inherently joint allowing other Services access to Army common user transportation and is a medium for the Army to utilize joint transportation to enhance military operations. Movement control includes—
 - Allocate. The identification and commitment of specific transportation modes to meet a specific distribution requirement based on commodity and priority.
 - Coordinate. The interface with other components of the distribution management process to ensure the commodities, modes, routes, and times are brought together to ensure effective and timely distribution.
 - Routing. The planning, routing, and scheduling of movements on supply routes, which provide order, prevent congestion, and enforce movement priorities in the operational area.

A-19. Figure A-2 provides a visualization of the complexity of the distribution management process. The distribution management process involves data pulls from multiple automated systems, manual requests for

information, and coordination among many different elements. This process applies from the strategic to the tactical levels of warfare and for all supply classes. Materiel and transportation planners work to provide the supply support required to initiate and sustain large-scale combat operations and to resupply despite developments on the battlefield. The distribution management plan is a success only when this is accomplished. Each of the functions, depicted in the flowchart, contain many details and planning considerations that materiel, transportation, and distribution managers work independently and together to ensure supply reaches supported units anywhere on the battlefield.

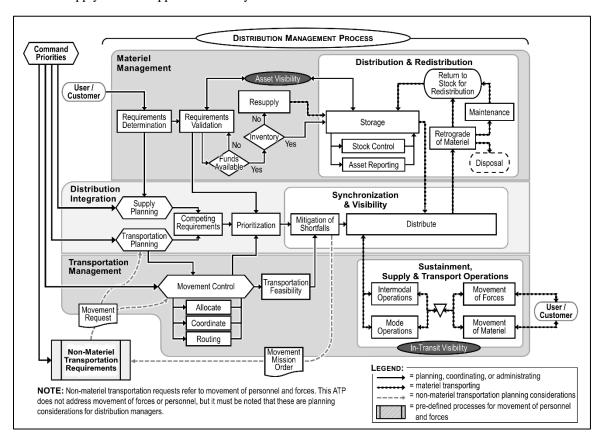


Figure A-2. Distribution management process flowchart

OPERATIONS PROCESS INTEGRATION

A-20. Commanders and staffs at every echelon should integrate the distribution management process into the operations process to develop a distribution plan that is synchronized with all warfighting functions. Failure to execute this integration leads to operational conflicts that hinder timely supply support. Commanders and staffs realize that support operations offices and the distribution plan directly influences the unit's mission success. Close ties between the operations and logistics staff ensures that planners quickly communicate changes to materiel managers located at tactical supply points. Although maneuver G-3 or S-3 and sustainment DMC or SPO are located in separate units, they are inextricably linked during the operations process and MDMP. See FM 6-0, *Commander and Staff Organization and Operations*, for in-depth information on the military decision-making process. The maneuver G-3 or S-3 and the sustainment DMC or SPO collaborate continuously through the phases of planning, preparation, execution and assessment.

PLANNING

A-21. Planning is the art and science of understanding a situation, envisioning a desired end state, and determining effective ways to bring that end state about. Planning allows leaders to understand situations to include potential problems; develop solutions to problems; direct, coordinate, and synchronize actions;

prioritize efforts; and anticipate events. For distribution management, planning helps leaders determine the best application of existing supply capability to meet operational requirements by identifying potential opportunities and threats along the way.

A-22. A critical part of supply support planning means gaining a clear understanding of the task organization of the supported force as this is what provides the basis for planning factors and forecasting. Supply support planning information includes a variety of data, such as consumption rates. 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). In developing the distribution plan, commanders start by analyzing the operational environment in terms of mission, enemy, terrain and weather, troops and support available, time available and civil considerations. The distribution plan outlines who, what, when, where, and how to accomplish supply support.

A-23. During planning, the staffs execute MDMP appropriate for the planning horizon. The TSC may plan for weeks or months in advance whereas a BSB may plan for days and hours. Regardless of the horizon, the outcome of a plan is an executable order. The order synchronizes subordinate unit actions in time, space, and purpose to achieve objectives and accomplish the supply support mission. Understanding the distribution management process, described in chapter 1, to include all subordinate functions facilitates working through the MDMP steps. The order also informs others outside the organization on how to cooperate and provide support. The order describes the situation, establishes a task organization, describes the concept of operations, assigns tasks to subordinate units, and provides essential coordinating instructions.

A-24. Commanders do not attempt to obtain perfection in planning. Imperfect knowledge and assumptions about the future are inherent in planning and planners cannot precisely predict how enemies will react during operations. Planning does not eliminate uncertainty but, instead, identifies actions to take amidst uncertainty. Regardless, planning improves situational understanding and facilitates future decision making. Planning and plans help leaders to—

- Understand the situations, supply requirements, and develop solutions to problems.
- Task-organize the supply and transportation units and prioritize efforts.
- Direct, coordinate, and synchronize action.
- Anticipate events and adapt to changing circumstances.

A-25. Planning keeps sustainment commanders and staffs focused on the future in spite of requirements of current operations. During planning, sustainment commanders and staffs anticipate enemy action and problems and develop contingency plans to provide flexibility. Decision points, branches, and sequels are tools used to create this flexibility. A decision point is a point in space and time where a commander or staff officer expect to make a key decision on a course of action. A decision point is tied to the commander's critical information requirements, enemy, and friendly action. At such points, based on assessment, commanders may decide to alter the initial operations concept. A branch is a contingency option built into the base plan that allows flexibility and adjustment to the plan beyond the initial stages of the operation. A sequel is a subsequent operation based on the possible outcomes of current operations. During planning, sustainment commanders and staffs develop branches and sequels as part of the order.

A-26. Unit G-3 or S-3 and DMC or SPO should collaborate throughout MDMP from receipt of the mission until the OPORD is published and disseminated. Both staffs have roles in developing a distribution plan for inclusion in the order as part of the operations concept. Figure A-3 on page A-10 represents one way in which the G-3 or S-3 and DMC or SPO may interact during planning to develop an order. Each of the MDMP steps and each of the distribution management functions contain assumptions, facts, planning considerations, and hundreds of details that influence mission success. The top lane illustrates the MDMP steps undertaken by commanders and staffs. The three lanes within the support operations lane display the functions distribution integrators, materiel managers, and transportation managers perform separately and together. Arrows between the functions and the MDMP steps demonstrate the complexity of the coordination between support operations, the S-3 or G-3, the commander's staff, and the commander as they uncover and evaluate courses of action. The bottom lane presents a very high-level view of how and when supply points, for all classes of supply, come into the process. Tactical leaders responsible for providing materiel and the mode of transportation receive orders then prepare for their role in supporting the commander using troop-leading procedures. The overall collaboration process depicted in the flowchart graphic applies to supply support

COMMANDER & S-3 / G-3 WARFIGHTING FUNCTION SYNCHRONIZATION **Operations Process and** Mission Command, Movement and Maneuver, Intelligence, Fires, Sustainment, Protection Military Decision-Making Process COA Commander' Receipt of Commander's Rehearsa Review Mission Validate Plan Approval Course of Action (COA COA COA OPORD Mission Analysis Development Analysis Comparison SUPPORT **OPERATIONS** Distribution Transportation DRAFT INITIAL Mitigation of Integration Prioritization Distribution COAs Distribution Shortfalls Supply Planning Transportation Movement Transportation Control Feasibility Management Requirements Materiel Determination Availability Management STORAGE & Supply Support Supply Support **TRANSPORTATION** Execution & **OPERATORS** WARNORD WARNORD Assessment Transportation Units Transportatio

planning for all warfighting functions. See FM 6-0, *Commander and Staff Organization and Operations*, for in-depth information on the military decision making process.

Figure A-3. Collaboration between the S-3 or G-3 and support operations

PREPARATION

A-27. Preparation includes activities performed by sustainment units and Soldiers to improve their ability to execute an operation. Preparation creates conditions that improve sustainment unit opportunities for success and include activities such as rehearsals, training, and inspections. Again, understanding the required distribution management functions assists in preparation. This understanding allows commanders to properly position supply and distribution capability in the most advantageous manner. Preparation helps the force transition from planning to execution. Commanders drive preparation activities with a focus on leading and assessing. The functions of preparation include the following:

- Improve situational understanding. Intelligence channels, analysis of logistics status reports, and information management enable this improvement.
- Develop a common understanding of the plan. This goal requires a thorough understanding of the higher headquarters and supported commander OPORD, detailed OPORD briefings and confirmation back briefs.
- Train and become proficient on critical tasks. However, normally a home station event, training
 continues when deployed. Understanding all required distribution management functions and their
 desired outcomes is critical.
- Task-organize and integrate the force. Establish appropriate command and support relationships and describe them clearly in the OPORD. Ensure every supply and transportation unit understands the units with whom they have a support relationship.
- Ensure forces and resources are positioned. All supply and transportation capability should be positioned to provide the most responsive support to the maneuver commander. All units should have the maximum supplies and transportation assets on hand to support the operation.

EXECUTION

A-28. Execution is the act of putting a distribution plan into action by applying supply and distribution capability to accomplish the mission and adjusting operations based on changes in the situation. Commanders and staff focus their efforts on translating decisions into actions. Execution requires decisions on whether to execute planned actions or to modify the plan using branches and sequels based on opportunities or threats. Although a plan provides a reasonable forecast of how execution occurs, it remains a starting point for operations and will be adjusted as the situation changes. Subordinate commanders need maximum latitude to exploit situations and meet the higher commander's intent when the original order no longer applies. Effective execution requires leaders trained in independent decision making, aggressiveness, and risk taking in an environment of mission command.

A-29. Sustainment commanders continually refine their situational understanding and adjust plans accordingly to exploit opportunities or counter threats. Major activities of execution include assessment, decision making, and directing action.

A-30. Assessment is an integral phase of the operations process and is executed continuously during all phases including execution. Assessment allows sustainment commanders and staffs to determine if the distribution plan is achieving the desired end state and commander's intent. If it is not, assessment allows commanders and staff to make prudent adjustments to the distribution plan to ensure success. The situation and type of operations affect the characteristics of assessment. During large-scale combat operations, assessment focuses the effectiveness of distribution operations and the logistics status of the friendly force. Identifying what and how to assess requires significant effort from the commander and staff. Regardless, assessment includes monitoring the current situation to collect relevant information, evaluating progress toward attaining end state conditions, achieving objectives, and performing tasks, and recommending or directing changes to the plan.

A-31. Decision making involves execution decisions and adjustment decisions. Execution decisions implement actions that are anticipated and planned within the order. These decisions may be based on anticipated circumstances such as route changes, the need to commit additional supply or transportation assets, or the need to execute a branch. The current operations integration cell oversees the synchronization and integration needed to implement execution decisions. Adjustment decision are more complex. These decision modify the operation based on unanticipated circumstances or threats. Adjustment decisions include reallocating resources, changing the operations concept, or changing the mission.

A-32. During execution, commanders and staff may use the rapid decision-making and synchronization process. Unlike the MDMP, the rapid decision-making and synchronization process does not seek optimal solutions. Instead, the rapid decision-making and synchronization process seeks a timely and effective solution within the commander's intent, mission, and concept of operations. The rapid decision-making and synchronization process avoids the time-consuming requirements of developing decision criteria and multiple courses of action. When using the rapid decision-making and synchronization process, sustainment commanders and staffs combine their experiences and intuition to quickly understand the situation, develop a viable option, and direct adjustments to the current order using the decision-making techniques described above. See FM 6-0, Commander and Staff Organization and Operations.

MATERIEL MANAGER RESPONSIBILITIES

A-33. Effective, efficient materiel management is critical to meet supply support requirements adequately and on time. Materiel management is anticipatory and flexible to meet unforeseen supply requirements that invariably arise during large-scale combat operations. Materiel managers identify, plan, resource, and implement management actions to ensure that all classes of supply are available for distribution. Materiel managers engage in detailed, methodical planning, synchronized with the supported operation and across all warfighting functions. Materiel managers anticipate supply requirements, where supplies are needed, and how supplies will be distributed to the supported unit. Failure to achieve synchronization may lead to mission failure.

A-34. Throughout the theater, materiel managers receive requirements, determine where the materiel is available, and direct materiel release based on command guidance and priority. Materiel managers continuously analyze stock status to manage workload and control potential backlogs or bottlenecks

generated by competing requirements and priorities. Near real-time situational awareness of the operational environment and supported commander's requirements drive the distribution, redistribution, and reprioritization of materiel.

A-35. Materiel managers frequently evaluate supply support, through supply operations assessments to determine trends, isolate deficient areas, and correct deficiencies. Materiel managers use management indicators and supply performance indicators to measure the effectiveness of supply support. For example, management indicators include the adequacy of policies and procedures, placement of supply points on the battlefield, responsiveness to supported unit needs, management controls, and operating practices. Supply performance indicators are standards used to evaluates performance to ensure a plan is meeting the commander's intent and to determine if future operations are supportable. Materiel managers alter plans that do not meet operational requirements or commander's intent.

A-36. Materiel managers analyze information to identify existing and potential problems, trends that may change support requirements, and other information requiring staff or command attention. They resolve current problems and prevent potential problems from developing. These include—

- Low supply stockage levels that influence the readiness of subordinate and supported units.
- Trends that dictate modification of support plans or procedures.
- Health threats, changes in medical capabilities, distribution and criticality of patients, changes in patient movement plans, and other factors that drive medical material requirements.
- Information indicating the need for training or emphasis on technical assistance.
- Any information suggesting the need for investigative action, changes in policies or procedures, or modifications.

A-37. Situational awareness of the operational environment gives leaders information on where to locate supply and transportation units to enable effective distribution. Materiel managers and transportation managers engage in the details associated within their specialty independently of one another. However, the combined activities of materiel and transportation managers align personnel, materiel, and movement to fill the requirements of supported units. Materiel managers coordinate the transportation mode selection based upon type, weight and cube, and destination of the materiel. Materiel managers rely upon movement control managers to synchronize multi nodal, multi modal transportation operations to move materiel around the battlefield. Materiel and transportation managers consider the following when selecting the mode (air, land, pipeline, or sea) of transportation, the supply route, and the nodes (warehouses, hospital centers and other patient treatment locations, depots, ammo SSAs, fuel SSAs, water SSAs, multi-class SSAs, and medical materiel SSAs:

- Supported unit mission.
- Support priorities.
- Threat level.
- Road networks and competing road priorities.
- Distance from source of supply to supported unit when deciding where to establish warehousing operations and supply points.
- Evacuation policy, available patient bed and operating room capacity, and special handling requirement (such as cold chain management).
- Availability of personnel and equipment (for example, trucks, helicopters, and material handling equipment).

A-38. The type, amount, availability of transportation assets, and resupply method depend on the location of supply points in relationship to the supported units. Coordination for transportation, ground and air, involves determining the time required for local haul and line haul round trips between supported and supporting units.

A-39. Units dispose of equipment according to each materiel life cycle sustainment plan. As a rule, however, unit supply and property book personnel need only turn in the serviceable, unserviceable, or obsolete materiel to their supporting supply point. Supply point personnel follow the disposition instructions provided by national level materiel managers.

Note: Materiel management tasks are similar for all classes of supply and at all echelons. Manual and information technology business processes inherently feature decision support procedures used for informed supply planning and decisions.

A-40. To be effective, leaders and planners should integrate the distribution management process into all phases of the operations process. Each of the following tables represents a class of supply. The first column provides materiel management functional descriptions. The middle column contains where, by echelon, the function is performed. The third column lists specific tasks associated with the function at that echelon. These task lists are high level and not all inclusive. In addition, each task contains hundreds of details that are too many to list in a single publication. Leaders and planners are encouraged to consult the references cited throughout this manual. In addition to cited references, leaders and planners should also be familiar with unit SOPs, automation end user manuals, and technical manuals to fill in the many details associated with each task.

