

CORPS SUPPORT COMMAND

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^{*}This publication supersedes FM 63-3, 24 August 1983, and FM 63-3J, 12 August 1985.

Preface

This manual describes how the COSCOM supports the corps force and its weapon systems for combat on modern battlefields. It describes how the COSCOM sustains soldiers and how it arms, fuels, fixes, and moves the corps force. Since battlefields can change in a multitude of ways based on the level, complexity, and intensity of battle, the scope of the manual can only provide principles and broad procedural guidelines. This manual is intended to serve as a guide. Guidance herein is subject to the specifics of COSCOM OPORDs and service support plans/orders.

FM 63-3 is intended primarily for use by commanders and staff assigned to a COSCOM HHC. It delineates COSCOM headquarters staff responsibilities and their relationships with staff officers in the corps headquarters and subordinate commands. It also describes how COSCOM coordinating staffs coordinate support for COSCOM units. COSCOM staffs can use the guidelines provided herein to develop situation unique tactics, techniques, and procedures for logistics support of potential combat situations. Staff officers assigned to corps, DISCOMs, and subordinate commands will also find this manual useful when planning and coordinating support with their counterparts in the COSCOM headquarters.

For additional information on how COSCOM units provide support to the DISCOM's FSBs and MSB, refer to FMs 54-30, 63-2, 63-2-1, 63-20, and 63-21. For information on support to the corps and COSCOM from higher echelons, refer to FMs 63-4, 100-10, and 100-16.

The proponent of this publication is HQ TRADOC. Send comments and recommendations on DA Form 2028 and forward to Commandant, US Army Logistics Management College, ATTN: ATSZ-LSD, Fort Lee, Virginia 23801-6050.

This publication implements the following international agreements -

STANAG 2034/QSTAG 516, Land Forces Procedures for Allied Supply Transactions, edition 4.

STANAG 2135, Procedures for Emergency Logistic Assistance, edition 3.

When amendment, revision, or cancellation of this publication is proposed that will affect or violate the agreement concerned, the preparing activity will advise the Army action agent and HQDA (DAMO/FDN).

The term "logistics," as used throughout this manual, includes the logistics functions of supply, field services, maintenance, transportation, and health service support. The term "CSS" includes these functions as well as the finance and personnel service support functions provided by the corps finance command and corps personnel service command.

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

CHAPTER 1

Supporting Corps Forces

The COSCOM supports the corps force by providing logistics support. It enables the corps to support high levels of combat over the duration of major operations. Its battlefield support mission facilitates the corps commander's ability to generate combat power at the decisive time and place. The COSCOM does this by –

- Arming corps weapon systems.
- Fueling stationary equipment, tracked/wheeled vehicles, and aircraft.
- Fixing damaged equipment.
- Moving soldiers, equipment, and supplies about the battlefield.
- Sustaining the soldier.
- Protecting the support structure.

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SUPPORTING THE CORPS BATTLE

The COSCOM maintains the support structure and supply levels to support the corps. It supports either a contingency corps force in underdeveloped areas or a forward deployed corps in an established theater of operations.

CONTINGENCY CORPS FORCE

A contingency corps force is tailored for rapid deployment. Corps forces are projected to contingency operations in underdeveloped areas where there is no existing US military base. The contingency corps is initially an austere organization, with a mix of light and heavy maneuver forces. It establishes a lodgment with appropriate sea and air LOCs, often in conjunction with allied forces.

The composition of the contingency force depends on the situation, potential threat, and AO. While a contingency force that deploys with an entire COSCOM cannot be smaller than one division, it can expand to several divisions. A contingency combat operation involving a division or larger force would probably involve two or more US military Services and possibly allied forces.

The COSCOM can support the Army components of the contingency force. It may support other Services attached to the force. To avoid duplication of logistics efforts, interservice support agreements, memoranda of understanding, and other documentation assign logistics responsibilities.

FORWARD DEPLOYED CORPS

The COSCOM can also support a forward deployed corps in an established theater of operations. Based on treaty obligations, a predeployed corps operates in an established theater as a forward presence to deter mid-to-high level threats. Given current world politics and US treaty commitments, the corps normally fights as an element of a combined force, in cooperation with Air Force, Navy, and Marine Corps. Table 1-1 lists the differences between logistics support of a forward deployed corps versus that of a force projection corps.