Table A-1. Class I

Materiel Management Function	Echelon	Supply Support Tasks
	TSC/ESC	Coordinate and respond to geographic combatant command (GCC) lead service common-user logistics designation and multinational force logistics directives.
		Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class I implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
		Review the service support paragraph.
Supply planning is forecasting to establish supply stock levels at each support echelon to meet mission requirements.		Coordinate with supported units to compute and establish stockage objectives for units based on personnel totals.
		Establish ration cycle from initial until a prime vendor is established.
		Push class I forward to sustainment brigades via class I break points or supply support activities.
		Approve host nation water sources to the maximum extent possible.
		Advise the GCC on all food service matters related to food, equipment, facilities, training, and food service personnel;
		Monitor, coordinate, and synchronize all Class I actions.
		Recommend ration cycle.
		Issue class I material directives to expeditionary and sustainment brigades specifying unit support assignments.
		Coordinate with GCC and Army service component command (ASCC) G-4 planners to establish the theater class I sustainment base that includes projecting subordinate class I supply points.
		Identify foreign and host nation support concepts.
		Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Supply planning is forecasting to establish supply stock levels at each support echelon to meet mission requirements.	SB/DSB	Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class I implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
		Review the service support paragraph.
		Monitor, coordinate, and synchronize all Class I actions.
		Prepare guidance on all food service matters related to food, equipment, facilities, training, and food service personnel for the class I portion of support plans, base development plans, and troop basis for future operations with emphasis on class I basic load deployment instructions.
		Coordinate with medical command (deployment support) (MEDCOM (DS)) Veterinary Services personnel to establish inspection, re-issue requirements, and set disposition directives for residual disposal.
		Establish the contingency stockage levels.
		Coordinate with sustainment command planners to establish the class I sustainment base.
		Coordinate with theater sustainment command (TSC) planners to forecast and establish dining facility (DFAC).
		Identify foreign and host nation support concepts.
		Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units.
Supply planning is forecasting to establish supply stock levels at each support echelon to meet mission requirements.	CSSB/DSSB BSB/DSB	Review the situation requirements for the operation.
		Review the mission paragraph for class I implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
		Review the service support paragraph.
		Coordinate with the sustainment brigade (SB) and division sustainment brigade (DSB) class I planners for subsistence support.
		Set stock levels based upon anticipated and historical field feeding reports from supported units.
		Forecast timeline for meal, ready to eat (MRE)- only operations and conversions for contingency operations feeding.
		Monitor and reevaluate contingency stockage levels.
		Advise the commander on the plan to reduce these levels when moving to contingency operations feeding.
		Conduct reconnaissance to determine suitable locations for class I supply support activity (SSA).
		Coordinate with the SB and DSB planners to determine area and unit support assignment (supported unit base).
		Identify foreign and host nation support concepts.
		Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.
Requirements determination is all activities necessary to develop, consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating force.	TSC/ESC	Coordinate with GCC and the ASCC G-1 operations to determine force flow numbers.
		Coordinate with GCC and the /ASCC G-3 planners for operational timelines, enemy prisoner-of-war (EPW) and humanitarian estimates.
		Coordinate with the GCC and joint task force (JTF) or sustainment command assigned to support maneuver G-3 planners for operational timelines, EPW, and humanitarian estimates.
		Coordinate with JTF G-4 planners for Department of the Army (DA) civilian, authorized civilian, and contractor estimates.
		Prepare a logistics support forecast.
		Compute the class I requirements based on assigned personnel strength and mission.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	SB/DSB	Coordinate with assigned sustainment command to determine method of ration delivery, throughput capability and ration order/shipping time.
		Forecast medical diet supplements, religious supplements, and health and comfort packs.
		Prepare a logistics support forecast.
		Forecast medical diet supplements, religious meals and supplements, and health and comfort packs.
Requirements determination is all activities necessary to develop, consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating force.	CSSB/DSSB BSB/DSB	Compile requirements submitted by the brigade support battalion (BSB) field feeding sections or echelons above brigade elements if responsible for area support.
		Compare the theater feeding plan and timeline to requirements received from supported units and current operations and future.
		Compile requirements submitted by the forward support companies (FSC) and battalion S-4s.
		Compare anticipated packaged/containerized ration flow with current material handling equipment (MHE) capability.
		Prepare a logistics support forecast.
		Compute the class I requirements based on assigned personnel strength and mission.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Coordinate with sustainment command and supported unit G-4 or S-4 for priorities of support.
		Coordinate with MEDCOM (DS) and the joint task force veterinarian for local bottled water and class I food production or warehouse facility inspections for inclusion in the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement list.
		Coordinate with MEDCOM (DS) veterinary services personnel for inspection procedures for subsistence prime vendor.
		Establish the feeding plan timeline.
	TSC/ESC	Validate both space and material handling equipment availability for method of ration delivery at class I SSAs.
		Validate and provide the time estimate to subordinate SSA class I planners for travel rations for outbound elements.
Requirements validation is the		Coordinate with the TSC distribution management center (DMC) for operational contract support (OCS) support to fill DFAC operations shortfalls for transitioning units.
confirming of requirements and the prioritizing of available logistics assets		Establish the stockage strength requirements for each class I SSA.
against an established or forecasted requirement.		Direct subordinate support elements to establish their schedule of issues.
		Coordinate with subordinate class I planners to determine on-hand refrigeration, field kitchen equipment, bulk water, and bottled water requirements.
		Coordinate with sustainment command and supported unit G-4 for priorities of support.
	SB/DSB	Validate the local procurement requirements prior to submission to the local procuring activity.
		Validate space and MHE availability for method of ration delivery at class I SSAs.
		Establish the class I packaged loads in accordance with (IAW) battalion S-4 and forward support company feeder requirements.
	CSSB/DSSB BSB/DSB	Coordinate with the supported brigade S-1 section to monitor force flow and projected strength adjustments.
		Establish standard issue factors for subsistence, except operational rations, ensuring sufficient refrigerated and other required storage space is available.
Funds management is the managing of obligations, expenses, and		Attend budget allocation meetings and provide feeding estimates.
disbursement of funds by contracting officers with warrant authority, finance	TSC/ESC	Execute management of class I stocks.
officers, and Army leaders at all levels in support of supply operations.		Coordinate with and pass requirements to the appropriate national inventory control point.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Funds management is the managing of	SB/DSB	Attend budget allocation meetings and provide feeding estimates.
obligations, expenses, and		Execute management of class I stocks.
disbursement of funds by contracting officers with warrant authority, finance officers, and Army leaders at all levels	CSSB/DSSB BSB/DSB	Submit compiled class I requisitions to the SB/DSB IAW requisitions, operational forecasts and the feeding plan timeline.
in support of supply operations.		Coordinate with the contracting office to obtain class I support.
		Coordinate with and pass requirements to the sustainment command.
	TSC/ESC	Coordinate with sustainment command, and MEDCOM (DS) veterinary services personnel, and contracting officers to acquire required menu components.
		Track performance measures that indicate how well the supply chain is responding to identified requirements.
		Coordinate with sustainment command, veterinary personnel.
Resupply is obtaining supplies to meet		Coordinate with contracting officers to acquire menu components.
operational requirements through the requisition process, cross-leveling,		Conduct manager review file oversight and review business workplace messaging.
contracting, and local purchase.	SB/DSB	Coordinate with and pass requirements to the sustainment command.
		Provide technical supervision for food service activities.
		Track performance measures that indicate how well the supply chain is responding to identified requirements.
	CSSB/DSSB	Submit compiled class I requisitions to the SB/DSB IAW requisitions received, operational forecasts and the feeding plan timeline.
	BSB/DSB	Request OCS for host nation or Logistics Civil Augmentation Program *(LOGCAP) class I subsistence, when needed.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Retrograde of materiel is an Army logistics function of returning materiel from the using unit back through the distribution system to the source of supply, directed ship to location, or point of disposal.	TSC/ESC	Monitor class I SSAs for shortages, excess and stockage. Set procedures for receipt and disposal of rations at the ISB and theater activity class I SSA from outbound units IAW TSC or expeditionary sustainment command (ESC) directives. Issue cross leveling notices to class I SSAs. Submit transportation management requests (TMR) to distribution integration branch (DIB) for movement of rations to fill shortages from class I points. Direct movement of class I rations between BSBs as need and IAW supported unit priorities of support. Coordinate with MEDCOM (DS) veterinary
	SB/DSB	services personnel for inspection of retrograde Class I for re-issue or disposal determination. Monitor class I SSAs for shortages, excess and stockage. Set procedures for receipt and disposal of rations at the ISB and theater activity class I SSA from outbound units IAW TSC or ESC
	CSSB/DSSB BSB/DSB	directives. Provide transportation assets for movement of class I as directed by the SB/DSB. Receive outbound unit unused recoverable class I.
	TSC/ESC	Coordinate with sustainment command and MEDCOM (DS) veterinary services personnel to establish disposal procedures. Coordinate with sustainment command or OCS for contract support for waste removal, if available.
		Coordinate with DIB for lift support if rations are to be disposed outside of class I SSA areas.
Disposal is the systematic removal of uneconomically repairable or obsolete materiel through the process of	SB/DSB	Coordinate with sustainment command and MEDCOM (DS) veterinary services personnel to establish disposal procedures.
demilitarizing, transferring, donating, selling, abandoning, or destroying		Coordinate with DIB for lift support if rations are to be disposed outside of class I SSA areas.
materiel.		Coordinate with sustainment command or OCS for contract support for waste removal, if available.
	CSSB/DSSB BSB/DSB	Dispose of unused, damaged or inedible rations IAW SB/DSB veterinary services directives.
		Coordinate with OCS for contract support of waste removal, if available.
		Request or provide transportation assets if rations are to be disposed outside of class I SSA areas.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Maintenance is all actions necessary	TSC/ESC	Coordinate with MEDCOM (DS) veterinary services personnel for class I inspection processes and storage control requirements.
	SB/DSB	Coordinate with MEDCOM (DS) veterinary services personnel for Class I inspection processes and storage control requirements.
for retaining an item in or restoring it to a specified condition to support the supply system.		Compile and forward class I stockage reports to the SB/DSB.
Cupply Systems	CSSB/DSSB BSB/DSB	Monitor supported unit feeder reports, requests, and on-hand inventories.
	BSB/DSB	Coordinate with MEDCOM (DS) veterinary services personnel for class i inspection processes and storage control requirements.
		Direct the receipt, storage, and issue of stocks in accordance with the sustainment command or supported unit support priorities.
	TSC/ESC	Direct the receipt, storage, and issue of stocks in accordance with the sustainment command/supported unit support priorities.
		Coordinate with MEDCOM (DS) veterinary services personnel for procedures in the event that rations are received and are damaged or are not in compliance with specified temperature requirements.
		Provide technical supervision over food service activities.
		Ensure that class I SSAs receive and issue MREs, bottled water, UGR - H&S, supplement, enhancements (non-refrigerated), and HCP.
Storage is the organizing, sorting, and safeguarding of materiel.		Set policies, priorities, allocations, and criteria for priority requests.
		Establish business rules for setting the issue cycle.
		Monitor warehouse MHE status.
		Set procedures for receipt and disposal of rations at the ISB or theater activity class I SSA from outbound units IAW TSC or ESC directives.
	SB/DSB	Direct the receipt, storage, and issue of stocks in accordance with the sustainment command/supported unit support priorities.
		Provide technical supervision over food service activities.
		Ensure that class I SSAs receive and issue MREs, bottled water, Unitized Group Ration-H&S, supplement, enhancements (non-refrigerated), and HCP.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Storage is the organizing, sorting, and safeguarding of materiel.	CSSB/DSSB BSB/DSB	Ensure a constant reliable electricity supply is available prior to requesting refrigerated stocks.
		Monitor, inventory, and inspect stocks routinely IAW theater SOP.
categorating of materioli	B3B/B3B	Coordinate with SB and DSB for additional container, flat rack or pallet MHE handling as needed.
		Monitor class I SSAs for shortages, excess and stockage.
	T00/F00	Coordinate with DIB for ITV status reporting and updates.
	TSC/ESC	Monitor rations delivered and stored in containers for demurrage.
		Compile the daily DOS stockage reports from each subordinate class I SSA.
Asset visibility provides materiel managers with information on the	SB/DSB	Monitor class I SSAs for shortages, excess and stockage.
location, movement, status, and identity of materiel, which facilitates the		Coordinate with DIB for ITV status reporting and updates.
capability to act upon that information to improve overall performance of the Army supply system.		Monitor rations delivered and stored in containers for demurrage.
Army supply system.		Maintain ITV status reporting and updates.
	CSSB/DSSB BSB/DSB	Monitor rations delivered and stored in containers for demurrage. Receive, encode, affix, track and recover radio frequency identification tags for distributed packaged loads.
		Follow the theater marking SOP for container and refrigeration movements including verification and filing of the packing slip.
		Monitor the supply point excess posture.
	TSC/ESC	Ensure compliance with directives related to subsistence supply storage and distribution operations.
		Establish policies and procedures for rations accountability.
Stock control is the maintaining of the proper location and identification of materiel within storage locations regardless of class of supply.		Compile the DOS stockage reports from each subordinate class I SSA.
		Monitor the supply point excess posture.
	SB/DSB	Ensure compliance with directives related to subsistence supply storage and distribution operations.
		Establish policies and procedures for rations accountability.
		Compile the DOS stockage reports from each subordinate class I SSA.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Stock control is the maintaining of the proper location and identification of materiel within storage locations regardless of class of supply.	CSSB/DSSB BSB/DSB	Set refrigerated and dry goods storage procedures and space management IAW the validated issue factors and determined requirements. Monitor, inventory and inspect stocks routinely IAW theater SOP, AR 30-22, and DA Pamphlet 30-22.
Asset reporting is the vertical and horizontal reporting of on-hand assets validation.	TSC/ESC	Monitor class I SSAs for shortages, excess and stockage. Monitor class I SSA refrigeration, MHE and critical ration control equipment readiness rates. Compile the daily DOS stockage reports from each subordinate class I SSA.
	SB/DSB	Monitor class I SSA refrigeration, MHE and critical ration control equipment readiness rates. Compile the daily DOS stockage reports from each subordinate class I SSA.
	CSSB/DSSB BSB/DSB	Monitor supported unit feeder reports/requests and on-hand inventories. Compile and forward class I stockage reports to the SB and DSB.
Supply is the provision of materiel to supported units by supply support organizations and activities.	TSC/ESC	Attend the theater FSMB. Supervise DFAC operations for ISB or theater activities. Issue bulk class I from sustainment base to theater transitioning units and other class I points IAW TSC or ESC directives. Direct CSSB deliveries to subordinate BSB supply points.
	SB/DSB	Attend the theater FSMB. Supervise DFAC operations for ISB and theater activities. Direct CSSB deliveries to subordinate BSB supply points. Issue bulk class I from sustainment base to theater transitioning units and other class I SSAs IAW TSC or ESC directives.
	CSSB/DSSB BSB/DSB	Issue MREs, bottled water, UGR - H&S, supplement, enhancements (non-refrigerated), HCPs, and UGR-A rations, enhancements, and ice. Build loads in the MTRCS and on CROPs for distribution to supported units.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	TSC/ESC	Provide configured load, tonnage and cube figure estimates DIB planners.
		Coordinate with DIB planners for refrigeration, MHE and transportation requirements IAW the ration cycle timeline.
		Assist in expediting critical and special rations.
		Monitor class I SSAs overdue deliveries to ensure they are being resolved effectively and in a timely manner.
		Monitor and account for throughput deliveries from TSC or ESC to subordinate support elements.
		Determine the methods of resupply for class I.
Distribution is the integration of the		Identify organic transportation capabilities.
logistics functions of transportation and		Identify transportation shortfalls by nodes.
supply. It is dependent on materiel		Identify the type of transportation required.
management and movement control. The operational process of		Request additional transportation support.
synchronizing all elements of the logistics system to deliver the "right		Identify the traffic controls that may be necessary to the operation.
things" to the "right place" at the "right time" to support the commander.	SB/DSB	Provide configured load, tonnage and cube figure estimates DIB planners.
''		Coordinate with DIB planners for refrigeration, MHE and transportation requirements IAW the ration cycle timeline.
		Assist in expediting critical and special rations.
		Monitor class I SSAs overdue deliveries to ensure they are being resolved effectively and in a timely manner.
		Determine the methods of resupply for class I.
		Identify organic transportation capabilities.
		Identify transportation shortfalls by nodes.
		Identify the type of transportation required.
		Request additional transportation support.
		Identify the traffic controls that may be necessary to the operation.

Table A-1. Class I (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	CSSB/DSSB BSB/DSB	Deliver packaged loads to supported units or coordinate transportation from theater assets via the SB and DSB for distribution (rail/air/boat) IAW SB and DSB directives.
Distribution is the integration of the logistics functions of transportation and		Provide or coordinate with SB and DSB for intransit security and plastic seals for trucks/containers containing class I.
supply. It is dependent on materiel management and movement control. The operational process of synchronizing all elements of the		Ensure the proper transportation of UGR-As by coordinating between the distribution manager and food service technician for proper mix of refrigerated and dry transport assets.
logistics system to deliver the "right		Determine the methods of resupply for class I.
things" to the "right place" at the "right time" to support the commander.		Identify organic transportation capabilities.
time to support the communication.		Identify transportation shortfalls by nodes.
		Identify the type of transportation required.
		Request additional transportation support.
		Identify the traffic controls that may be necessary to the operation.
	TSC/ESC	Monitor class I SSAs for shortages, excess and stockage.
		Issue cross leveling notices to subordinate SSAs.
		Submit TMRs to DIB for movement of rations to fill shortages from existing class I SSAs.
Redistribution is the reallocating of		Direct movement of class I rations between BSBs as need and IAW supported unit priorities of support.
excess materiel to other locations in theater using all transportation assets available. Managers may use excess	SB/DSB	Issue cross leveling notices to subordinate SSAs.
materiel in theater to fill shortages and meet operational requirements.		Submit TMRs to DIB for movement of rations to fill shortages from existing class I points.
		Direct movement of class I rations between BSBs as need and IAW supported unit priorities of support.
	CSSB/DSSB	Provide transportation assets for movement of class I between supported units as directed by the SB and DSB.
	BSB/DSB	Monitor and report any critical/immediate class I shortages or overages.

Table A-1. Class I (continued)

Legend:

ASCC - Army service component command

BSB – brigade support battalion CSSB – combat sustainment support battalion

CUL – common-user logistics DA – Department of the Army

DFAC – dining facility

DIB – distribution intégration branch DMC – distribution management center

DOS – days of supply

DSB – division sustainment brigade DSSB – division sustainment support battalion

EPW – enemy prisoner-of-war ESC – expeditionary sustainment command

FSMB – food service management board

G-1 – assistant chief of staff, personnel

G-3 – assistant chief of staff, operations

G-4 – assistant chief of staff, logistics GCC – geographic combatant commander

H&S - heat and serve

HCP - health and comfort packs

IAW – in accordance with ISB – intermediate staging base

ITV - in transit visibility

JTF – joint task force LOGCAP – logistics civil augmentation program

augmentation program
MEDCOM (DS) – medical command
(deployment support)

MHE – material handling equipment MRE – meal, ready to eat

MTRCS – multi temperature refrigerated container system joint operations area

OCS – operational contract support S-4 – battalion or brigade logistics staff officer

SB – sustainment brigade

SOP – standard operating procedure

SSA – supply support activity

TMR – transportation movement request

TSC – theater sustainment command UGR – unitized group ration

Table A-2. Class II

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class II implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
		Review the service support paragraph.
Supply planning is forecasting to establish supply stock levels at each support echelon to meet mission requirements.		Coordinate and respond to geographic combatant command (GCC) lead service common-user logistics designation and multinational force logistics directives.
	TSC/ESC	Coordinate with GCC and Army service component command (ASCC) G-4 planners to establish the theater central issue facility as well as any projected subordinate storage points in accordance with (IAW) the operation plans (OPLAN) and operation order (OPORD).
		Prepare guidance for the class II portion of support plans, base development plans, and troop basis for future operations with emphasis on required deployment instructions.
		Issue class II material directives to expeditionary and sustainment brigades specifying unit support assignments.
		Establish the joint operations area (JOA) contingency stockage levels.
		Identify foreign and host nation support concepts.
		Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.

Table A-2. Class II (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class II implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
		Review the service support paragraph.
Supply planning is forecasting to establish supply stock levels at each support echelon to meet mission requirements.	SB/DSB	Advise the commander on replenishment, direct exchange for upgrades, and the service capability.
		Coordinate with theater sustainment command (TSC) or expeditionary sustainment command (ESC) to set disposition directives for retrograde and disposal operations.
		Coordinate with TSC planners to establish the theater central issue facility as well as any projected subordinate storage points IAW the OPLAN and OPORD.
		Identify foreign and host nation support concepts.
		Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.

Table A-2. Class II (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units. Review the situation requirements for the operation.
		Review the mission paragraph for class II implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
		Review the service support paragraph.
Supply planning is forecasting to establish supply stock levels at each support echelon to meet mission requirements.	CSSB/DSSB BSB/DSB	Coordinate with sustainment brigade (SB) and division sustainment brigade (DSB) planners on replenishment, direct exchange for upgrades, and the service capability.
requirements.		Plan for turn-in/reissue operations IAW theater and SB or DSB disposition directives for retrograde and disposal operations.
		Coordinate with SB and DSB and determine/plan for contingency stockage levels.
		Identify foreign and host nation support concepts.
		Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.
		Coordinate with GCC and ASCC G-1 operations to determine force flow numbers.
Requirements determination is all activities necessary to develop, consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating force.	TSC/ESC	Coordinate with GCC and ASCC G-3 planners for operational timelines focusing on reception, staging, onward movement, and integration (RSOI) procedures if supplemental issue or rapid fielding initiatives (RFI) are required.
		Coordinate with subordinate class II planners for issuing requests and receipts.
		Coordinate with TSC to determine method of delivery, throughput capability and order/shipping time.
		Prepare a logistics support forecast.
		Compute class II requirements based on the issue allowances in the CTA 50-900, Clothing and Individual Equipment.