Major subordinate elements, to include a reduced COSCOM organization, normally locate with a predeployed corps. In the event of war, time-phased deployment of reinforcing forces occurs.

CORPS ORGANIZATION

The corps is tailored for the theater and mission operations. It consists of organic combat, CS, and CSS required to support operations for a considerable period. Figure 1-1 depicts a sample corps organization. The specific number, size, and types of units vary.

PREDEPLOYMENT

Commanders may use a warning order to advise subordinates that the National Command Authority

Table 1-1. Differences between logistics support of a forward deployed corps versus force projection corps.						
FORWARD DEPLOYED CORPS	FORCE PROJECTION CORPS					
 Theater-oriented logistics with logistics forces forward-deployed. 	 Force requirement oriented logistics with logistics support forces deployed before or with combat forces. 					
 Allocation/OPLAN based logistics. 	 Capability based tailored logistics. 					
 Established theater logistics infrastructure. 	 Possible bare base logistics with logistics buildup required. 					
Component tailored logistics.	CINC/Joint tailored logistics.					
Support to known coalitions.	Support to ad hoc coalitions.					
 Operational and tactical logistics primarily military personnel. 	 Increased use of DOD, DA, and private sector civilians. 					
HNS agreements in place.	 Contingency contracting and coalition support. 					
 Commercially oriented communications exists. 	Communications austere.					

has determined a crisis situation exists which warrants military preparations or actions. The warning order generally equates to the planning directive used in deliberate planning processes.

Planning Phase

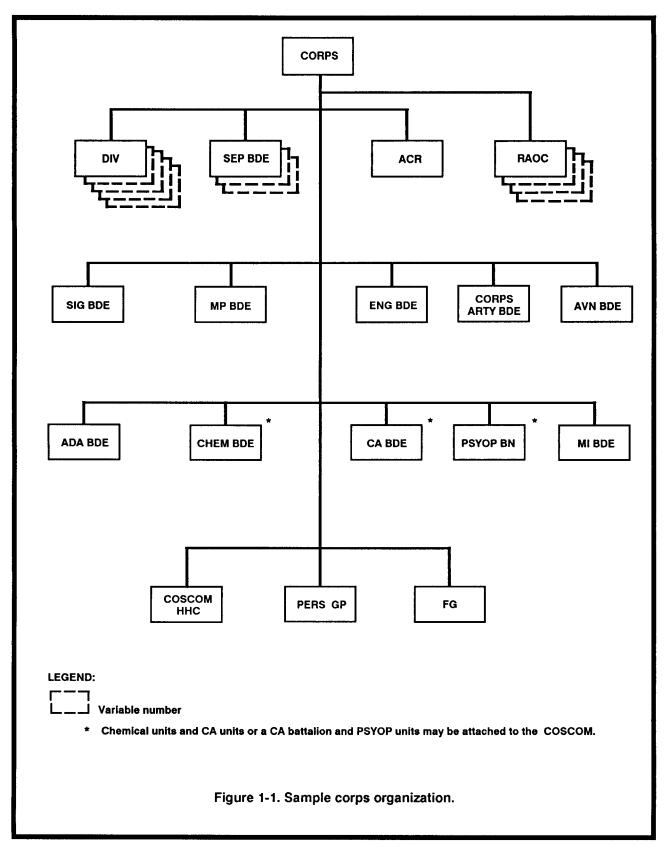
ACofS, G3 staff officers review deployment contingency plans. To update applicable plans, they need to determine –

- What courses of action are being explored by corps G3 staff.
- Potential COSCOM support missions in the AO.
- Possible specified tasks and implied tasks from corps directives, OPLANs, and the service support annex.
- What corps troops will be used.
- Estimated population of corps force.
- Estimated duration of the operation.
- Intensity and level of combat.

- What map series corps is using in its planning.
- Whether supporting units are specified.
- Whether HNS will be available.
- Quantitative logistics requirements.