Table A-2. Class II (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	SB/DSB	Coordinate with TSC or ESC for operational timelines focusing on RSOI procedures if supplemental issue or RFI are required.
		Coordinate with TSC or ESC and subordinates for DA civilian, authorized civilian, and contractor estimates.
		Plan for operational-specific equipping requirements (chemical biological radiological and nuclear, cold/hot weather).
Requirements determination is all		Determine the size of issuing and storage sustainment activity that will be required to perform distribution tasks at each level of supply JOA, supply support activities).
activities necessary to develop,		Prepare a logistics support forecast.
consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating force.		Compute class II requirements based on the issue allowances in the CTA 50-900, Clothing and Individual Equipment.
lorce.	CSSB/DSSB BSB/DSB	Coordinate with the SB and DSB for operational timelines focusing on RSOI procedures, if supplemental issue or RFI are required.
		Coordinate with the SB and DSB and supported units for DA civilian, authorized civilian, and contractor estimates.
		Coordinate with supported unit class II planners for issuing requests and receipts procedures.
		Prepare a logistics support forecast.
		Compute class II requirements based on the issue allowances in the CTA 50-900, Clothing and Individual Equipment.
	TSC/ESC	Coordinate with GCC and ASCC G-4 for priorities of support.
		Validate the local procurement requirements prior to submission to the local procuring activity.
		Coordinate with the head of contracting authority for inspection procedures for local prime vendors.
Requirements validation is the confirming of requirements and the		Establish the contingency theater issue plan timeline for reception operations.
prioritizing of available logistics assets against an established or forecasted requirement.		Coordinate with subordinate planners to determine on-hand issue and direct exchange requirements.
	SB/DSB	Validate the local procurement requirements prior to submission to the local procuring activity.
	36/036	Coordinate with assigned contracting activity for inspection procedures for local prime vendors.
		Validate and provide the plan and time estimate to subordinate planners for turn-in and item recovery for outbound elements.

Table A-2. Class II (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	CSSB/DSSB	Determine on-hand issue and direct exchange requirements.
Requirements validation is the confirming of requirements and the		Determine the inspection procedures for local prime vendors.
prioritizing of available logistics assets against an established or forecasted requirement.	BSB/DSB	Validate both space and MHE availability for method of delivery.
requirement.		Coordinate with the SB and DSB for priorities of support.
		Attend G-8 and J-8 budget allocation meetings.
	TSC/ESC	Provide ordering estimates.
Funds management is the managing of	100/200	Execute theater and JOA management of class II.
obligations, expenses, and		Attend budget allocation meetings.
disbursement of funds by contracting	SB/DSB	Provide ordering estimates.
officers with warrant authority, finance officers, and Army leaders at all levels in support of supply operations.	05/005	Execute management of I class II in the assigned area of responsibility.
support of supply operations.	CSSB/DSSB	Attend budget allocation meetings and provide ordering estimates.
	BSB/DSB	Execute management of class II in the assigned area of responsibility.
	TSC/ESC	Coordinate with and pass requirements to the appropriate national inventory control point.
		Provide technical supervision over theater issuing activities.
Resupply is obtaining supplies to meet operational requirements through the requisition process, cross-leveling,		Coordinate with and pass requirements to the TSC.
contracting, and local purchase.		Provide technical supervision over JOA issuing activities.
		Track performance measures that indicate how well the supply chain is responding to identified requirements.
		Coordinate with and pass requirements to the TSC or ESC.
		Provide technical supervision over subordinate issuing activities.
Retrograde of materiel is an Army logistics function of returning materiel	SB/DSB	Track performance measures that indicate how well the supply chain is responding to identified requirements.
from the using unit back through the distribution system to the source of supply, directed ship to location, or point of disposal.		Coordinate with TSC or ESC to acquire basic issue items or non-controlled class II items (such as hand tools, admin/household keeping supplies).
	0000/0000	Receive class II deliveries IAW the SB and DSB issuing and delivery schedule.
	CSSB/DSSB	Receive outbound unit turn-in equipment.
	BSB/DSB	Inspect local procured class II IAW contracting officer directives.

Table A-2. Class II (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Monitor issuing facilities for shortages, excess and stockage.
		Issue cross leveling notices.
	TSC/ESC	Submit TMRs to DIB for movement of equipment to fill shortages from existing in-theater issuing facilities.
Retrograde of materiel is an Army		Determine controlled items that must be returned to national providers when no longer operationally needed.
logistics function of returning materiel from the using unit back through the distribution system to the source of	SB/DSB	Monitor issuing facilities for shortages, excess and stockage.
supply, directed ship to location, or point of disposal.	36/036	Coordinate with TSC or ESC for return shipping information and documentation.
		Provide transportation assets for movement of class II as directed by the SB and DSB.
	CSSB/DSSB	Receive outbound unit unused recoverable class II items.
	BSB/DSB	Receive controlled items that must be returned when no longer operationally needed.
		Coordinate with the SB and DSB for return shipping information and documentation.
	TSC/ESC	Coordinate with national providers to establish in-theater and JOA disposal procedures.
		Coordinate with the GCC and ASCC G-4 for possible FEPP and FERP program instructions.
		Coordinate with Defense Logistics Agency, host nation, TSC OCS for contract support for waste removal.
Disposal is the systematic removal of		Coordinate with DIB for lift support for external-theater disposal.
uneconomically repairable or obsolete materiel through the process of demilitarizing, transferring, donating,	SB/DSB	Coordinate with TSC or ESC to establish disposal procedures.
selling, abandoning, or destroying materiel.		Coordinate with TSC or ESC for possible FEPP and FERP program instructions.
		Coordinate with TSC or ESC OCS for contract support for waste removal, if available.
		Dispose of unused or damaged class II items IAW SB/DSB directives.
	CSSB/DSSB BSB/DSB	Coordinate with OCS for contract support of waste removal, if available.
		Request or provide transportation assets if class II is to be disposed outside of AO.
Maintenance is all actions necessary for retaining an item in or restoring it to a	TSC/ESC	Set policy and procedure for direct-exchange and turn-in requirements.
specified condition to support the supply system.	100/200	Set guidelines for combat loss and consumable determinations.

Table A-2. Class II (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	SB/DSB	Set local policy and procedure for direct- exchange and turn-in requirements IAW TSC or ESC directives.
		Set local guidelines for combat loss and consumable determinations IAW TSC or ESC directives.
Maintenance is all actions necessary for retaining an item in or restoring it to a specified condition to support the supply system.		Provide transportation assets for movement of class II between supported units as directed by the SB and DSB.
System.	CSSB/DSSB BSB/DSB	Enforce local policy and procedure for direct- exchange and turn-in requirements IAW brigade S-4 directives.
		Enforce local guidelines for combat loss and consumable determinations IAW brigade S-4 directives.
		Direct the receipt, storage, and issue of theater stocks in accordance with the ASCC and joint task force support priorities.
	TSC/ESC	Coordinate with providers and subordinates for procedures in the event class II received in a non-standard manner.
		Provide technical supervision over theater issuing activities.
		Ensure that facility supply points receive, account and issue class II IAW the theater issue plan.
Storage is the organizing, sorting, and	SB/DSB	Coordinate with TSC or ESC and subordinates for procedures in the event class II received in a non-standard manner.
safeguarding of materiel.		Provide technical supervision over subordinate issuing activities.
		Ensure that facility supply points receive, account and issue class II IAW the issue plan.
		Establish class II issue point.
		Coordinate with OCS for host nation warehouse leases or brigade Engineers for construction.
	CSSB/DSSB	Receive, account for, and issue class II IAW the issue plan.
	BSB/DSB	Coordinate with brigade S-3 for site security support.
		Coordinate with SB and DSB for additional container, flat rack or pallet MHE handling as needed.
A goot visibility provides asstatist		Compile daily stockage reports from each issuing facility.
Asset visibility provides materiel managers with information on the location, movement, status, and identity of materiel, which facilitates the capability to act upon that information to improve overall performance of the Army supply system.	T00/T	Monitor issuing facilities for shortages, excess and stockage.
	TSC/ESC	Coordinate with DIB for ITV status reporting and updates.
		Monitor containers used to deliver or store equipment for demurrage.
	SB/DSB	Same as TSC/ESC.

Table A-2. Class II (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Asset visibility provides materiel managers with information on the location, movement, status, and identity of materiel, which facilitates the	CSSB/DSSB	Compile daily stockage reports and forward to the SB/DSB.
		Monitor supported unit and AO to include logistics unit locations, class II status and movements utilizing the current ITV system.
capability to act upon that information to	BSB/DSB	Maintain ITV status reporting and updates.
improve overall performance of the Army supply system.		Receive, encode, affix, track and recover radio frequency identification tags for distributed packaged loads.
		Compile stockage reports from each issuing facility.
		Monitor the supply point excess posture.
	TSC/ESC	Ensure compliance with directives related to storage and distribution operations.
Stock control is the maintaining of the proper location and identification of		Establish policies and procedures for accountability.
materiel within storage locations	SB/DSB	Same as TSC/ESC.
regardless of class of supply.		Establish class II supply point.
	CSSB/DSSB	Set storage procedures and space management IAW determined requirements.
	BSB/DSB	Monitor, report, inventory and inspect stocks routinely IAW theater standard operating procedure.
	TSC/ESC	Compile daily stockage reports from each issuing facility.
Asset reporting is the vertical and		Monitor issuing facilities for shortages, excess and stockage.
horizontal reporting of on-hand assets validation.		Monitor issuing facilities MHE and critical controlled equipment readiness rates.
	SB/DSB	Same as TSC/ESC.
	CSSB/DSSB BSB/DSB	Compile daily stockage reports and forward to the SB/DSB and BDE S-4.
	TSC/ESC	Direct bulk issue from port to theater to JOA reception issuing facility and to subordinate issuing facilities.
Supply is the provision of materiel to supported units by supply support organizations and activities.		Direct bulk equipment issue from theater or JOA reception issuing facility to subordinate class II warehouses.
	SB/DSB	Direct bulk issue from theater reception issuing facility and to subordinate issuing facilities.
		Direct supply operations IAW the Issue Plan.
	CSSB/DSSB	Issue class II IAW the issue plan and supported unit requests and direct exchange procedures.
	BSB/DSB	Build configured issue loads for distribution to supported units.

Table A-2. Class II (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Provide configured load, tonnage and cube figure estimates to DIB planners.
		Coordinate with DIB planners for MHE and transportation.
		Assist in expediting critical and special equipment issue requests.
		Coordinate with the distribution integration and mobility branches for status on the distribution of commodities they manage.
	TSC/ESC	Monitor overdue deliveries to ensure they are being resolved effectively and in a timely manner.
		Determine the methods of resupply for class II.
		Identify organic transportation capabilities.
Distribution is the integration of the		Identify transportation shortfalls by nodes.
logistics functions of transportation and supply. It is dependent on materiel		Identify the type of transportation required.
management and movement control.		Request additional transportation support.
The operational process of synchronizing all elements of the		Identify the traffic controls that may be necessary to the operation.
logistics system to deliver the "right	SB/DSB	Same as TSC/ESC.
things" to the "right place" at the "right time" to support the commander.	CSSB/DSSB BSB/DSB	Deliver packaged loads to battalions and forward support companies or coordinate transportation from theater assets via the CSSB for throughput delivery.
		Provide or coordinate with SB, DSB, or BDE S-3 for in-transit security and tamper seals for trucks/containers containing class II.
		Determine logistics release points.
		Determine the methods of resupply for class II.
		Identify organic transportation capabilities.
		Identify transportation shortfalls by nodes.
		Identify the type of transportation required.
		Request additional transportation support.
		Identify the traffic controls that may be necessary to the operation.
		Monitor issuing facilities for shortages, excess and stockage.
	TSC/ESC	Issue cross leveling notices.
Redistribution is the reallocating of excess materiel to other locations in theater using all transportation assets available. Managers may use excess materiel in theater to fill shortages and meet operational requirements.	130,200	Submit TMRs to DIB for movement of equipment to fill shortages from existing in-theater and in-JOA issuing facilities.
	SB/DSB	Monitor issuing facilities for shortages, excess and stockage.
		Submit TMRs to DIB for movement of equipment to fill shortages from existing issuing facilities.
		Issue cross leveling notices.

Table A-2. Class II (continued)

Materiel Management Function		Echelon	Supply Supp	ort Tasks
Redistribution is the reallocating of excess materiel to other locations is theater using all transportation asso available. Managers may use excemateriel in theater to fill shortages a meet operational requirements.	n ets ss	CSSB/DSSB BSB/DSB	class II between the SB and DS	eport any critical/immediate class II
Legend: AO – area of operations ASCC - Army service component command BDE – brigade BSB – brigade support battalion CSSB – combat sustainment support battalion CTA – common table of allowances DA – Department of the Army DIB – distribution integration branch DSB – division sustainment brigade DSSB – division sustainment support battalion ESC – expeditionary sustainment command	FEPP – Federal Excess Peroperty FERP – Federal Excess Reg-1 – assistant chief of states G-3 – assistant chief of states G-4 – assistant chief of states G-8 – geographic combates commander IAW – in accordance with ITV – in transit visibility J-8 – resources, and assessed irectorate of a joint staff JOA – joint operations area		Real Property taff, personnel taff, operations taff, logistics taff, financial atant	MHE – material handling equipment OCS – operational contract support OPLAN – operation plan OPORD – operation order RFI – rapid fielding initiatives RSOI – reception, staging, onward movement, and integration S-4 – battalion or brigade logistics staff officer SB – sustainment brigade TMR – transportation movement request TSC – theater sustainment command

Table A-3. Class III

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class III implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
		Review the service support paragraph.
Supply planning is forecasting to	TSC/ESC	Coordinate and respond to GCC lead Service common-user logistics designation, Theater Petroleum Center, and multi-national force logistics directives.
		Coordinate with JTF J-4 Planners to establish the JOA DFSP and subordinate class III storage points IAW the OPLAN and OPORD.
establish supply stock levels at each support echelon to meet mission		Integrate the quartermaster petroleum liaison team into the TSC petroleum section.
requirements.		Coordinate with GCC and Army service component command (ASCC) G-4 planners to establish the theater DFSP as well as projected subordinate class III storage points IAW the OPLAN and OPORD.
		Prepare guidance for the class III portion of support plans, base development plans, and troop basis for future operations with emphasis on initial fueling and refueling operations.
		Issue class III directives to expeditionary and sustainment brigades specifying unit support assignments.
		Identify foreign and host nation support concepts. Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.

Table A-3. Class III (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	SB/DSB	Establish the contingency stockage levels.
		Coordinate with TSC or ESC to set disposition directives for residual disposal.
		Coordinate with TSC or ESC Planners to establish the theater and JOA DFSP IAW the OPLAN and OPORD.
		Integrate the petroleum pipeline terminal company and petroleum support battalion for DFPS operations and the Quartermaster force provider company for reception, staging, onward movement, and integration fueling support.
		Identify foreign and host nation support concepts.
Supply planning is forecasting to		Develop plans for forecasted support.
establish supply stock levels at each		Develop plans for un-forecasted support.
support echelon to meet mission requirements.		Identify boundaries needed for sustainment purposes.
	CSSB/DSSB BSB	Coordinate with the SB/DSB planners to set contingency stockage levels.
		Coordinate with the SB/DSB planners to set disposition directives for residual disposal.
		Coordinate with the SB/DSB Planners to establish the AO fuel points IAW the OPLAN and OPORD.
		Coordinate with the SB/DSB Planners to determine area/unit support assignment (supported unit base).
		Identify foreign and host nation support concepts. Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.
	TSC/ESC	Coordinate with GCC, ASCC G-3, and JTF J-3 planners for operational timelines.
Requirements determination is all activities necessary to develop, consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating force.		Coordinate with GCC, ASCC G-4, JTF J-4 planners for equipment density, allied/host nation support density lists, and equipment arrival/departure timelines.
		Coordinate with subordinate class III planners for fuel requests and consumption rate forecasts.
Notice.		Prepare a logistics support forecast.
		Compute class III bulk fuel and packaged products requirements based on equipment on hand.

Table A-3. Class III (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Coordinate with TSC, ESC, JTF J-3, and division planners for operational timelines.
	SB/DSB	Coordinate with TSC, ESC, and division J-4 planners for equipment density, allied/host nation support density lists, and equipment arrival/departure timelines.
		Coordinate with subordinate class III planners for fuel requests, support and consumption rate forecasts.
		Prepare a logistics support forecast.
		Compute class III bulk fuel and packaged products requirements based on equipment on hand.
Requirements determination is all activities necessary to develop,		Coordinate with the SB/DSB Planners for operational timelines.
consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating force.	CSSB/DSSB BSB	Coordinate with the SB/DSB Planners and supported units for supported equipment density, allied and host nation support density lists, and equipment arrival and departure timelines.
		Coordinate with the SB/DSB Planners and supported unit class III planners for fuel requests, area support and consumption rate forecasts.
		Forecast long-range materiel requirements, facilities, materials, and equipment needed to operate assigned FSSP.
		Prepare a logistics support forecast.
		Compute class III bulk fuel and packaged products requirements based on equipment on hand.
		Coordinate with the GCC, ASCC G-3, ASCC G-5, the USAPC, and the JTF J-3, J-5 to validate the class III distribution plan/method(s).
Requirements validation is the confirming of requirements and the prioritizing of available logistics assets against an established or forecasted requirement.		Coordinate with subordinate class III planners to determine pipelines, hose lines, bladders, barges, rail cars, tank trucks, and aircraft requirements.
	TSC/ESC	Coordinate with ASCC and JTF J-4 for inspection procedures, quality assurance and surveillance program details and compliance requirements related to receiving, storing, and distribution of class III.
		Establish the theater and JOA petroleum operating concept and the basic stockage concept.

Table A-3. Class III (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	SB/DSB	Coordinate with the TSC, ESC, division, and J-4 to validate the class III distribution plan/method(s).
		Coordinate with subordinate class III planners to determine pipelines, hose lines, bladders, barges, rail cars, tank trucks, and aircraft requirements.
		Coordinate with TSC and division J-4 for inspection procedures, quality assurance/surveillance program details and compliance requirements related to receiving, storing, and distribution of class III.
Requirements validation is the confirming of requirements and the		Validate space availability for distribution and storage methods (pipe, tank, bladder).
prioritizing of available logistics assets against an established or forecasted requirement.		Validate external support commodities needed to support the distribution system (security/engineer.
		Validate the requirement for retail fuel support.
	CSSB/DSSB BSB	Coordinate with the SB/DSB for inspection procedures, quality assurance/surveillance program details and compliance requirements related to receiving, storing, and distribution of class III.
		Validate space availability for distribution and storage methods.
		Validate refuel plans in accordance with support designation (direct, general, area.)
		Prepare issue schedules.
Funds management is the managing of	TSC/ESC	Execute theater/JOA management of class III.
obligations, expenses, and disbursement of funds by contracting officers with warrant authority, finance	SB/DSB	Execute area of responsibility management of class III.
officers, and Army leaders at all levels in support of supply operations.	CSSB/DSSB BSB	Execute AO management of class III.
		Coordinate with and pass requirements to the ASCC, SAPO, JPO, and TSC.
		Provide operational oversight for bulk petroleum.
	TSC/ESC	Track performance measures that indicate how well the supply chain is responding to identified requirements.
Resupply is obtaining supplies to meet operational requirements through the		Conduct manager review file oversight, and review business workplace messaging.
requisition process, cross-leveling, contracting, and local purchase.		Coordinate with and pass requirements to the TSC or ESC.
	SB/DSB	Provide operational oversight for bulk petroleum.
		Track performance measures that indicate how well the supply chain is responding to identified requirements.
		Conduct manager review file oversight, and review business workplace messaging.