Appendix A provides a deployment planning checklist. When possible, COSCOM staff officers coordinate support plans with higher, lower, and adjacent units before deployment. During the planning phase –

- Corps G3 and G4 staff officers provide initial input on the number of troops to be supported. the AO, and the support to be provided.
- CSS plans branch personnel coordinate with force design/plans branch personnel in tailoring force packages and preparing contingency plans to support the force.
- The CMMC develops fuel, ration, and ammunition push packages. It coordinates with AMC on identifying project codes to call forward



- prepositioned emergency supply packages. It identifies all known sources and quantities of contingency stocks to CSS plans branch staff.
- Contracting and procurement personnel in the COSCOM's procurement support branch identify requirements for contracting officers and ordering officers. They coordinate the assembly of contingency acquisition kits for each ordering officer.
- COSCOM transportation support branch personnel coordinate with ACotS, G3 force design/plans branch to establish initial distribution patterns and the transportation force structure to support it consistent with the TPFDL.
- The CMCC assists major subordinate commands in updating unit movement plans and loading force package data into the AALPS program.
- ACofS, G1 staff officers identify positions that require linguists.
- ACofS, G6 staff officers coordinates with the signal brigade to develop signal packages which will flow for duplication of networks by alternate means, data transmission links for the CMMC and DSUs, and CMCC control nets.

Alert Phase

The alert order is a formal JCS directive. It follow a decision by the National Command Authority that US military forces may be required. The alert order states that the Secretary of Defense has authorized execution planning for the selected course of action.

During the alert COSCOM staff officers facilitate disengagement of subordinate support elements from installations. Reserve component units mobilize and complete administrative functions prior to movement.

Alerted unit commanders provide ACofS, G3 staff with anticipated requirements to support planned exceptional or unanticipated operations. Requirements should address –

- Base development construction.
- Barrier construction.
- Force structure dependencies.

When given advance warning, COSCOM support operations staff officers need to determine –

- When support will begin.
- Quantitative supply requirements.
- Priority of support.
- Common item support requirements of other Services.

- Whether units will deploy with their ASLs and PLLs.
- Supply sources of basic loads.
- Lead times required for supply requisitions.
- Possibility of propositioning brigade or division sets.

Ordering officers must be appointed prior to deployment. Sufficient funds need to be provided to support over-the-counter local purchase requirements, within limitations set forth in appointment orders, until periodic replenishment of funds by Class A agents.

DEPLOYMENT

FM 100-17 describes mobilization and deployment doctrine. The deployment/deployment preparation order increases deployment posture. It covers personnel recall through marshaling units at POE and first increment loaded. It may be included as a part of the warning, planning, or alert orders.

Support operations section staff officers develop customer support lists which clearly align deploying units with COSCOM supporting units. The support operations section provides deploying units a list identifying support activities and alternative support sources. This list allows supported units to use the applicable support activity address as a supplementary address on supply requests submitted prior to deployment. This helps ensure that supplies are shipped more efficiently and reduces frustrated cargo.

If a CMMC team does not deploy with the initial deploying units, the COSCOM support operations officer and ACofS, G6 officer need to modify the flow of requisitions. The modification should enable initial deployed units to transmit requirements to their home base via telephone or facsimile. To preclude rejection of requisitions, the COSCOM support operations officer ensures that the CMMC will recognize ad hoc unit requirements.

Base Support

Depending on the theater, a base support battalion (TOE 63636L000) maybe attached to an ASG or CSG. Its mission is to plan for, conduct or assist, and report on the reception and stationing of deploying, reinforcing, and relocating units. It supports the staging and onward movement of units passing through the BSB area of responsibility.

To provide base support to deploying and reinforcing units, a BSB may control the following type of freed facilities:

- Dining facilities.
- Maintenance shops.
- Terminal facilities.
- Barracks.
- Railway points.
- Fuel facilities.
- Laundry facilities.
- Warehouses.

Depending on the resources assigned to the battalion and the type of freed facilities which it controls, a BSB can provide the following support:

- Communications.
- Intelligence dissemination.
- Mail
- Laundry.
- Maintenance.
- Organizational clothing and equipment.
- Transportation.
- Military police support.

A base support battalion also conducts deploying facility turnover and inventory functions. BSB staff officers perform the following phase-down support functions:

- Phase-down commissary, AAFES, and related support.
- Coordinate mutual assistance efforts using later deploying units.
- Close-out community services.
- Secure essential facilities after deploying units leave.

Noncombatant Evacuation Operations

NEO are theater and situation dependent. In theaters where forces have established a forward presence, noncombatants are evacuated before or as hostilities begin. Noncombatants include soldier dependents and US government sponsored civilian employees. NEO relieve forward deployed soldiers of the psychological stress of worrying about their families at the onset of hostilities.