Table A-3. Class III (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Resupply is obtaining supplies to meet operational requirements through the requisition process, cross-leveling,	CSSB/DSSB BSB	Coordinate with and pass requirements to the SB/DSB. Provide operational oversight for bulk petroleum.
contracting, and local purchase.		Perform fuel recovery, defueling and inspection of retrograded class III.
	TSC/ESC	Coordinate with USAPC to establish in-theater reclamation and defueling procedures.
		Coordinate with TSC to establish in-JOA reclamation and defueling procedures.
	100/200	Monitor terminal and refuel points for shortages, excess and stockage.
		Issue cross-leveling notices or redirect transportation of inbound fuel as needed.
Retrograde of materiel is an Army logistics function of returning materiel		Coordinate with TSC or ESC to establish reclamation and defueling procedures.
from the using unit back through the distribution system to the source of	SB/DSB	Monitor terminal and refuel points for shortages, excess and stockage.
supply, directed ship to location, or point of disposal.		Issue cross-leveling notices and/or redirect flow/transportation of inbound fuel, as needed.
		Provide transportation assets for movement of class III as directed by the SB/DSB.
	0000/0000	Perform reclamation and defueling operations.
	CSSB/DSSB BSB	Report refuel points shortages, excess and stockage.
		Coordinate with the SB and DSB to assist in redirection of inbound throughput fuel as needed.
	TSC/ESC	Coordinate with USAPCto establish in-theater and in-JOA Army-owned class III product disposition instructions.
		Coordinate with DLA-Energy to establish in- theater DLA-Energy-owned class III product disposition instructions.
Disposal is the systematic removal of uneconomically repairable or obsolete		Coordinate with TSC to establish in-JOA DLA- Energy-owned class III product disposition instructions.
materiel through the process of demilitarizing, transferring, donating, selling, abandoning, or destroying materiel.		Coordinate with the TSC or ESC to establish Army-owned class III product disposition instructions.
	SB/DSB	Coordinate with TSC or ESC to establish in- JOA DLA-Energy-owned class III product disposition instructions.
	CSSB/DSSB BSB	Dispose of Army-owned class III product IAW theater disposition instructions.
		Coordinate with SB/DSB OCS for contract support of waste removal/fuel disposition, if available.

Table A-3. Class III (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Maintenance is all actions necessary for retaining an item in or restoring it to a specified condition to support the supply system.	TSC/ESC SB/DSB	Coordinate with USAPC for sampling, laboratory testing, quality assurance and
	CSSB/DSSB BSB	surveillance programs. Coordinate with USAPC for sampling, laboratory testing, quality assurance and surveillance programs. Conduct sampling, testing, and enforce quality assurance and surveillance programs.
		Direct the receipt, storage, and issue of theater and JOA stocks in accordance with the ASCC/JTF support priorities.
	TSC/ESC	Coordinate with USAPC and DLA-Energy for procedures in the event that fuel is received in a non-standard manner.
		Provide operational supervision over theater fuel/re-fueling activities.
		Ensure that fuel points receive and issue the appropriate product IAW safety/environmental procedures.
	SB/DSB	Direct the receipt, storage, and issue of stocks in accordance with the TSC, ESC, and JTF J-4 support priorities.
Storage is the organizing, sorting, and		Coordinate with TSC or ESC for procedures in the event that fuel is received in a non-standard manner.
safeguarding of materiel.		Provide operational supervision over fuel and re-fueling activities.
		Ensure that fuel points receive and issue the appropriate product IAW safety and environmental procedures.
	CSSB/DSSB BSB	Establish the class III storage and retail fueling point as directed by the SB/DSB.
		Receive, store, and issue stocks IAW SB/DSB directives and support priorities.
		Coordinate with the SB/DSB for procedures in the event that fuel is received in a non-standard manner.
		Provide operational supervision over retail fuel and re-fueling activities.
		Ensure that retail fuel points receive and issue the appropriate product IAW safety and environmental procedures.
		Compile the daily terminal inventory reports.
Asset visibility provides materiel managers with information on the		Maintain daily pumping schedules for the forecasted week.
location, movement, status, and identity of materiel, which facilitates the capability to act upon that information to improve overall performance of the Army supply system.	TSC/ESC	Compile the monthly pipeline schedule Monitor terminal and fuel points for shortages, excess and stockage.
		Coordinate with DIB for ITV status reporting and updates.
	SB/DSB	Same as TSC/ESC.

Table A-3. Class III (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Asset visibility provides materiel managers with information on the location, movement, status, and identity of materiel, which facilitates the		Compile daily stockage reports and forward to the SB/DSB.
	CSSB/DSSB	Monitor supported unit and AO to include logistics unit locations, fuel status and movements utilizing the current ITV system.
capability to act upon that information	BSB	Maintain ITV status reporting and updates.
to improve overall performance of the Army supply system.		Follow the theater marking SOP for petroleum and HAZMAT movements including load inspection, verification and filing of the packing slip.
		Compile the daily stockage reports from each subordinate.
		Monitor the fuel point and storage excess posture.
	TSC/ESC	Ensure compliance with directives related to sampling, quality assurance, safety, environmental and distribution operations.
Stock control is the maintaining of the		Establish policies and procedures for consumption accountability.
proper location and identification of	SB/DSB	Same as TSC/ESC.
materiel within storage locations regardless of class of supply.		Compile daily stockage reports and forward to the SB/DSB.
	CSSB/DSSB BSB	Monitor supported unit and AO to include logistics unit locations, fuel status and movements utilizing the current ITV system.
		Maintain ITV status reporting and updates.
		Follow the theater marking SOP for petroleum and HAZMAT movements including load inspection, verification and filing of the packing slip.
	TSC/ESC	Provide the complete terminal inventory reports to the JPO daily.
		Provide a weekly terminal message report to DLA-Energy.
		Monitor and compile input station, pump station, takeoff receiving station reports.
Asset reporting is the vertical and horizontal reporting of on-hand assets validation.		Monitor terminal and refuel point critical equipment readiness rates.
		Provide the complete terminal inventory reports to the TSC or ESC daily.
	SB/DSB	Provide a weekly terminal message report to TSC or ESC.
		Monitor and compile input station, pump station, takeoff receiving station reports.
		Monitor terminal and refuel point critical equipment readiness rates.

Table A-3. Class III (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Asset reporting is the vertical and	CSSB/DSSB BSB	Prepare daily inventory reports and forward to the SB/DSB.
		Compile and forward class III stockage reports to the SB/DSB.
horizontal reporting of on-hand assets validation.		Compile and report supported unit requests, on- hand inventories, and retail usage statistics to the SB/DSB.
		Maintain FSSP critical equipment readiness rates.
	TSC/ESC	Direct bulk class III issue from port to theater sustainment base and to theater class III points.
Supply is the provision of materiel to		Direct bulk class III issue to JOA class III points.
supported units by supply support organizations and activities.	SB/DSB	Direct bulk issue to subordinate class III points.
organizations and activities.	CSSB/DSSB BSB	Issue class III IAW the issue plan and supported unit requests.
		Direct class III distribution IAW petroleum supply chain layout (offshore petroleum discharge system, pipeline, tanker truck, air).
		Coordinate with DIB planners for transportation requirements IAW the petroleum distribution plan.
	TSC/ESC	Assist in expediting critical and special fuel requests.
		Monitor fuel points and terminals overdue deliveries to ensure they are being resolved effectively and in a timely manner.
		Determine the methods of resupply for class III.
		Identify organic transportation capabilities.
Distribution is the integration of the logistics functions of transportation and supply. It is dependent on materiel		Identify transportation shortfalls by nodes.
		Identify the type of transportation required.
		Request additional transportation support.
management and movement control. The operational process of		Identify the traffic controls that may be necessary to the operation.
synchronizing all elements of the logistics system to deliver the "right		Direct class III distribution IAW petroleum supply chain layout.
things" to the "right place" at the "right time" to support the commander.		Coordinate with DIB planners for transportation requirements IAW the petroleum distribution plan.
		Assist in expediting critical and special fuel requests.
	SB/DSB	Monitor fuel points and terminals overdue deliveries to ensure they are being resolved effectively and in a timely manner.
		Determine the methods of resupply for class III.
		Identify organic transportation capabilities.
		Identify transportation shortfalls by nodes.
		Identify the type of transportation required.
		Request additional transportation support.
		Identify the traffic controls that may be necessary to the operation.

Table A-3. Class III (continued)

Materiel Management Function		Echelon	Supply Suppo	rt Tasks
				ue class III IAW SB, DSB, and prities and supported battalion
				dinate with SB/DSB or brigade S-3 curity and tamper seals for trucks III.
Distribution is the integration of the logistics functions of transportation a	and		Determine logis	tics release points.
supply. It is dependent on materiel			Expedite critical	and special fuel requests.
management and movement control The operational process of synchronizing all elements of the	l.	CSSB/DSSB BSB		overdue deliveries to ensure they yed effectively and in a timely
logistics system to deliver the "right things" to the "right place" at the "right	ht		Determine the r	nethods of resupply for class III.
time" to support the commander.	111		Identify organic	transportation capabilities.
			Identify transpo	rtation shortfalls by nodes.
			Identify the type	of transportation required.
			Request additio	nal transportation support.
			Identify the traffic controls that may be necessary to the operation.	
			Monitor termina excess and stoo	I and fuel points for shortages, ckage.
	Redistribution is the reallocating of excess materiel to other locations in theater using all transportation assets		Issue cross-leve transportation o	eling notices or redirect the flow or finbound.
excess materiel to other locations in theater using all transportation asse			for movement o	rtation movement requests to DIB fuel to fill immediate shortages theater fuel points.
available. Managers may use exces materiel in theater to fill shortages a		SB/DSB	Same as TSC/ESC.	
meet operational requirements.	iiu	CSSB/DSSB		rtation assets for movement of n supported units as directed by the
		BSB		ort any critical and immediate fuel erages.
Legend: AO – area of operations ASCC - Army service component command BSB – brigade support battalion CSSB – combat sustainment support battalion DA – Department of the Army DFSP – Defense Fuel Support Point DIB – distribution integration branch DLA – Defense Logistics Agency- Energy DSB – division sustainment brigade DSSB – division sustainment support battalion ESC – expeditionary sustainment command	FSSP – fuel system s G-3 – assistant chief operations G-4 – assistant chief of G-5 – assistant chief of GCC – geographic cocommander HAZMAT – hazardous IAW – in accordance ITV – in transit visibilit J-3 – operations direct staff J-4 – logistics director staff J-5 – plans directorate		of staff, of staff, logistics of staff, plans ombatant s materials with ty ctorate of a joint rate of a joint	JOA – joint operations area JPO – Joint Petroleum Office JTF – joint task force OCS – operational contract support OPLAN – operation order S-4 – battalion or brigade logistics staff officer SAPO – subarea petroleum office SB – sustainment brigade SOP – standard operating procedure USAPC – United States Army Petroleum Center TSC – theater sustainment command

Table A-4. Class IV

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class IV implications and requirements.
		Review the execution paragraph and concept of operation.
	TSC/ESC	Review the coordinating instructions subparagraph.
	130/230	Review the service support paragraph.
		Coordinate and respond to GCC lead Service common-user logistics designation and multinational force logistics directives.
		Identify foreign and host nation support concepts. Develop plans for forecasted support.
		Develop plans for un-forecasted support.
Supply planning is forecasting to		Identify boundaries needed for sustainment purposes.
establish supply stock levels at each		Review task organization for troop units.
support echelon to meet mission requirements.		Review the situation requirements for the operation.
		Review the mission paragraph for class IV implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
	SB/DSB	Review the service support paragraph.
	22/202	Coordinate with GCC, Army service component command (ASCC) engineer, and G-4 planners to establish the theater central class IV yard and subordinate storage points IAW the OPLAN and OPORD.
		Identify foreign and host nation support concepts. Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.

Table A-4. Class IV (continued)

Materiel Management Function	Echelon	Supply Support Tasks
<u> </u>		Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class IV implications and requirements.
		Review the execution paragraph and concept of operation.
Supply planning is forecasting to	CSSB/DSSB	Review the coordinating instructions subparagraph.
establish supply stock levels at each support echelon to meet mission	BSB	Review the service support paragraph.
requirements.	ВЗВ	Coordinate with TSC, JTF engineer, and J-4 planners to establish the JOA central class IV yard and subordinate storage points IAW the OPLAN and OPORD.
		Identify foreign and host nation support concepts. Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.
		Prepare guidance for the class IV portion of support plans, obstacle plans, and base development plans.
		Prepare a logistics support forecast.
	TSC/ESC	Compute class IV requirements based on the mission needs, local unit SOP, and allowances in the CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).
	SB/DSB	Issue class IV material directives to expeditionary and sustainment brigades specifying unit support assignments.
		Prepare a logistics support forecast.
Requirements determination is all activities necessary to develop, consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating		Compute class IV requirements based on the mission needs, local unit SOP, and allowances in the CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).
force.		Coordinate with ESC and division engineer planners to establish the class IV yard and subordinate storage points IAW the OPLAN and OPORD.
	CSSB/DSSB	Prepare a logistics support forecast.
	BSB	Compute class IV requirements based on the mission needs, local unit SOP, and allowances in the CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).
	SB/DSB	Issue class IV material directives to CSSB yard managers.
	CSSB/DSSB BSB	Plan for management of contingency stockage levels.

Table A-4. Class IV (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Prepare guidance for the class IV portion of support plans, obstacle plans, and base development plans.
Requirements determination is all		Prepare a logistics support forecast.
activities necessary to develop, consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating	TSC/ESC	Plan the locations of engineer forward supply points for the delivery of engineer configured loads of Class IV barrier material.
force.		Compute class IV requirements based on the mission needs, local unit SOP, and allowances in the CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, And Heraldic Items).
Requirements validation is the confirming of requirements and the prioritizing of available logistics assets		Issue class IV material directives to expeditionary and sustainment brigades specifying unit support assignments.
against an established or forecasted	00 (000	Prepare a logistics support forecast.
requirement.	SB/DSB	Compute class IV requirements based on the mission needs, local unit SOP, and allowances in the CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).
Funds management is the managing of obligations, expenses, and disbursement of funds by contracting officers with warrant authority, finance officers, and Army leaders at all levels in support of supply operations.	CSSB/DSSB BSB	Coordinate with ESC and division engineer planners to establish the class IV yard and subordinate storage points IAW the OPLAN and OPORD.
		Prepare a logistics support forecast.
		Compute class IV requirements based on the mission needs, local unit SOP, and allowances in the CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).
	SB/DSB	Issue class IV material directives to CSSB yard managers.
	CSSB/DSSB BSB	Plan for management of contingency stockage levels.
	TSC/ESC	Advise the SB/DSB on replenishment and the service capability.
Resupply is obtaining supplies to meet operational requirements through the requisition process, cross-leveling, contracting, and local purchase.	SB/DSB	Coordinate with the TSC or ESC to receive disposition directives for retrograde and disposal operations.
	CSSB/DSSB BSB	Coordinate with GCC, ASCC G-3, and engineer planners for operational timelines, obstacle and barrier plans, base construction and improvement plans, EPW site construction and humanitarian and host nation assistance estimates.

Table A-4. Class IV (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Retrograde of materiel is an Army	TSC/ESC	Coordinate with JTF J-3 and engineer planners for operational timelines, obstacle and barrier plans, base construction and improvement plans, EPW site construction and humanitarian and host nation assistance estimates.
logistics function of returning materiel from the using unit back through the distribution system to the source of	SB/DSB	Coordinate with subordinate class IV planners for issuing requests and receipts.
supply, directed ship to location, or point of disposal.	CSSB/DSSB BSB	Coordinate with TSC, ESC, and division engineer planners for operational timelines, obstacle and barrier plans, base construction and improvement plans, EPW site construction and humanitarian and host nation assistance estimates.
Disposal is the systematic removal of uneconomically repairable or obsolete materiel through the process of demilitarizing, transferring, donating, selling, abandoning, or destroying materiel.	TSC/ESC	Coordinate with subordinate class IV planners for issuing requests and receipts.
	SB/DSB	Coordinate with TSC or ESC to determine method of delivery, throughput capability and order ship time.
	CSSB/DSSB BSB	Coordinate with the SB/DSB for operational timelines, obstacle and barrier plans, base construction and improvement plans, EPW site construction and humanitarian and host nation assistance estimates.
Maintenance is all actions necessary for retaining an item in or restoring it to a specified condition to support the supply system.	TSC/ESC	Coordinate with supported unit engineers for issuing requests and receipts.
	SB/DSB	Plan for operational-specific engineering requirements (sunshades, berms, canal).
	CSSB/DSSB BSB	Determine the size of issuing and storage sustainment activity that will be required to perform distribution tasks.
Storage is the organizing, sorting, and	TSC/ESC	Coordinate with GCC, ASCC G-4, and JTF J-4 for priorities of support.
safeguarding of materiel.	SB/DSB	Coordinate with subordinate planners to determine on-hand issue requirements.

Table A-4. Class IV (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	CSSB/DSSB BSB	Validate the local procurement requirements prior to submission to the local procuring activity.
Asset visibility provides materiel managers with information on the	TSC/ESC	Coordinate with the head of contracting authority for inspection procedures for local prime vendors.
location, movement, status, and identity of materiel, which facilitates the capability to act upon that information	SB/DSB	Coordinate with subordinate planners to determine on-hand issue requirements.
to improve overall performance of the Army supply system.	CSSB/DSSB BSB	Validate the local procurement requirements prior to submission to the local procuring activity.
	TSC/ESC	Coordinate with assigned contracting activity for inspection procedures for local prime vendors.
Stock control is the maintaining of the proper location and identification of materiel within storage locations	SB/DSB	Validate both space and MHE availability for method of delivery at yards.
regardless of class of supply.	CSSB/DSSB BSB	Coordinate with the SB/DSB to receive the plan and time estimate for turn-in from outbound elements.
	TSC/ESC	Coordinate with the SB/DSB for priorities of support.
Asset reporting is the vertical and horizontal reporting of on-hand assets validation.	SB/DSB	Coordinate with supported unit sustainment activities for distribution and issuing/delivery procedures.
	CSSB/DSSB BSB	Attend G-8 and J-8 budget allocation meetings and provide ordering estimates.
Supply is the provision of materiel to	TSC/ESC	Execute theater and JOA management of class IV.
supported units by supply support	SB/DSB	Execute management of assigned class IV.
organizations and activities.	CSSB/DSSB BSB	Attend budget allocation meetings and provide ordering estimates.
Distribution is the integration of the logistics functions of transportation and supply. It is dependent on materiel management and movement control. The operational process of synchronizing all elements of the logistics system to deliver the "right things" to the "right place" at the "right time" to support the commander.	TSC/ESC	Execute management of class IV. Determine the methods of resupply for class IV. Identify organic transportation capabilities. Identify transportation shortfalls by nodes. Identify the type of transportation required. Request additional transportation support. Identify the traffic controls that may be necessary to the operation.
	SB/DSB	Coordinate with and pass requirements to the appropriate national inventory control point. Determine the methods of resupply for class IV. Identify organic transportation capabilities. Identify transportation shortfalls by nodes. Identify the type of transportation required. Request additional transportation support. Identify the traffic controls that may be necessary to the operation.

Table A-4. Class IV (continued)

Materiel Management Function		Echelon	Supply Supp	ort Tasks
Distribution is the integration of the logistics functions of transportation supply. It is dependent on materiel management and movement control The operational process of synchronizing all elements of the logistics system to deliver the "right things" to the "right place" at the "right time" to support the commander.	n and l rol.	CSSB/DSSB BSB	issuing yards. Determine the Identify organ Identify transp Identify the ty Request addi	e methods of resupply for class IV. ic transportation capabilities. cortation shortfalls by nodes. pe of transportation required. tional transportation support. affic controls that may be
Redistribution is the reallocating of excess materiel to other locations in theater using all transportation assets available. Managers may use excess materiel in theater to fill shortages and meet operational requirements.		TSC/ESC	Track performance measures that indicate how well the supply chain is responding to identified requirements.	
		SB/DSB	Coordinate with DLA and the TSC head of contracting authority, OCS or other appropriate providers to acquire local construction material.	
		CSSB/DSSB BSB/DSB	Conduct manager review file oversight, and review business workplace messaging.	
Legend: AO – area of operations ASCC - Army service component command BSB – brigade support battalion CSR – controlled supply rate CSSB – combat sustainment support battalion DIB – distribution integration branch DLA – Defense Logistics Agency DSB – division sustainment brigade DSSB – division sustainment support battalion EPW – enemy prisoner-of-war ESC – expeditionary sustainment command	FEPP – Federal Excess Property FERP – Federal Excess R G-3 – assistant chief of state operations G-4 – assistant chief of state operations G-8 – assistant chief of state operations GCC – geographic combate commander IAW – in accordance with ITV – in transit visibility J-3 – operations directorate staff J-4 – logistics directorate of staff		s Real Property staff, staff, logistics staff, financial abatant ith	J-8 –resources, and assessment directorate of a joint staff JOA – joint operations area JTF – joint task force MHE – material handling equipment OCS – operational contract support OPLAN – operation plan OPORD – operation order S-4 – battalion or brigade logistics staff officer SB – sustainment brigade SOP TMR – transportation movement request TSC – theater sustainment command

Table A-5. Class V

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class V implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
	TSC/ESC	Review the service support paragraph.
		Coordinate and respond to GCC lead Service common-user logistics designation, other U.S. agency, and multi-national force munition support directives.
		Identify foreign and host nation support concepts. Develop plans for forecasted support.
Supply planning is forecasting to establish supply stock levels at each		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.
support echelon to meet mission		Review task organization for troop units.
requirements.		Review the situation requirements for the operation.
		Review the mission paragraph for class V implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
	SB/DSB	Review the service support paragraph.
		Coordinate with GCC and Army service component command (ASCC) G-4 planners to establish the theater ASP and ASA IAW the OPLAN and OPORD.
		Identify foreign and host nation support concepts. Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.

Table A-5. Class V (continued)

	Review task organization for troop units. Review the situation requirements for the operation.			
	l •			
	Review the mission paragraph for class V implications and requirements.			
CSSB/DSSB	Review the execution paragraph and concept of operation.			
	Review the coordinating instructions subparagraph.			
	Review the service support paragraph.			
ВЗВ	Coordinate with TSC and JTF J-4 planners to establish the JOA ASP and ASA IAW the OPLAN and OPORD.			
	Identify foreign and host nation support concepts.			
	Identify plans for forecasted support.			
	Identify plans for un-forecasted support.			
	Identify boundaries needed for sustainment purposes.			
	Coordinate with the U.S. Army Technical Center for Explosives Safety for site plans.			
TSC/ESC	Prepare a logistics support forecast.			
100/200	Prepare a logistics support forecast. Computed the Class V requirements based on the RSR for the type of mission, and the type and number of weapons on hand for one day.			
SB/DSB	Coordinate with GCC and ASCC for theater ASP site plans (security and construction).			
	Prepare a logistics support forecast.			
	Computed the Class V requirements based on the RSR for the type of mission, and the type and number of weapons on hand for one day.			
CSSB/DSSB	Coordinate with the TSC or ESC for explosives safety site plans.			
	Prepare a logistics support forecast.			
BSB	Computed the Class V requirements based on the RSR for the type of mission, and the type and number of weapons on hand for one day.			
TSC/ESC	Coordinate with TSC, ESC, and division for ASP or ASA site plans (security and construction).			
SB/DSB	Prepare guidance for the class V portion of support plans, base development plans, and weapons systems for future operations with emphasis on the CSR.			
CSSB/DSSB BSB	Establish stockage levels to avoid stockpiling.			
TSC/ESC	Coordinate with the SB/DSB for explosives safety site plans and to establish the ASP.			
SB/DSB	Coordinate with the SB/DSB for ASP site plans (security and construction).			
	TSC/ESC SB/DSB SB/DSB TSC/ESC SB/DSB SB/DSB TSC/ESC			

Table A-5. Class V (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	CSSB/DSSB BSB	Coordinate with the SB/DSB to establish stockage levels to avoid stockpiling.
Resupply is obtaining supplies to meet operational requirements through the	TSC/ESC	Maintain a running estimate of assigned supported unit munitions requirements.
	SB/DSB	Coordinate with GCC, ASCC G-3, and JTF J-3 planners for operational timelines, supported unit task organization, to include anticipated area support obligations and the RSR.
requisition process, cross-leveling, contracting, and local purchase.	CSSB/DSSB BSB	Coordinate with GCC, ASCC G-4, TSC, and JTF J-4 planners for weapons density, allied/host nation support density lists, and basic loads currently with each weapons system as well as special handling and equipment requirements for munitions receipt.
Retrograde of materiel is an Army	TSC/ESC	Coordinate with ASCC and the Army Field Support Brigade to determine availability and priority for any pre-positioned stocks.
logistics function of returning materiel from the using unit back through the distribution system to the source of supply, directed ship to location, or point of disposal.	SB/DSB	Coordinate with TSC or ESC to determine methods of class V delivery, safety/environmental mitigation requirements, and throughput capability.
	CSSB/DSSB BSB	Coordinate with TSC to establish initial theater entry basic load issue menus.
Disposal is the systematic removal of uneconomically repairable or obsolete materiel through the process of demilitarizing, transferring, donating, selling, abandoning, or destroying materiel.	TSC/ESC	Coordinate with division G-3 planners for operational timelines, supported unit task organization, to anticipated area support obligations and the RSR. Coordinate with ESC to determine availability and priority for any prepositioned stocks.
	SB/DSB	Coordinate with the SB/DSB to determine methods of class V delivery and safety/environmental mitigation requirements.
	CSSB/DSSB BSB	Coordinate with the SB/DSB for receipt of initial theater entry basic load issue menus.
	TSC/ESC	Coordinate with supported unit G-3 and S-3 Planners for operational timelines, supported unit task organization and the assist in developing the RSR.
Maintenance is all actions necessary for retaining an item in or restoring it to a specified condition to support the supply system.	SB/DSB	Coordinate with supported units for weapons density, allied and host nation support density lists and basic loads currently with each weapons system as well as special handling and equipment requirements for munitions receipt.
	CSSB/DSSB BSB	Coordinate with GCC, ASCC G-3 and G-4, TSC and JTF J-4 to validate RSR and set the CSR.
	TSC/ESC	Coordinate with subordinate class V planners to determine location of ATHP.
Storage is the organizing, sorting, and safeguarding of materiel.	SB/DSB	Coordinate with ASCC and JMC for inspection procedures, safety procedures, and risk mitigation related to receiving, storing, and distribution of class V.

Table A-5. Class V (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	CSSB/DSSB BSB	Establish the theater stockage objectives and ASA on-hand balance directives.
Asset visibility provides materiel managers with information on the location, movement, status, and identity	TSC/ESC	Coordinate with TSC or ESC for inspection procedures, safety procedures, and risk mitigation related to receiving, storing, and distribution of class V.
of materiel, which facilitates the capability to act upon that information to	SB/DSB	Validate sustainment and operational loads.
improve overall performance of the Army supply system.	CSSB/DSSB BSB	Coordinate with TSC, ESC, and division G-3 and G-4 to establish combat configured loads and specific mission configured loads IAW OPORD.
	TSC/ESC	Coordinate with ESC and the division G-3 and G-4 to validate RSR and set the CSR.
Stock control is the maintaining of the proper location and identification of	SB/DSB	Coordinate with subordinate class V planners to determine location of ATHPs.
materiel within storage locations regardless of class of supply.	CSSB/DSSB BSB	Coordinate with the SB/DSB for inspection procedures, safety procedures, and risk mitigation related to receiving, storing, and distribution of class V.
	TSC/ESC	Validate sustainment and operational loads.
Asset reporting is the vertical and horizontal reporting of on-hand assets	SB/DSB	Coordinate with the SB/DSB and supported units to establish combat configured loads and specific mission configured loads.
validation.	CSSB/DSSB BSB	Coordinate with the SB/DSB and supported units to validate the CSR.
Supply is the provision of materiel to supported units by supply support organizations and activities.	TSC/ESC	Establish procedures and alignments of DODIC for utilization in-theater and in-JOA.
	SB/DSB	Execute theater and JOA management of class V.
organizations and assistance.	CSSB/DSSB BSB	Execute management of assigned class V.
		Establish procedures and alignments of DODIC for unit utilization issue and turn-in during reception, staging, onward movement, and integration.
		Determine the methods of resupply for class V. Identify organic transportation capabilities.
	TSC/ESC	Identify transportation shortfalls by nodes.
Distribution is the integration of the logistics functions of transportation and		Identify the type of transportation required.
supply. It is dependent on materiel		Request additional transportation support.
management and movement control. The operational process of synchronizing all elements of the logistics system to deliver the "right things" to the "right place" at the "right time" to support the commander.		Identify the traffic controls that may be necessary to the operation.
		Establish procedures and alignments of supported DODICs.
		Determine the methods of resupply for class V.
	SB/DSB	Identify organic transportation capabilities.
		Identify transportation shortfalls by nodes.
		Identify the type of transportation required.
		Request additional transportation support. Identify the traffic controls that may be necessary to the operation.

Table A-5. Class V (continued)

Materiel Management Function		Echelon	Supply Supp	ort Tasks	
			Execute AO m	nanagement of class V.	
			Determine the	e methods of resupply for class V.	
			Identify organ	ic transportation capabilities.	
		CSSB/DSSB	Identify transp	oortation shortfalls by nodes.	
		BSB	Identify the type	pe of transportation required.	
			Request addit	ional transportation support.	
			Identify the tra	affic controls that may be necessary on.	
Redistribution is the reallocating of excess materiel to other locations in				th GCC, ASCC, TSC, and the JTF cedures for CEA.	
theater using all transportation asse		SB/DSB	Provide opera	Provide operational oversight for class V.	
available. Managers may use excess materiel in theater to fill shortages and meet operational requirements.		CSSB/DSSB BSB/DSB	Track performance measures that indicate how well the supply chain is responding to identified requirements.		
Legend: AO – area of operations AOR – area of responsibility APOD – aerial port of debarkation ASA – ammunition support activities ASCC - Army service component command ASP – ammunition supply point ATHP – ammunition transfer holding points BSB – brigade support battalion CEA – captured enemy ammunition CSR – controlled supply rate CSSB – combat sustainment support battalion DIB – distribution integration branch DODIC – Department of Defense Identification Code	DSB – division sustainment brigade DSSB – division sustainment suppor battalion ESC – expeditionary sustainment command G-3 – assistant chief of staff, operatic G-4 – assistant chief of staff, logistics GCC – geographic combatant commander IAW – in accordance with ITV – in transit visibility J-3 – operations directorate of a joint staff J-4 – logistics directorate of a joint st JMC – Joint Munitions Command JOA – joint operations area JTF – joint task force		nent support tainment taff, operations taff, logistics atant ate of a joint of a joint staff ommand	OPLAN – operation plan OPORD – operation order RSR – required supply rate SAAS – standard Army ammunition system SB – sustainment brigade SPOD – sea port of debarkation TAMIS – Total Ammunition Management Information System TMR – transportation movement request TSC – theater sustainment command	

Table A-6. Class VII

Materiel Management Function	Echelon	Supply Support Tasks		
		Review task organization for troop units.		
		Review the situation requirements for the operation.		
		Review the mission paragraph for class VII implications and requirements.		
		Review the execution paragraph and concept of operation.		
	TSC/ESC	Review the coordinating instructions subparagraph.		
	TSC/ESC	Review the service support paragraph.		
		Coordinate and respond to GCC lead service common-user logistics designation and multinational force logistics directives.		
		dentify foreign and host nation support		
		Develop plans for un-forecasted support.		
Supply planning is forecasting to		dentify boundaries needed for sustainment ourposes.		
establish supply stock levels at each	Review the situation requirements operation.	Review task organization for troop units.		
support echelon to meet mission requirements.		Review the situation requirements for the operation.		
		Review the mission paragraph for class VII implications and requirements.		
		implications and requirements.		
		Review the mission paragraph for class VII mplications and requirements. Review the execution paragraph and concept of operation. Review the coordinating instructions subparagraph. Review the service support paragraph. Coordinate and respond to GCC lead service common-user logistics designation and multinational force logistics directives. dentify foreign and host nation support concepts. Develop plans for forecasted support. Develop plans for un-forecasted support. dentify boundaries needed for sustainment ourposes. Review task organization for troop units. Review the situation requirements for the operation. Review the mission paragraph for class VII mplications and requirements. Review the execution paragraph and concept of operation. Review the coordinating instructions subparagraph. Review the service support paragraph. Coordinate with GCC and Army service component command (ASCC) G-4 and AFSB blanners for use of pre-positioned stocks and any theater provided equipment IAW the DPLAN and OPORD. dentify foreign and host nation support concepts. Develop plans for forecasted support. Develop plans for un-forecasted support. dentify boundaries needed for sustainment		
	SB/DSB	Review the service support paragraph.		
	55,565	Coordinate with GCC and Army service component command (ASCC) G-4 and AFSB planners for use of pre-positioned stocks and any theater provided equipment IAW the OPLAN and OPORD.		
		Identify foreign and host nation support concepts. Develop plans for forecasted support.		
		Develop plans for un-forecasted support.		
		Identify boundaries needed for sustainment purposes.		

Table A-6. Class VII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units.
	CSSB/DSSB	Review the situation requirements for the operation.
		Review the mission paragraph for class VII implications and requirements.
		Review the execution paragraph and concept of operation.
Supply planning is forecasting to establish supply stock levels at each		Review the coordinating instructions subparagraph.
support echelon to meet mission	BSB	Review the service support paragraph.
requirements.		Coordinate with TSC and JTF planners for use of pre-positioned stocks and theater provided equipment IAW the OPLAN and OPORD.
		Identify foreign and host nation support concepts. Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.
	TSC/ESC	Prepare guidance for the class VII portion of support plans IAW ASCC G-4, AFSB, and JTF J-4 with emphasis on deployed equipment lists and issue or turn-in from AFSB-controlled theater stocks.
		Prepare a logistics support forecast.
Requirements determination is all activities necessary to develop,		Determine the class VII major end item requirements and command controlled items.
consolidate, coordinate, validate, approve, and prioritize supply	SB/DSB	Establish the contingency stockage/operational float levels.
requirements to support an operating		Prepare a logistics support forecast.
force.		Determine the class VII major end item requirements and command controlled items.
	CSSB/DSSB	Coordinate with ASCC and the AFSB to set disposition directives for disposal.
	BSB	Prepare a logistics support forecast.
	505	Determine the class VII major end item requirements and command controlled items.
Requirements validation is the confirming of requirements and the prioritizing of available logistics assets against an established or forecasted requirement.	TSC/ESC	Coordinate with TSC, ESC, and division planners for use of pre-positioned stocks and theater provided equipment IAW the OPLAN and OPORD.
	SB/DSB	Prepare guidance for the class VII portion of support plans with emphasis on deployed equipment lists and issue/turn-in during reception, staging, onward movement, and integration.
	CSSB/DSSB BSB	Establish the contingency stockage and operational float levels.

Table A-6. Class VII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Funds management is the managing of	TSC/ESC	Coordinate with TSC, ESC, and division G-4 to set disposition directives for disposal.
obligations, expenses, and disbursement of funds by contracting officers with warrant authority, finance	SB/DSB	Coordinate with the SB/DSB for use of pre- positioned stocks and any theater provided equipment.
officers, and Army leaders at all levels in support of supply operations.	CSSB/DSSB BSB	Coordinate with the SB/DSB for planning of issue and turn-in operations support during redeployment.
Resupply is obtaining supplies to meet	TSC/ESC	Coordinate with the SB/DSB to receive the contingency stockage and operational float levels.
operational requirements through the requisition process, cross-leveling, contracting, and local purchase.	SB/DSB	Coordinate with the SB/DSB to receive disposition directives for disposal.
Contracting, and local purchase.	CSSB/DSSB BSB	Coordinate with the SB/DSB to receive maintenance support priorities.
Retrograde of materiel is an Army logistics function of returning materiel	TSC/ESC	Coordinate with GCC, ASCC G-4, and JTF J-4 operations for TPFDL and individual deployed equipment lists associated with each deploying unit.
from the using unit back through the distribution system to the source of supply, directed ship to location, or	SB/DSB	Coordinate with ASCC G-4 and JTF J-4 for DODAAC alignment and conversion architecture and policies.
point of disposal.	CSSB/DSSB BSB	Coordinate with GCC, ASCC G-4, and JTF J-4 planners for DA civilian, authorized civilian, and contractor estimates of GFE.
	TSC/ESC	Coordinate with ASCC G-4 and AFSB to determine method of replacement delivery.
Disposal is the systematic removal of uneconomically repairable or obsolete materiel through the process of demilitarizing, transferring, donating,	SB/DSB	Coordinate with TSC, ESC, and division G-4 operations for TPFDL and individual deployed equipment lists s associated with each deploying unit.
selling, abandoning, or destroying materiel.	CSSB/DSSB BSB	Coordinate with TSC, ESC, and division G-4 for DODAAC alignment and conversion architecture and policies.
Maintenance is all actions necessary	TSC/ESC	Coordinate with TSC, ESC, and division G-4 planners for DA Civilian, authorized civilian, and contractor estimates of GFE.
for retaining an item in or restoring it to a specified condition to support the	SB/DSB	Coordinate with TSC or ESC to determine method of replacement delivery.
supply system.	CSSB/DSSB BSB	Coordinate with TSC, ESC, and division G-4 for ordering procedures, shipping times, and local procurement accountability procedures.
Storage is the organizing, sorting, and safeguarding of materiel.	TSC/ESC	Coordinate with the SB/DSB and supported units for TPFDL and individual deployed equipment lists associated with each deploying unit.
	SB/DSB	Coordinate with the SB/DSB for DA civilian, authorized civilian, and contractor estimates of GFE.
	CSSB/DSSB BSB	Coordinate with the SB/DSB to determine method of replacement delivery.

Table A-6. Class VII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
Asset visibility provides materiel managers with information on the location, movement, status, and	TSC/ESC	Coordinate with the SB/DSB and supported units for ordering procedures, shipping times, and local procurement accountability procedures.
identity of materiel, which facilitates the capability to act upon that information	SB/DSB	Coordinate with GCC, ASCC G-4, and JTF J-4 for priorities of support.
to improve overall performance of the Army supply system.	CSSB/DSSB BSB	Coordinate with subordinate PBOs for DODAAC alignments.
Stock control is the maintaining of the	TSC/ESC	Validate the local procurement requirements prior to submission to the local procuring activity.
proper location and identification of materiel within storage locations	SB/DSB	Coordinate with TSC, ESC, and division G-4 for priorities of support.
regardless of class of supply.	CSSB/DSSB BSB	Coordinate with subordinate PBOs for DODAAC alignments.
Asset reporting is the vertical and	TSC/ESC	Validate the local procurement requirements prior to submission to the local procuring activity.
horizontal reporting of on-hand assets validation.	SB/DSB	Coordinate with the SB/DSB and supported units for priorities of support.
	CSSB/DSSB BSB	Validate transshipping loads and anticipated throughput volume.
Supply is the provision of materiel to	TSC/ESC	Compare assigned personnel, transportation assets, and MHE to anticipated class VII flow rate.
supported units by supply support organizations and activities.	SB/DSB	Attend G-8 and J-8 budget allocation meetings.
organizations and activities.	CSSB/DSSB	Attend all budget allocation meetings.
	BSB	
		Attend all budget allocation meetings. Determine the methods of resupply for class VII.
		Identify organic transportation capabilities.
	TSC/ESC	Identify transportation shortfalls by nodes.
Division in the control of		Identify the type of transportation required.
Distribution is the integration of the logistics functions of transportation and		Request additional transportation support.
supply. It is dependent on materiel		Identify the traffic controls that may be necessary to the operation.
management and movement control. The operational process of synchronizing all elements of the logistics system to deliver the "right things" to the "right place" at the "right time" to support the commander.		Track performance measures that indicate how well the supply chain is responding to identified requirements.
		Determine the methods of resupply for class VII.
	SB/DSB	Identify organic transportation capabilities.
		Identify transportation shortfalls by nodes.
		Identify the type of transportation required.
		Request additional transportation support.
		Identify the traffic controls that may be necessary to the operation.