Theater dependent, a BSB executes the NEO notification plan within its area of responsibility. It controls and supervises the administrative processing and support of evacuees. The BSB performs the following NEO support:

- Maintains NEO rosters and schedules.
- Maintains housing plans and evacuation route plans.

- Provides information on documentation requirements and assembly areas.
- Plans use of HN vehicular assets.
- Assembles noncombatants.
- Provides evacuee security and protection.
- Houses and feeds assembled noncombatants.
- Arranges for emergency health services support.
- Maintains accountability of noncombatants throughout their evacuation.
- Coordinates with MCTs on movement of evacuees.
- Arranges for the storage and transportation of evacuee property and assets.

Movement Phase

Movement phase activities include coordinating and monitoring the transport of elements of the contingency force or task force. To plan and coordinate the reception and onward movement of supplies from ports to supply support activities, COSCOM CSS plans branch personnel and CMCC staff officers need advance manifests.

The COSCOM ACofS, G6 develops an early deployment policy for deployment of automation devices in COSCOM units as well as early deployment of CSSAMO personnel from the COSCOM and CSGs. He coordinates signal support requirements with corps signal staff. CSSAMO personnel ensure that all incoming units use the same version software. They also help TACCS and ULC microcomputer operators resolve software operating problems.

Preassault Phase

Units deploy with accompanying supplies as indicated in deployment directives. Accompanying supplies usually include basic loads and selected critical supplies. These supplies support the assault force for two to five days, or until follow-up supply flow can be established. All units must follow supply economy for Class I, III, and V.

Assault Phase

Initial logistics support is austere. Units which deploy with assault elements use their accompanying supplies as their primary source of supply. If available, prepositioned supplies and contingency stocks provide initial support. When practicable, preplanned resupply occurs by air and then by surface resupply. Resupply from CONUS or other sources will be limited.

AirLand Phase

Follow-on support units deploying into the objective area assume support mission from the support elements

in the assault echelon. To coordinate follow-on support, several support operations staff officers knowledgeable about the operation should remain at home base.

Supply levels, special authorizations, and troop strengths to be supported are confirmed in COSCOM OPLANs/OPORDs and administrative/logistics plans/orders. War reserve stocks are normally provided during initial resupply operations by preplanned increments from CONUS or overseas locations, or both. HNS and local procurement supplement the supply system. To ensure that normal resupply operations begin prior to termination of preplanned resupply, COSCOM support operations staff officers and CMMC staff officers need to take into account order-ship time.

CORPS AREA OF OPERATIONS

The corps area includes areas in which corps forces conduct deep, close, and rear operations. Though situational and geographically dependent, the corps AO could encompass an area roughly 100 by 210 kilometers or 21,000 square kilometers. Refer to Figure 1-2.

Terrain Management

The corps G3 has overall responsibility for management of corps rear area terrain. The corps rear CP's operations cell plans and executes terrain management. The operations cell monitors the tactical situation. It directs repositioning of units to facilitate continuous support and survivability. It coordinates its analysis of unit positioning requirements with the corps G3 and the rear CP's CSS cell.

RAOC Positioning

The corps rear CP uses its subordinate RAOCs to assign operating locations to units throughout the corps rear area. This includes positioning of HNS units and echelon above corps units. For example, RAOCs can position area support group elements in the corps rear area to assist in reconstitution. Units entering or relocating in the corps rear area must first coordinate with the area RAOC to obtain operating locations and with the supporting MCT to obtain movement clearance, This ensures that the locations selected do not conflict with current or projected rear operations.

CSGs coordinate positioning of their units with the RAOC in their area. Forward CSGs coordinate the positioning of their units in the division rear area with the division rear CR. CSGs provide general positioning requirements to the COSCOM support operations officer, supporting RAOC, and division rear CP.

Logistics Unit Positioning Guidelines

To accomplish their missions, COSCOM units often have unique terrain requirements. For example, supply units often need to employ near existing road, rail, air, and water nets. Supply points need to be accessible to both supported units and the transportation network. Whenever possible, the position selected should simplify the receipt, storage, and issue of supplies as well as the evacuation of damaged equipment.