Table A-6. Class VII (continued)

Materiel Management Function		Echelon	Supply Supp	oort Tasks
				ager review file oversight, and ess workplace messaging.
			Determine the VII.	e methods of resupply for class
		CSSB/DSSB	Identify organ	nic transportation capabilities.
		BSB	Identify transp	portation shortfalls by nodes.
			Identify the ty	pe of transportation required.
			Request addi	tional transportation support.
				affic controls that may be the operation.
Redistribution is the reallocating of excess materiel to other locations in theater using all transportation assets available. Managers may use excess materiel in theater to fill shortages and		TSC/ESC	•	nance measures that indicate how ly chain is responding to identified .
		SB/DSB	Conduct manager review file oversight, and review business workplace messaging.	
meet operational requirements.		CSSB/DSSB	Repair class VII and re-issue IAW SB/DSB	
		BSB	directives and support priorities.	
Legend: AFSB – Army Field Support Brigade AO – area of operations ASCC - Army service component command BSB – brigade support battalion CSDP – Command Supply Discipline Program CSSB – combat sustainment support battalion DA – Department of the Army DIB – distribution integration branch DODAAC – Department of Defense Activity Address Code DSB – division sustainment support battalion ESC – expeditionary sustainment command	FEPP – Federal Excess Personal Property FERP – Federal Excess Real Property G-4 – assistant chief of staff, logistics G-8 – assistant chief of staff, financial management GCC – geographic combatant commander GFE – government furnished equipment IAW – in accordance with ITV – in transit visibility J-4 – logistics directorate of a joint staff J-8 –resources, and assessment directorate of a joint staff JOA – joint operations area JTF – joint task force		s Real Property staff, logistics staff, financial batant ished ith te of a joint sessment ff	MHE – material handling equipment OPLAN – operation plan OPORD – operation order SB – sustainment brigade SSA – supply support activity TMR – transportation movement request TPFDL – Time Phase Force Deployment List TSC – theater sustainment command

Table A-7. Class VIII

Materiel Management Function	Echelon	Supply Support Tasks
		Coordinate and respond to GCC lead service common-user logistics designations and multi-national force health service directives; provide planning and support for SIMLM, when designated.
		Through the MLMC forward support team, establish liaison with TSC or ESC distribution management center.
		Coordinate with medical planners in the GCC, Army service component command (ASCC), and other Service component surgeon cells and with the TSC or ESC to establish the JOA class VIII sustainment base.
	MEDCOM (DS)	Issue guidance for implementing the class VIII portion of ASCC AHS plans for future operations, with emphasis on required deployment instructions.
		Issues guidance to medical brigades to specify unit support assignments.
		Task organize MEDBDEs for support, including class VIII supply support to the JOA.
Supply planning is forecasting to		Advise the commander on class VIII support options available, and the service capabilities within theater.
establish supply stock levels at each support echelon to meet mission		Develop plans for forecasted support.
requirements.		Develop plans for un-forecasted support.
	TSC/ESC	Coordinate with the MEDCOM (DS) to integrate class VIII supply and other health service requirements (patient movement, food, water, and field services) into sustainment and distribution planning.
	MMC/TLAMM	Coordinate with AMLC, GCC, ASCC, and DLA to establish stock levels for class VIII contingency stocks for support of Army and joint health services and plan for transition from peacetime to contingency operations.
		Coordinate with the MEDCOM (DS) to identify managed class VIII items for intensive management.
		Prepare guidance for the class VIII portion of support plans for future operations with emphasis on required deployment instructions.
	MEDBDE/MMB	Conduct reconnaissance to determine suitable locations for MLCs to conduct class VIII SSA and forward distribution operations.
		Coordinate with MEDCOM (DS) and division surgeons and G-4s for required stockage levels in Hospital Centers and MLCs.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	SB/DSB/BSB	Coordinate with division surgeons and G-4s to establish stock levels for brigade medical supply officer safety stock of critical class VIII supplies.
		Coordinate with GCC and ASCC G-1 to determine time-phased medical PAR based on time-phased force deployment data force flow.
	MEDCOM (DS)	Coordinate with AMLC, MMC, and TLAMM to forecast class VIII requirements in consideration of casualty estimates, specific health threats, PAR, and health services capabilities in JOA.
		Coordinate with GCC and ASCC G-3 planners to develop health service estimates for EPW and humanitarian assistance.
Requirements determination is all activities necessary to develop,		Coordinate class VIII requirement forecasts with TSC or ESC through the MLMC forward support team.
consolidate, coordinate, validate, approve, and prioritize supply requirements to support an operating force.	MMC/TLAMM	Coordinate with medical planners at GCC, ASCC, MEDCOM (DS), and DLA to forecast class VIII requirements in consideration of casualty estimates, specific health threats, PAR, and health services capabilities in the JOA.
		Coordinate class VIII distribution requirements with TSC or ESC.
	MEDBDE/MMB	Issue guidance for changes to stockage levels in Hospital Centers and MLCs in coordination with MEDCOM (DS) and division surgeons and G-4s.
		Coordinate class VIII distribution requirements with SB and DSB.
	SB/DSB/BSB	Coordinate with MEDBDEs and BSB SPO to integrate class VIII requirements into distribution planning.
		Coordinate with GCC, ASCC G-4, and JTF J-4 for priorities of support.
Requirements validation is the confirming of requirements and the prioritizing of available logistics assets against an established or forecasted requirement.		IAW GCC and ASCC surgeon monitor and manage exceptions to class VIII formulary for AOR.
	MEDCOM (DS)	Validate local procurement requirements prior to submission to the operational contracting support; in coordination with GCC and ASCC surgeon, issue guidance regarding emergency use authorizations for non-FDA approved products.
	MMC/TLAMM	Coordinate with MEDCOM (DS) for priorities of class VIII support.
		Coordinate class VIII distribution requirements with TSC or ESC.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Validate, space (including cold chain and controlled substances) and material handling equipment availability for class VIII distribution points.
	MEDBDE/MMB	Monitor critical Class VIII items on hand and establish release procedures.
		Coordinate with hospital centers and division surgeons and G-4s to battalions to establish combat configured and mission-specific configured load requirements.
	SB/DSB/BSB	Coordinate with MEDBDEs and brigade support battalion (BSB) SPO to integrate class VIII requirements into distribution planning.
Con de management in the	MEDCOM (DS)	Attend all G-8 and J-8 budget allocation meetings and provide class VIII estimates.
Funds management is the managing of obligations, expenses, and disbursement of funds by	MEDCOM (DS)	Execute theater and JOA management of all class VIII.
contracting officers with warrant	MMC/TLAMM	Coordinate DWCF requirements with DLA.
authority, finance officers, and Army leaders at all levels in support of	MEDBDE/MMB	Attend all budget allocation meetings and provide class VIII estimates.
supply operations.		Execute management of all assigned class VIII.
	MEDCOM (DS)	Coordinate and supervise class VIII resupply within the AOR and JOA.
		Track class VIII supply chain performance in support of theater health services.
		Coordinate class VIII resupply requirements with TSC or ESC through the MLMC forward support team.
	MMC/TLAMM	Manage processing of class VIII orders for medical unit resupply within AOR and JOA.
		Coordinate class VIII distribution to hospital centers, MLCs, and joint and multinational forces with TSC, ESC, or DDOC.
Resupply is obtaining supplies to meet operational requirements through the requisition process, cross-leveling, contracting, and local		Pass requirements for theater replenishment and non-stocked items to national-level suppliers (primarily DLA's medical prime vendors).
purchase.		Coordinate with medical prime vendors, AMLC, and DLA TS to ensure class VIII availability for uninterrupted health services in AOR and JOA.
		Coordinate with operational contracting for local purchase of class VIII items.
		Track MMC and TLAMM performance in support of theater health services.
		Coordinate and supervise class VIII resupply within their AO.
	MEDBDE/MMB	Coordinate with MEDCOM (DS), MMC, and TLAMM to ensure class VIII availability for uninterrupted health services.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	Hospital Center	Note: The hospital center does not have an external class VIII distribution mission.
		Coordinate with MMC and TLAMM for emergency class VIII resupply to save life, limb, or eyesight.
Resupply is obtaining supplies to		Receive and confirm class VIII deliveries for organic detachments and teams within the hospital.
meet operational requirements through the requisition process, cross-leveling, contracting, and local purchase.	MLC	Coordinate with MMC and TLAMM for emergency class VIII resupply to save life, limb, or eyesight.
paroridos.		Receive and confirm class VIII deliveries.
	00/000/000	Coordinate with MEDBDEs and BSB SPO to integrate class VIII resupply into distribution operations.
	SB/DSB/BSB	Coordinate with MMB, MMC and TLAMM for emergency class VIII resupply to save life, limb, or eyesight.
	MEDCOM (DS)	Issue guidance for collection, turn-in, and disposition of class VIII from outbound units IAW ASCC and AMLC directives.
Retrograde of materiel is an Army logistics function of returning materiel from the using unit back through the distribution system to the source of supply, directed ship to location, or point of disposal.		Issue cross leveling directives and/or return instructions for excess class VIII to MEDBDEs.
	MMC/TLAMM	Issue turn-in instructions to MEDBDEs for excess or unserviceable class VIII IAW ASCC and AMLC directives.
		Receive class VIII materiel turned in by outbound units as directed by MEDCOM (DS) and AMLC.
		Monitor class VIII status of hospital centers and MLCs for shortages, excess and stockage.
	MEDBDE/MMB	Direct movement of class VIII between hospital centers and MLCs as needed and IAW supported Division priorities of support.
		Coordinate with supporting SB or DSB S-4 for transportation required to cross-level or retrograde class VIII materiel.
	Hospital Centers	Return internal excess and/or unserviceable class VIII materiel as directed by MEDBDE, MMC, or TLAMM.
	MLC	Return excess and/or unserviceable class VIII materiel as directed by MEDBDE, MMC, or TLAMM.
	SB/DSB/BSB	Monitor class VIII status in brigade medical supply officer for shortages, excess and onhand.
		Direct movement of class VIII between BSBs as needed IAW priorities of support.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Coordinate with ASCC and TSC or ESC to establish guidance on disposition of excess and unserviceable class III from outbound units.
		Coordinate with AMLC for assistance in inspection, and classification of medical devices in theater.
	MEDCOM (DS)	Issue guidance for disposal of class VIII from outbound units IAW ASCC directives.
	MEDCOM (DS)	Coordinate with operational contracting support for local destruction of unserviceable or excess class VIII in accordance with applicable U.S. and host nation laws.
Disposal is the systematic removal of uneconomically repairable or		Coordinate with ASCC, AMLC, and DLA Disposal Services for lawful donation of excess class VIII to host nation or multinational partners.
obsolete materiel through the process of demilitarizing, transferring, donating, selling,	MMC/TLAMM	Dispose of excess or unserviceable class VIII stocks as directed by ASCC, AMLC, and MEDCOM (DS).
abandoning, or destroying materiel.		Coordinate with AMLC for return of excess but serviceable medical devices required for future requirements.
	MEDBDE/MMB	Issue guidance to hospital centers, MLCs, and EAB medical units for disposal of class VIII from outbound units IAW ASCC directives.
	Hospital Center	Locally dispose of internal excess and/or unserviceable class VIII materiel as directed by MEDBDE, MMC, or TLAMM.
	MLC	Locally dispose of excess and/or unserviceable class VIII materiel as directed by MEDBDE, MMC, or TLAMM.
	SB/DSB/BSB	Issue guidance for local dispose of excess and/or unserviceable class VIII in BDE/battalions elements as directed.
	MEDCOM (DS)	Monitor and provide oversight and guidance on MMQC in coordination with ASCC and TSC or ESC surgeons.
	MMC/TLAMM	Conduct surveillance and execute MMQC actions for class VIII stocks.
Maintenance is all actions necessary for retaining an item in or restoring it to a specified condition to support the supply system.		Disseminate MMQC alerts to theater units.
		Monitor and provide oversight MMQC.
	MEDBDE/ MMB	Monitor and provide oversight of the availability and maintenance of medical devices across subordinate units.
	Hospital Center	Conduct surveillance and execute MMQC actions for Class VIII stocks within the hospital center.
	·	Execute scheduled services for medical devices within the hospital center.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	MLC	Conduct surveillance and execute MMQC actions for class VIII stocks.
		Execute scheduled services for medical devices.
	MLMC	Serves as the medical maintenance consultant to multiple ASCC surgeons. Reviews maintenance status, performs reports, and manages allocation of maintenance personnel and Medical Standby Equipment Program items and other maintenance regeneration enablers.
		Monitor and provide oversight of MMQC.
	SR/DSR/RSR	Monitor and provide oversight of the availability and maintenance of medical devices across subordinate units.
	SB/DSB/BSB	Coordinate with supporting MEDBDE and MMB for MLC support for scheduled and unscheduled maintenance services for medical devices.
	MEDCOM (DS)	Monitor class VIII flow and theater and JOA stocks in accordance with the ASCC and JTF health service support priorities.
		Coordinate with GCC and ASCC surgeon to establish SSA guidance for stockage of non-standard class VIII required to meet specific health threats or missions.
		Set policies, priorities, allocations, and criteria for priority class VIII requests.
		Coordinate with TSC or ESC to ensure class VIII SSAs have sufficient space and are located where optimum use can be made of material handling and distribution resources.
Storage is the organizing, sorting, and safeguarding of materiel.	TSC/ESC	Integrate class VIII storage requirements for AOR and JOA in sustainment planning to support current and planned contingency requirements.
		In coordination with MEDCOM (DS), monitor class VIII flow and theater and JOA stocks in accordance with the ASCC and JTF support priorities.
		Serve as theater-level class VIII SSA in support of Army and joint forces in the theater and JOA.
	MMC/TLAMM	Store class VIII in condition appropriate to requirements, such as, temperature (including cold-chain), security, and hazardous properties.
		Coordinate with DIB for 03/life-death priority orders.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	MEDBDE/MMB	Monitor class VIII stocks across hospital centers and MLCs.
		Coordinate with operational contract support leasing host nation space, as required to meet hospital center and/or MLC requirements.
		Set class VIII inventory storage procedures and space management IAW anticipated.
		Ensure hospital centers and MLCs receive, account for, and store class VIII stocks IAW the AHS plan.
Storage is the organizing, sorting, and safeguarding of materiel.	Hospital Center	Store class VIII stocks required to support the hospital center and all assigned augmentation detachments (medical, surgical, and intermediate care).
and safeguarding of materiel.		Store class VIII in condition appropriate to requirements, such as, temperature (including cold-chain), security, and hazardous properties for organic detachments and teams.
	MLC	Establish class VIII SSA in support of division and brigades and EAB medical units IAW the ASCC and JTF AHS plan.
		Store class VIII in condition appropriate to requirements such as, temperature (including cold-chain), security, and hazardous properties.
	SB/DSB/BSB	Monitor class VIII stocks across BSBs.
	MEDCOM (DS)	Monitor daily class VIII stock status for theater and JOA, to include on-hand, due-in, and critical shortages.
		Monitor status of class VIII items identified for intensive management.
Asset visibility provides materiel managers with information on the		Monitor status of critical unit class VIII shortages for theater and JOA.
location, movement, status, and identity of materiel, which facilitates the capability to act upon that information to improve overall performance of the Army supply system.		Monitor class VIII supply chain performance from DIB.
		Coordinate class VIII stock status with TSC or ESC through the MLMC forward support team.
		Coordinate with DIB for ITV status reporting and updates.
	MMC/TLAMM	Monitor status of class VIII items identified for intensive management.
		Monitor status of critical unit class VIII shortages.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	MEDBDE/MMB	Monitor class VIII status of hospital centers and MLCs to include on hand, due-in, and critical shortages.
		Monitor status of class VIII items identified for intensive management across their AO.
		Monitor status of critical unit class VIII shortages across hospital centers and MLCs.
Asset visibility provides materiel managers with information on the		Monitor class VIII supply chain performance from MMC and TLAMM.
location, movement, status, and identity of materiel, which facilitates the capability to act upon that information to improve overall	Hospital Center	Receive, encode, affix, track and recover radio frequency identification tags for all distributed packaged loads for organic detachments and teams.
performance of the Army supply system.	MLC	Receive, encode, affix, track and recover radio frequency identification tags tags for all distributed packaged loads.
		Monitor class VIII status across BSBs.
		Monitor status of class VIII items identified for intensive management across BSBs.
	SB/DSB/BSB	Monitor status of critical unit class VIII shortages across BSBs.
		Monitor class VIII supply chain performance from class VIII SSAs.
	MEDCOM (DS)	Monitor daily class VIII stock status for theater and JOA.
		Monitor class VIII excess and shortages and issue directives for cross-leveling as required and IAW priorities for support.
		Ensure compliance with directives related to class VIII storage and distribution operations.
	MMC/TLAMM	Execute stock control functions for theater SSA and MLCs within ERP architecture.
Stock control is the maintaining of		Execute storage procedures and space management stock requirements.
the proper location and identification of materiel within storage locations		Monitor, report, inventory and inspect class VIII stocks.
regardless of class of supply.		Compile and forward stockage reports to the MEDCOM (DS).
	MEDBDE/MMB	Same as MEDCOM (DS) for hospital centers and MLCs.
		Execute storage procedures and space management stock requirements for organic detachments and teams.
	Hospital Center	Execute local stock control functions within enterprise resource planning architecture.
		Monitor, report, inventory and inspect class VIII stocks.
		Compile and forward hospital stockage reports to MEDBDE and MMB.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
	MLC	Execute local stock control functions within enterprise resource planning architecture.
		Execute storage procedures and space management stock requirements.
	IVILO	Monitor, report, inventory and inspect class VIII stocks.
		Compile and forward stockage reports to MEDBDE and MMB.
		Compile daily Class VIII stock status for theater and JOA, to include on hand, duein, and critical shortages.
	MEDCOM (DS)	Monitor status of class VIII items identified for intensive management.
		Coordinate class VIII stock status with TSC or ESC through the MLMC forward support team.
		Compile daily stockage reports for AMLC and MEDCOM (DS).
	MMC/TLAMM	Provide status of class VIII items identified for intensive management and critical class VIII shortages.
Asset reporting is the vertical and	MEDBDE/MMB	Compile daily class VIII stock status for hospital centers and MLCs for submission to MEDCOM (DS).
horizontal reporting of on-hand assets validation.		Monitor status of class VIII items identified for intensive management across hospital centers and MLCs.
		Monitor class VIII excess and stockage across hospital centers and MLCs.
	Hospital Center	Prepare daily internal class VIII inventory reports and forward to the MEDBDE and MMB.
		Report hospital class VIII excess and stockage.
	MLC	Prepare daily class VIII inventory reports and forward to the MEDBDE and MMB.
		Report class VIII excess and stockage.
	SB/DSB/BSB	Compile daily class VIII stock status for BSBs.
	00/000/000	Report status of class VIII shortages and excess across BSBs.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Monitor class VIII supply operations in support of AHS priorities.
		Coordinate with AMLC and AFSB for issue of class VIII from Army pre-positioned stocks or other centralized stocks for emergency parts.
	MEDCOM (DS)	Set policies, priorities, allocations, and criteria for priority class VIII requests
		Coordinate with ASCC and other Service components in execution of SIMLM responsibilities.
Supply is the provision of materiel to supported units by supply support		Coordinate class VIII supply operations with TSC or ESC through the MLMC forward support team.
organizations and activities.	MMC/TLAMM	Issue class VIII materiel from theater-level SSA stocks to fulfill theater and JOA class VIII orders.
	MINIC/TLAMINI	Pass orders for non-stocked items to national-level suppliers (primarily DLA's medical prime vendors).
	MEDBDE/ MMB	Monitor class VIII supply operations in support of AHS priorities.
	Hospital Center	Issue class VIII to organic detachments and teams IAW AHS priorities.
	MLC	Issue class VIII IAW AHS priorities.
	SB/DSB/BSB	Monitor brigade supply operations (including class VIII).
	MEDCOM (DS)	Coordinates theater class VIII distribution priorities with TSC or ESC through MLMC forward team.
		Attend the TSC/ESC Distribution Board.
Distribution is the integration of the logistics functions of transportation and supply. It is dependent on materiel management and movement control. The operational process of synchronizing all elements of the logistics system to deliver the "right things" to the "right place" at the "right time" to support the commander.		Coordinate with AMLC and DLA TS on theater class VIII requirements, status of critical items and shortages, and requirements for configured resupply from DIB.
		Coordinate with ASCC and other Service components in execution of SIMLM responsibilities.
		Integrates class VIII into theater distribution planning.
	TSC/ESC	Ensure necessary conveyance and appropriate routing for cold chain transportation.
		Coordinate intra-theater transportation of emergency (life/death) class VIII resupply to point of care.