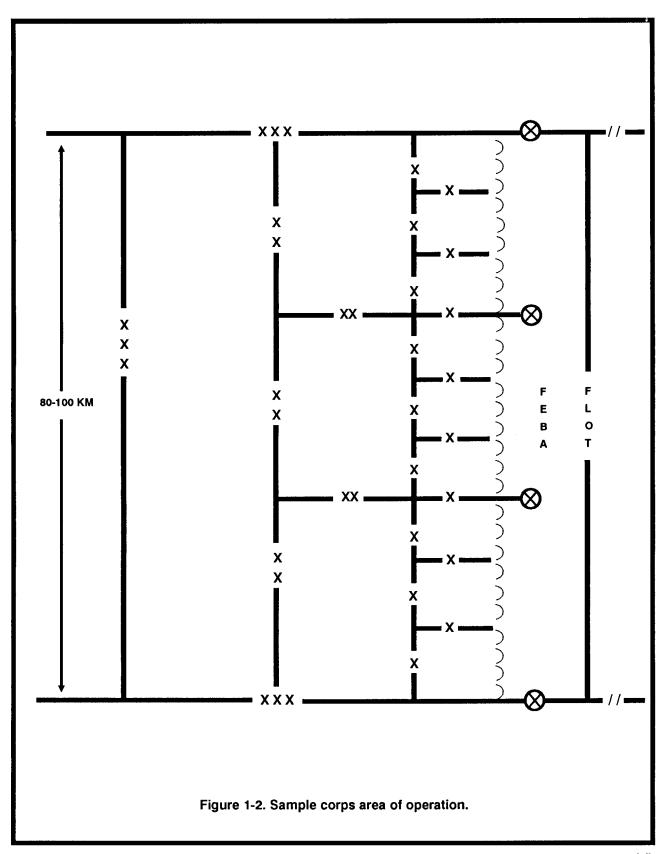
The positioning of COSCOM units varies depending on METT-T, unit positioning factors, and the need to balance mission accomplishment with protection considerations. As appropriate, the COSCOM requests terrain which enables subordinate groups to –

- Position supply units near MSRs.
- Locate Class III points at least 100 feet from water sources to prevent contamination.
- Distance the nondivision ammunition company ATP at least 200 meters from other supplies and 650 meters from the nearest inhabited troop facility.
- Locate Class I points near the water point.
- Locate maintenance sites near supported units and evacuation routes. In built-up areas, maintenance units can use existing HN maintenance facilities.
- Position medical facilities away from likely target areas (ATPs, ASPs, CSAs, Class III points, bridges, and road junctions). Medical facilities need to be near evacuation routes. They also need an open area to allow for landing air ambulances and evacuating casualties by air.
- Position mortuary affairs collection points to take advantage of vehicle backhaul missions.
- Position logistics units to enhance their survivability. For example, position units with the heaviest firepower along the most threatened avenues of approach.

COSCOM Staff Input

COSCOM support operations staff officers and ACofS, G3 staff officers ensure that the terrain requirements and priority protection requirements of COSCOM units are relayed to the corps rear CP's CSS and operations cells.

COSCOM support operations staff officers continually prioritize the COSCOM's critical asset list. The COSCOM ACofS, G3 keeps the corps rear



CP's operations cell informed of changes to the critical asset list.

WEIGHTING THE BATTLE

The corps commander uses the COSCOM's resources to weight the battle. His G3 staff sets priority of support. The COSCOM weights the battle for the corps commander by realigning its resources following corps priorities of support. This enables combat commander to grasp window of opportunity as front line forces seize the initiative.

LOGISTICS CHARACTERISTICS

Logistics characteristics prescribed by FMs 100-5 and 100-10 facilitate the ability of the corps force to attain operational and tactical success. To support the corps battle, COSCOM staff officers must adhere to the following five logistics characteristics.

Anticipation

COSCOM support operations staff officers must anticipate the impact which changing tactical situations will have on support systems. They need to clearly understand the corps commander's intent. To provide critical and timely logistics support, they need to anticipate requirements. They cannot wait until units place demands on the logistics support system. Comprehensive SOPS and contingency plans help subordinate support operations staff to respond rapidly to changes in demands resulting from changes in tactical operations.

To provide timely support, COSCOM support operations staff officers need to focus on support operations at least 48 to 72 hours in the future. Rather than merely react to support requirements transmitted to the CMMC or CMCC, they must focus on responsive support of future tactical operations. For example, they can anticipate a shift from high munitions requirements in a defensive operation to high fuel consumption as offensive operations begin.