Table A-7. Class VIII (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Receive theater class VIII resupply from DIB.
		Coordinate class VIII distribution requirements with TSC or ESC to include cold-chain and other special handling requirements.
	MMC/TLAMM	Coordinate with DIB to source emergency (life/death) class VIII requirements.
		Provide class VIII transportation movement requests, pack data, and special handling requirements to TSC or ESC distribution managers and DDOC.
		Pack, label, and present goods issued for transportation.
	MEDBDE/MMB	Coordinate with SB and DSB for integration of class VIII into deliveries to hospital centers, BSBs, and other EAB medical distribution points.
	MLC	Pack, label and present goods issued for transportation to BSB and EAB distribution points.
	SB/DSB/BSB	Integrate Class VIII into distribution planning
		Deliver or coordinate transportation of Class VIII from SSAs to BSBs, Hospital Centers, and other EAB units.
	MEDCOM (DS)	Monitor theater class VIII stock status for theater shortages and excess.
		Issue cross leveling directives to reallocate Class VII across MEDBDEs IAW health service priorities.
		Coordinate class VIII redistribution directives with TSC or ESC through the MLMC forward support team.
Redistribution is the reallocating of excess materiel to other locations in	MMC/TLAMM	Receives and redirects class VIII for theater-wide cross-leveling IAW MEDCOM (DS) directives.
theater using all transportation assets available. Managers may use excess materiel in theater to fill shortages and meet operational requirements.		Monitor class VIII stock status for shortages and excess across hospital centers and MLCs.
	MEDBDE/MMB	Issue cross leveling directives to reallocate class VIII across hospital centers and MLCs IAW health service priorities.
		Coordinate class VII redistribution with SB and DSB.
		Integrate class VIII redistribution into distribution planning.
	SB/DSB/BSB	Deliver or coordinate transportation for redistribution of Class VIII across Hospital Centers MLCs, or BSBs.

Table A-7. Class VIII (continued)

Legend: AHS – Army Health System AMLC - Army Medical Logistics Command AO – area of operations ASCC - Army service component command BSB - brigade support battalion DDOC - deployment and distribution operations center DIB – distribution integration branch DLA – Defense Logistics Agency DLA TS - Defense Logistics Agency Troop Support DSB – division sustainment brigade DWCF - Defense Working Capital Fund EAB - echelons above brigade EPW – enemy prisoner-of-war ESC - expeditionary sustainment command

FDA – Food and Drug Administration GCC – geographic combatant commander ITV - in transit visibility

J-4 - logistics directorate of a joint staff

JOA – joint operations area JTF – joint task force MEDBDE - medical brigade

MEDCOM (DS) - medical command (deployment support)

MLC - medical logistics company MLMC medical logistics management center

MMB medical battalion (multifunctional)

MMC - medical materiel center MMQC - medical materiel quality control

PAR – population at risk

SB - Sustainment brigade

SIMLM - single integrated medical logistics management

SPO - support operations

SSA – supply support activity

TLAMM - theater lead agent for medical materiel

TSC - theater sustainment command

Table A-8. Class IX

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class IX implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
	TSC/ESC	Review the service support paragraph.
		Coordinate and respond to GCC lead Service common-user logistics designation and multinational force logistics directives.
		Identify foreign and host nation support concepts.
		Develop plans for forecasted support.
		Develop plans for un-forecasted support.
Supply planning is forecasting to		Identify boundaries needed for sustainment purposes.
establish supply stock levels at each support echelon to meet mission		Review task organization for troop units.
requirements.		Review the situation requirements for the operation.
		Review the mission paragraph for class IX implications and requirements.
		Review the execution paragraph and concept of operation.
		Review the coordinating instructions subparagraph.
	SB/DSB	Review the service support paragraph.
	35/555	Coordinate with GCC, Army service component command (ASCC), AFSB, TSC, and JTF planners to establish any Army pre-positioned stocks lists for intensively managed parts.
		Identify foreign and host nation support concepts.
		Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.

Table A-8. Class IX (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Review task organization for troop units.
		Review the situation requirements for the operation.
		Review the mission paragraph for class IX implications and requirements.
		Review the execution paragraph and concept of operation.
Supply planning is forecasting to	CSSB/DSSB	Review the coordinating instructions subparagraph.
establish supply stock levels at each support echelon to meet mission	BSB	Review the service support paragraph.
requirements.	ВЗВ	Prepare guidance for the class IX portion of support plans, for future operations with emphasis on required deployment instructions.
		Identify foreign and host nation support concepts.
		Develop plans for forecasted support.
		Develop plans for un-forecasted support.
		Identify boundaries needed for sustainment purposes.
	TSC/ESC	Determine maintenance requirements.
		Coordinate with ASCC planners, AFSB, and JTF J-4 for required contingency stockage levels.
		Prepare a logistics support forecast.
		Compute the class IX requirements based on demand history.
		Determine maintenance requirements.
Requirements determination is all activities necessary to develop, consolidate, coordinate, validate,	SB/DSB	Advise the commander on replenishment, reparable turn-in procedures, and the service capability within theater and JOA.
approve, and prioritize supply requirements to support an operating		Prepare a logistics support forecast.
force.		Compute the class IX requirements based on demand history.
		Determined maintenance requirements.
	CSSB/DSSB	Coordinate with TSC, ESC, and division G-4 planners to establish any intensively managed parts list.
	BSB	Prepare a logistics support forecast.
		Compute the class IX requirements based on demand history.

Table A-8. Class IX (continued)

Materiel Management Function	Echelon	Supply Support Tasks
		Prepare guidance for the class IX portion of support plans, for future operations with emphasis on required deployment instructions.
		Verify the priority of maintenance support for air, ground, and watercraft.
	TSC/ESC	Verify the support maintenance, facilities and salvage collection points for equipment.
		Identify the controlled exchange, and cannibalization point.
		Verify the maintenance evacuation procedures.
		Identify maintenance capability shortfalls.
		Coordinate with TSC, ESC, and division G-4 planners for required contingency stockage levels.
Requirements validation is the confirming of requirements and the		Verify the priority of maintenance support for air, ground, and watercraft.
prioritizing of available logistics assets against an established or forecasted	SB/DSB	Verify the support maintenance, facilities and salvage collection points for equipment.
requirement.		Identify the controlled exchange, and cannibalization point.
		Verify the maintenance evacuation procedures.
		Identify maintenance capability shortfalls.
	CSSB/DSSB BSB	Advise the commander on replenishment, reparable turn-in procedures, and service capability.
		Verify the priority of maintenance support for air, ground, and watercraft.
		Verify the support maintenance, facilities and salvage collection points for equipment.
		Identify the controlled exchange, and cannibalization point.
		Verify the maintenance evacuation procedures.
		Identify maintenance capability shortfalls.
Funds management is the managing of obligations, expenses, and	TSC/ESC	Coordinate with the SB/DSB, CSSB, and supported units to receive the intensively managed parts list.
disbursement of funds by contracting officers with warrant authority, finance	SB/DSB	Coordinate with the CSSB and supported units for required contingency stockage levels.
officers, and Army leaders at all levels in support of supply operations.	CSSB/DSSB BSB	Advise supported units on replenishment, reparable turn-in procedures, and service capability.
Resupply is obtaining supplies to meet	TSC/ESC	Coordinate with SB/DSB and supported units to forecast authorized stockage list.
operational requirements through the requisition process, cross-leveling, contracting, and local purchase.	SB/DSB	Coordinate with GCC, ASCC G-4, TSC, and JTF J-4 for TPFDL and individual deployed equipment lists s associated with each deploying unit.

Table A-8. Class IX (continued)

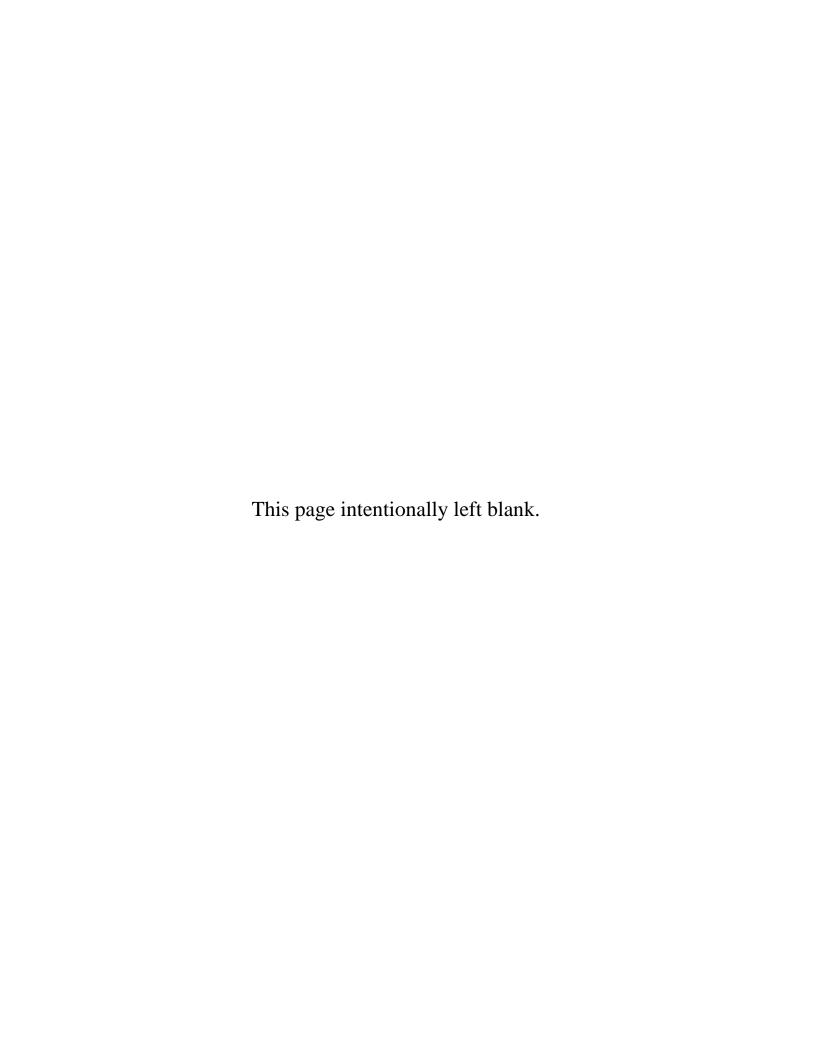
Materiel Management Function	Echelon	Supply Support Tasks
	CSSB/DSSB BSB	Coordinate with ASCC G-4 and JTF J-4 for DODAAC alignment and conversion architecture and policies.
Retrograde of materiel is an Army	TSC/ESC	Coordinate with GCC, ASCC G-4, and JTF J-4 planners for DA civilian, authorized civilian, and contractor estimates of GFE.
logistics function of returning materiel from the using unit back through the distribution system to the source of supply, directed ship to location, or	SB/DSB	Coordinate with ASCC G-4 and TSC for shipping times, and local procurement accountability procedures.
point of disposal.	CSSB/DSSB BSB	Coordinate with TSC, ESC, and division G-4 for TPFDL and individual deployed equipment lists s associated with each deploying unit.
Disposal is the systematic removal of	TSC/ESC	Coordinate with TSC, ESC, and division G-4 for DODAAC alignment and conversion architecture and policies.
uneconomically repairable or obsolete materiel through the process of demilitarizing, transferring, donating, selling, abandoning, or destroying	SB/DSB	Coordinate with TSC, ESC, and division G-4 planners for DA civilian, authorized civilian, and contractor estimates of GFE.
materiel.	CSSB/DSSB BSB	Coordinate with TSC or ESC for shipping times, and local procurement accountability procedures.
Maintenance is all actions necessary	TSC/ESC	Coordinate with the SB/DSB, BRIGADE S-3, and brigade S-4 and supported units for TPFDL and individual deployed equipment lists s associated with each deploying unit.
for retaining an item in or restoring it to a specified condition to support the supply system.	SB/DSB	Coordinate with the SB/DSB, brigade S-3, and brigade S-4 for DA civilian, authorized civilian, and contractor estimates of GFE.
	CSSB/DSSB BSB	Coordinate with the SB/DSB for shipping times, and local procurement accountability procedures.
	TSC/ESC	Determine the size of issuing and SSA activity that will be required to perform distribution tasks.
Storage is the organizing, sorting, and safeguarding of materiel.	SB/DSB	Coordinate with GCC, ASCC G-4, and JTF J-4 for priorities of support.
	CSSB/DSSB BSB	Coordinate with subordinate planners to determine on-hand issue and reparable turn-in requirements.
Asset visibility provides materiel managers with information on the	TSC/ESC	Validate the local procurement requirements prior to submission to the local procuring activity.
location, movement, status, and identity of materiel, which facilitates the capability to act upon that information to improve overall performance of the	SB/DSB	Coordinate with the head of contracting authority for inspection procedures for local prime vendors.
Army supply system.	CSSB/DSSB BSB	Coordinate with TSC, ESC, and division G-4 for priorities of support.
Stock control is the maintaining of the proper location and identification of materiel within storage locations regardless of class of supply.	TSC/ESC	Coordinate with subordinate planners to determine on-hand issue and reparable turn-in requirements.
	SB/DSB	Validate the local procurement requirements prior to submission to the local procuring activity.

Table A-8. Class IX (continued)

Materiel Management Function	Echelon	Supply Support Tasks	
	CSSB/DSSB BSB	Coordinate with the assigned contracting activity for inspection procedures for local prime vendors.	
Asset reporting is the vertical and horizontal reporting of on-hand assets validation.	TSC/ESC	Coordinate with the SB/DSB, brigade S-4, and supported units for priorities of support.	
	SB/DSB	Coordinate with the CSSB and supported units to determine on-hand issue and reparable turn-in requirements.	
	CSSB/DSSB BSB	Validate the local procurement requirements prior to submission to the local procuring activity.	
Supply is the provision of materiel to supported units by supply support organizations and activities.	TSC/ESC	Coordinate with the SB/DSB and supported battalions to establish combat configured loads and specific mission configured loads.	
	SB/DSB	Attend G-8 and J-8 budget allocation meetings and provide ordering estimates.	
	CSSB/DSSB BSB	Execute theater and JOA management of class IX.	
Distribution is the integration of the logistics functions of transportation and supply. It is dependent on materiel management and movement control. The operational process of synchronizing all elements of the logistics system to deliver the "right things" to the "right place" at the "right time" to support the commander.	TSC/ESC	Attend all budget allocation meetings and provide ordering estimates. Determine the methods of resupply for class IX. Identify organic transportation capabilities. Identify transportation shortfalls by nodes. Identify the type of transportation required. Request additional transportation support. Identify the traffic controls that may be necessary to the operation.	
	SB/DSB	Execute management of all assigned class IX. Determine the methods of resupply for class IX. Identify organic transportation capabilities. Identify transportation shortfalls by nodes. Identify the type of transportation required. Request additional transportation support. Identify the traffic controls that may be necessary to the operation.	
	CSSB/DSSB BSB	Attend all budget allocation meetings. Determine the methods of resupply for class IX. Identify organic transportation capabilities. Identify transportation shortfalls by nodes. Identify the type of transportation required. Request additional transportation support. Identify the traffic controls that may be necessary to the operation.	

Table A-8. Class IX (continued)

Materiel Management Function		Echelon	Supply Sup	port Tasks
Redistribution is the reallocating of excess materiel to other locations in theater using all transportation assets available. Managers may use excess materiel in theater to fill shortages and meet operational requirements.		TSC/ESC	Coordinate with AFSB and appropriate national inventory control point to ensure steady flow of intensively managed parts.	
		SB/DSB	Track performance measures that indicate how well the supply chain is responding to identified requirements.	
		CSSB/DSSB BSB	Coordinate with AFSB and appropriate national inventory control point, and TSC to acquire emergency need-based parts.	
Legend: AFSB – Army Field Support Brigade AO – area of operations ASA – ammunition support activities ASCC - Army service component command BDE – brigade BSB – brigade support battalion CSSB – combat sustainment support battalion DA – Department of the Army DIB – distribution integration branch DODAAC – Department of Defense Activity Address Code DSB – division sustainment brigade	DSSB – division sustain battalion ESC – expeditionary su command FEPP – Federal Excess Property FERP – Federal Excess Property G-4 – assistant chief of G-8 – assistant chief of management GCC – geographic com commander GCSS-Army – Global C Control System-Army GFE – government furn equipment IAW – in accordance wi ITV – in transit visibility		ustainment s Personal s Real f staff, logistics f staff, financial nbatant Command and nished	J-4 – logistics directorate of a joint staff JOA – joint operations area JTF – joint task force MHE – material handling equipment OCS – operational contract support S-4 – battalion or brigade logistics staff officer SB – sustainment brigade SSA – supply support activity TPFDL – Time Phase Force Deployment List TSC – theater sustainment command



Glossary

The glossary lists acronyms and abbreviations for Army and joint terms.