To provide effective support, support operations staff officers need to understand the mission of supported units. They can then better assess the capability of the supporting COSCOM units and apply resources against requirements.

Integration

Tactical operations must be logistically supportable. Logistics sets operational limits. The success of tactical operations depends on the integration of logistics plans and battle plans. The lead time needed to arrange logistics support and resolve logistics problems requires continuous integration of logistics limits into the operational planning process. To

enable support operations staff officers to determine the supportability of proposed courses of action these plans must be developed concurrently. Support operations section CSS plans branch and ACofS, G3 force design/plans branch personnel help to ensure that operational plans are logistically supportable. When the corps supports either a joint or combined force, the COSCOM integrates its logistics support plans with other Services and allies.

The COSCOM task organizes subordinate commands to complement the logistics requirements of the force to be supported. It forms task forces or realigns organizations for specific support operations or requirements.

Continuity

Maintaining a depth of logistics resources ensures continuity. COSCOM units can then provide continuous support on time and on demand, without a lapse in support. A depth of resources ensures the capability to divert materiel to meet changing priorities.

The volume of supplies required to support the corps requires establishment and maintenance of long LOCs. Continuous provision of supplies to units over unsecured LOCs dictates increased reliance on airdrop or air-landed resupply. Air eligible Class IX and selected maintenance related Class II items are moved via air LOC to DSUs. However, when requested by the corps, any item can be moved by the Air Force. This includes high priority, low-density Class V supplies and Class III products.

The availablity of critical logistics resources decisively influences tactical operations. Continual replenishment of corps reserve stocks enables the COSCOM to provide continuous, uninterrupted support. This helps ensure that maneuver commanders retain the initiative.

Table 1-2 lists additional areas or planning considerations which help ensure continuous logistics support.

Responsiveness

Responsive logistics support enables maneuver commanders to meet changing requirements on short notice. To provide responsive support, COSCOM support operations staff officers need to be kept informed of what each of the supported elements does, when they do it, and how it is accomplished. Support operations staff also need to be kept informed on the type, quantity, and priority of logistics support required. Placing LNOs from the support operations section at the operations and

CSS cells of corps main and rear CPs helps ensure responsive logistics support. Automated CSSCS reports keep them current on the status and capabilities of subordinate units.

Changes in tactical operations require different methods of support. To retain the corps momentum, COSCOM elements need to respond to these sudden changes quickly. Detailed plans should exist on alternative ways to support contingencies and diverse courses of action. As tactical operations change, COSCOM support operations staff officers need to work with CMMC, CMCC, and CSG support operations staff to –

- Divert assets.
- Redirect supply flows.
- Reallocate transportation assets.

• Task organize subordinate organizations.

A basic principle of logistics doctrine is to provide support forward. Depending upon METT-T, COSCOM elements operate as far forward as necessary to support the tactical plan. In accordance with support forward doctrine —

- MSTs make on-site repairs on disabled weapon systems.
- Truck units haul barrier materials and bridging supplies as far forward as possible.
- Medical units treat patients as far forward as possible to save lives and increase the possibility of return to combat.

Improvisation

The modern battlefield presents extraordinary logistics problems. The COSCOM support operations

Table 1-2. Logistics continuity planning considerations.

- Establish alternate command and control procedures.
- Establish alternate methods of communications and automation support.
- Plan for increased demand for resupply by air.
- Divert normal logistics support efforts to support corps priority operations.
- Plan ways to rapidly divert support into alternate channels.
- Position supplies to support forward or withdrawing forces.
- Plan for use of preplanned combat push packages.
- Stock sufficient critical supplies near points of anticipated consumption to permit continued operations if disruption occurs in the LOC.
- Disperse units and supply points to reduce exposure to enemy interdiction.
- Perform throughput distribution on a routine basis.
- Maximize the use of containerized, packaged, or covered supplies to limit the spread of contamination when operating in a chemical environment.
- Use HNS resources, including MHE, transportation assets, and supply sources.

staff needs to devise innovative methods of support to offset the impact of battle losses and lengthy order and ship time. When CSGs cannot resolve day-to-day support problems using routine and traditional methods, COSCOM support operation staff officers need to devise ways to meet extraordinary requirements. This includes cross-leveling assets to cover the loss of support equipment and devising ways to meet unanticipated peaks in work loads.