SECTION I – ACRONYMS AND ABBREVIATIONS

CTION I – ACRON	YMS AND ABBREVIATIONS		
ACC	Army Contracting Command		
AD	aerial delivery		
ADP	Army doctrine publications		
AESIP	Army Enterprise System Integration Program		
AFSB	Army field support brigade		
AFSBn	Army field support battalions		
AHS	Army Health System		
AO	area of operations		
AOR	area of responsibility		
APS	Army pre-positioned stocks		
AR	Army regulation		
ASC	Army Sustainment Command		
ASCC	Army Service component command		
ATP	Army techniques publication		
AWCF	Army Working Capital Fund		
BCT	brigade combat team		
BSB	brigade support battalion		
CBN	contracting battalion		
CBRN	chemical, biological, radiological, and nuclear		
CSB	contracting support brigade		
CONUS	continental United States		
COR	contracting officer representative		
CSSB	combat sustainment support battalion		
DA	Department of the Army		
DIB	distribution integration branch		
DLA	Defense Logistics Agency		
DLA-Energy	Defense Logistics Agency - Energy		
DMC	distribution management center		
DOD	Department of Defense		
DODAAC	Department of Defense activity address code		
DNBI	disease and nonbattle injuries		
DSB	division sustainment brigade		

division sustainment support battalion

DSSB

DWCF Defense Working Capital Fund **EAB** echelons above brigade **EBS** Enterprise Business System **ERP** enterprise resource planning **ESC** expeditionary sustainment command **FFC** field feeding company FMfield manual **FOO** field ordering officer **FRAGORD** fragmentary orders **FSC** forward support company assistant chief of staff, intelligience G-2 G-3 assistant chief of staff, operations G-4 assistant chief of staff, logistics **G-8** assistant chief of stafff, financial management **GCC** geographic combatant commander **GCSS-Army** Global Combat Support System-Army **GFEBS** General Funds Enterprise Business System **IMCOM Installation Management Command** J-4 logistics directorate of a joint staff **JFC** joint force commander **JOA** joint operations area JP joint publication JPO Joint Petroleum Office JSA joint security area **JSOA** Joint special operations area **LADS** Laundry Advanced System **LCMC** life cycle management command LIN line item number LOGCAP logistics civil augmentation program LOGPAC logistics package **LOGSTAT** logistics status report LRC logistics readiness centers MEDCOM (DS) medical command (deployment support) MEDLOG medical logistics **MMB** medical battalion (multifunctional) **MEDBDE** medical brigade MEDBDE (SPT) medical brigade (support) **MEEL** mission essential equipment list **MDMP** military decision-making process MOS military occupational specialty

MTOE

modified table of organization and equipment

NATO North Atlantic Treaty Organization

NCO noncommissioned officer

NCOIC noncommissioned officer in charge
OCONUS outside the continental United States

OCS operational contract support

OMA operations and maintenance, Army

OPCON operational control
OPLOG Operations Logistics
OPLAN operation plan
OPORD operation order

PBO property book officerpH potential of hydrogen

PPE personal protective equipment
PPP Power Projection Platforms
RIC routing identifier code

S-2 battalion or brigade intelligience staff officer

S-3 battalion or brigade operations officerS-4 battalion or brigade logistics staff officer

S-8 battalion or brigade financial management staff officer

SAPO subarea petroleum office

SDDC Surface Deployment and Distribution Command

SOP standard operating procedure

SPO support operations
SSA supply support activity

TAMIS Total Ammunition Management Information System

TB technical bulletin

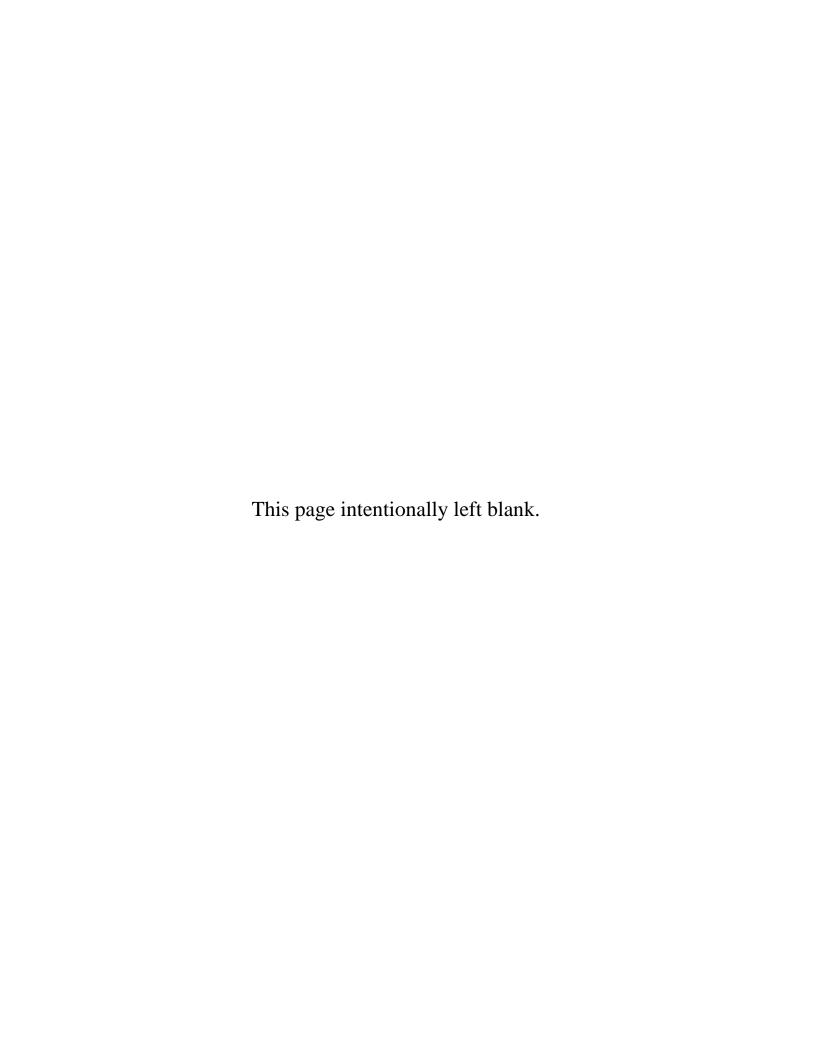
TDA table of distribution and allowances
TADC theater aerial delivery company
TSC theater sustainment command

TM technical manaul

TPC theater petroleum center
UIC unit identification code

U.S. United States

USAMC United States Army Materiel Command
USTRANSCOM United States Transportation Command



References

All URLs accessed on 28 July 2020.

REQUIRED PUBLICATIONS

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

ADP 1-02, Terms and Military Symbols, 14 August 2018.

FM 1-02.1, Operational Terms, 11 November 2019

DOD Dictionary of Military and Associated Terms, June 2020.

RELATED PUBLICATIONS

These documents contain relevant supplemental information.

DEPARTMENT OF DEFENSE PUBLICATIONS

Most Department of Defense publications are available online: https://www.esd.whs.mil/DD/.

DoDM 4160.21, Volume 1, Defense Materiel Disposition: Disposal Guidance and Procedures, 22 October 2015

DoDM 4160.21, Volume 2, Defense Materiel Disposition: Property Disposal and Reclamation, 22 October 2015

DoDM 4160.21, Volume 3, Defense Materiel Disposition: Reutilization, Transfer, and Sale of Property, 22 October 2015

DoDM 4160.21, Volume 4, Defense Materiel Disposition: Instructions for Hazardous Property and Other Special Processing Materiel, 22 October 2105

DoDM 4160.28, Volume 1, Defense Demilitarization: Program Administration, 9 August 2017

DODD 1300.22, Mortuary Affairs Policy, 30 October 2015.

DODD 2010.9, Acquisition and Cross-Servicing Agreements, 28 April 2003

DODD 5000.01, The Defense Acquisition System, 12 May 2003.

DODD 6490.02E, Comprehensive Health Surveillance, 8 February 2012.

DODI 6480.04, Armed Services Blood Program Operational Procedures, 13 August 2012.

DODI 6490.03, Deployment Health, 19 June 2019.

JOINT PUBLICATIONS

Most joint publications are available online: https://www.jcs.mil/Doctrine/.

JP 3-0, Joint Operations, 17 January 2017.

JP 4-0, Joint Logistics, 4 February 2019.

JP 4-02, Joint Health Services, 11 December 2017

JP 4-09, Distribution Operations, 14 March 2019.

JP 4-10, Operational Contract Support, 4 March 2019.

CJCSI 2120.01D, Acquisition and Cross-Servicing Agreements, 21 May 2015.

ARMY PUBLICATIONS

Most Army doctrinal publications are available online: https://armypubs.army.mil/.

ADP 1-01, Doctrine Primer, 31 July 2019.

- ADP 3-0, Operations, 31 July 2019.
- ADP 5-0, The Operations Process, 31 July 2019.
- AR 5-13, Total Army Munitions Requirements and Prioritization Policy, 8 October 2015.
- AR 30-22, Army Food Program, 17 July 2019.
- AR 40-1, Composition, Mission, and Functions of the Army Medical Department, 24 May 2019.
- AR 40-3, Medical, Dental, and Veterinary Care, 23 April 2013.
- AR 40-5, Preventive Medicine, 12 May 2020.
- AR 40-60, Army Medical Materiel Acquisition Policy, 6 May 2014.
- AR 40-61, Medical Logistics Policies, 28 January 2005.
- AR 56-4, Distribution of Materiel and Distribution Platform Management, 17 September 2014.
- AR 59-4, Joint Airdrop Inspection Records, Malfunction/Incident Investigations, and Activity Reporting, 8 April 2008.
- AR 71-9, Warfighting Capabilities Determination, 15 August 2019.
- AR 71-32, Force Development and Documentation, 20 March 2019.
- AR 190-11, Physical Security of Arms, Ammunition, and Explosives, 17 January 2019.
- AR 190-13, The Army Physical Security Program, 27 July 2019.
- AR 190-51, Security of Unclassified Army Property (Sensitive and Nonsensitive), 27 June 2019.
- AR 210-130, Laundry and Dry Cleaning Operations, 22 February 2005.
- AR 350-1, Army Training and Leader Development, 10 December 2017.
- AR 638-2, Army Mortuary Affairs Program, 28 November 2016.
- AR 700-4, Logistics Assistance, 23 March 2017.
- AR 700-8, Logistics Planning Factors And Data Management, 15 March 2011
- AR 700-84, Issue and Sale of Personal Clothing, 22 July 2014.
- AR 700-135, Soldier Support in the Field, 5 February 2009.
- AR 700-137, Logistics Civil Augmentation Program, 23 March 2017.
- AR 710-1, Centralized Inventory Management of the Army Supply System, 28 November 2016.
- AR 710-2, Supply Policy Below the National Level, 28 March 2008.
- AR 715-9, Operational Contract Support Planning and Management, 23 March 2017.
- AR 735-5, Property Accountability Policies, 9 November 2016.
- AR 750-1, Army Materiel Maintenance Policy, 28 October 2019.
- AR 750-32, Airdrop, Parachute Recovery, and Aircraft Personnel Escape Systems, 18 June 2008.
- ATP 1-06.1, Field Ordering Officer and Pay Agent Operations, 10 May 2013
- ATP 2-22.82, Biometric-Enabled Intelligence, 2 November 2015.
- ATP 3-20.98, Scout Platoon, 4 December 2019.
- ATP 3-35.1, Army Pre-positioned Operations, 27 October 2015.
- ATP 3-37.10, Base Camps, 27 January 2017.
- ATP 4-0.1, Army Theater Distribution, 29 October 2014
- ATP 4-01.45/MCRP 3-40F.7[MCRP 4-11.3H]/AFTTP 3-2.58, *Multi-Service Tactics, Techniques, and Procedures for Tactical Convoy Operations*, 22 February 2017.
- ATP 4-02.1, Army Medical Logistics, 29 October 2015
- ATP 4-02.3, Army Health System Support to Maneuver Forces, 9 June 2014.
- ATP 4-02.8, Force Health Protection, 9 March 2016.
- ATP 4-02.55, Army Health System Support Planning, 30 March 2020.
- ATP 4-10/MCRP 4-11H/NTTP 4-09.1/AFMAN 10-409-O, Multi-Service Tactics, Techniques, and Procedures for Operational Contract Support, 18 February 2016.

ATP 4-10.1, Logistics Civil Augmentation Program Support to Unified Land Operations, 1 August 2016.

ATP 4-11, Army Motor Transport Operations, 14 August 2020

ATP 4-25.12, Unit Field Sanitation Teams, 30 April 2014.

ATP 4-33, Maintenance Operations, 9 July 2019.

ATP 4-35, Munitions Operations and Distribution Techniques, 5 September 2014.

ATP 4-41, Army Field Feeding and Class I Operations, 31 December 2015.

ATP 4-42.2, Supply Support Activity Operations, 9 June 2014.

ATP 4-43, Petroleum Supply Operations, 6 August 2015.

ATP 4-44, Water Support Operations, 2 October 2015.

ATP 4-45, Force Provider Operations, 24 November 2014.

ATP 4-46, Contingency Fatality Operations, 17 December 2014.

ATP 4-48, Aerial Delivery, 21 December 2016.

ATP 4-90, Brigade Support Battalion, 18 June 2020.

ATP 4-91, Army Field Support Brigade, 15 December 2011.

ATP 4-92, Contracting Support to Unified Land Operations, 15 October 2014.

ATP 4-93, Sustainment Brigade, 11 April 2016.

ATP 4-93.1, Combat Sustainment Support Battalion, 19 June 2017.

ATP 4-94, Theater Sustainment Command, 28 June 2013.

ATP 5-19, Risk Assessment, 14 April 2014.

CTA 50-900, Clothing and Individual Equipment, 20 November 2008

CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items), 28 January 2005

DA Pamphlet 30-22, Operating Procedures for the Army Food Program, 17 July 2019.

DA Pamphlet 40-11, Preventive Medicine, 18 May 2020.

DA Pamphlet 700-16, The Army Ammunition Management System, 26 June 2017.

DA Pamphlet 710-2-1, Using Unit Supply System (Manual Procedures), 1 December 2016.

DA Pamphlet 710-2-2, *Supply Support Activity Supply System: Manual Procedures*, 30 September 1998.

DA Pamphlet 710-7, Hazardous Material Management Program, 23 March 2017.

DA Pamphlet 735-5, Financial Liability Officer's Guide, 23 March 2016.

FM 1-06, Financial Management Operations, 15 April 2014.

FM 3-0, Operations, 6 October 2017.

FM 3-99, Airborne and Air Assault Operations, 6 March 2015.

FM 4-0, Sustainment Operations, 31 July 2019.

FM 4-02, Army Health System, 26 August 2013.

FM 4-30, Ordnance Operations, 1 April 2014.

FM 6-0, Commander and Staff Organization and Operations, 5 May 2014.

FM 6-27/MCTP 11-10C, The Commander's Handbook On The Law Of Land Warfare, 7 August 2019.

TB MED 531, Facility Sanitation Controls and Inspections, 1 March 2019

TB MED 577, Sanitary Control and Surveillance of Field Water Supplies, 1 May 2010.

TC 4-02.3, Field Hygiene and Sanitation, 6 May 2015.

TM 10-3510-221-10, Operator's Manual for Laundry Advanced System (LADS), 7 July 2008.

TM 10-3510-226-10, Operator's Maintenance Manual for Containerized Batch Laundry (CBL), 31 August 2005.

UNITED STATES LAW

United States Codes are available at https://uscode.house.gov/

10 USC 164(c), Commanders of combatant commands: assignment; powers and duties.

31 USC 665 (RS 3679). Antideficiency Act.

OTHER PUBLICATIONS

DLA Customer Assistance Handbook, 21st Edition (2019), available online:

https://www.dla.mil/CustomerSupport.aspx

Federal Acquisition Regulation, Part 13, Simplified Acquisition Procedures, available online: https://www.acquisition.gov/.

PRESCRIBED FORMS

This section contains no entries.

REFERENCED FORMS

Unless otherwise indicated, DA forms are available on the Army Publishing Directorate web site at https://armypubs.army.mil. DD forms are available on the Executive Services Directorate website at https://www.esd.whs.mil/Directives/forms/.

DA Form 1687, Notice Of Delegation Of Authority - Receipt For Supplies.

DA Form 1974, Laundry List [Medical Treatment Facility and Organization].

DA Form 2028, Recommended Changes to Publication and Blank Forms.

DA Form 2765–1, Request for Issue or Turn-in.

DA Form 2886, Laundry List for Military Personnel.

DA Form 3078, Personal Clothing Request.

DA Form 3136, Roster and Statement.

DA Form 3953, Purchase Request and Commitment.

DD Form 250, Material Inspection and Receiving Report.

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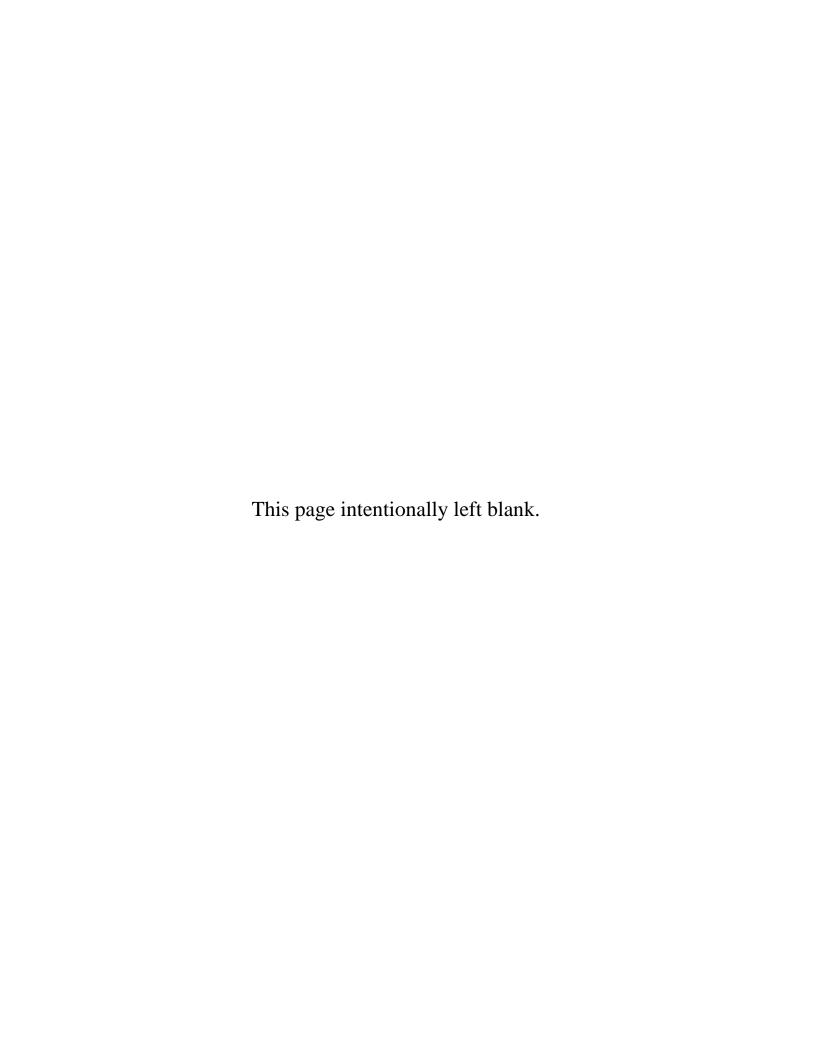
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