Innovative solutions include exploiting unusual sources of supplies and transportation. This includes the use of captured enemy supplies (less medical), enemy equipment, and HN resources. Access to these stocks can significantly enhance logistics commanders' ability to improvise support on a fluid transitional battlefield.

COSCOM SUPPORT MISSION

As the logistics support command assigned to the corps, the COSCOM executes the corps CSS cell's support plan. The COSCOM provides logistics support to the corps force and to other units, Services, or allies as directed, to include a corps slice to offset LID shortages.

COSCOM MISSION AND FUNCTIONS

The COSCOM coordinates logistics elements in support of corps forces or the current operational plans of unified or joint commands. It organizes different types of logistics units into a support package to meet the mission requirements of the supported force. Appendices B through E provide guidance on supporting offensive, defensive, contingency, and other operations.

The COSCOM must be prepared to provide logistics support for the following possible corps missions

- Combat operations in low-, mid-, or high-intensity environments.
- Forced entry operations.
- Show of force operations.
- Demonstration of force operations.
- Noncombatant evacuation operations.
- Disaster relief or mercy missions.

Depending upon METT-T, the COSCOM's units perform the following functions in support of its logistics mission.

Supply Support Functions

In general, COSCOM units provide DS and GS supply support to nondivision units. They provide GS supplies to the divisions, separate brigades, and ACRs. Supply support functions include:

- DS and GS ammunition supply.
- DS and GS Class III support.
- DS and GS water supply.
- DS and GS Class I, II, and IV supply.
- DS and GS repair parts supply.

- Major end item replacement.
- Airdrop supply.
- Reinforcing supply support to the FSBs/MSB.
- Local procurement.
- Materiel management performed by the CMMC.

Service Support Functions

The COSCOM provides the following service support functions on a corpswide basis:

- Mortuary affairs support.
- CEB, laundry, and textile renovation support.
- Tactical post exchange with or without AAFES augmentation.
- Salvage support.

Maintenance Support Functions

The COSCOM maintenance support functions consist of –

- Maintenance management performed by the CMMC.
- DS maintenance and AVIM to nondivision units.
- Reinforcing DS maintenance and AVIM to the divisions, separate brigades, and ACRs.
- Missile-rocket maintenance support.
- Calibration support.

Transportation Support Functions

The COSCOM corpswide transportation support functions consist of –

- Movement control.
- Mode operations.
- Cargo transfer operations.
- Terminal operations (to include water terminals when augmenting EAC).
- Airdrop support.

Medical Support Functions

The COSCOM medical brigade or medical group area support functions consist of –

- Emergency medical treatment.
- Medical evacuation.
- Hospitalization support.
- Medical regulation of patients.
- Whole blood management.
- Medical logistics (Class VIII supply and resupply).
- Preventive medicine services.
- Dental services.
- Veterinary services.

CORPSWIDE SUPPORT

The following functional battalions assigned to the rear CSG provide corpswide support:

- The transportation battalion provides intra and inter corps transportation support.
- The petroleum supply battalion, ammunition battalion, and S&S battalion provide Class III, V and general supplies respectively on a corpswide basis. They supply the bulk distribution systems which support divisions, separate brigades, and ACRs.
- The S&S battalion also provides airdrop, mortuary affairs, CEB, laundry, and renovation support on a corpswide basis.
- The AVIM battalion provides corpswide aircraft maintenance support.

AREA SUPPORT

Area support is the most efficient and affordable way to provide support. The COSCOM's CSGs and medical brigade have an area support mission.

For CSGs, area support means that the DS supply and maintenance relationships in effect are determined by the location of the units requiring support. CSG subordinate DS units provide support on an area basis to units located in or passing through their area of responsibility. The CSG's support operations section maintains support operations overlays depicting support locations and times of operations. Supported units entering the corps rear area obtain a copy of the overlays when they report in to the sector RAOC. Those in the division sector obtain support overlays from the division rear CP.

Medical units provide health service support on an

area basis to nondivision units lacking organic HSS. The forward supporting medical group of the medical brigade employs area support medical elements to provide Levels I and II HSS. This support is provided by the area support medical battalion and its area support medical companies. These corps area medical support assets reinforce division medical companies that provide Level II HSS.

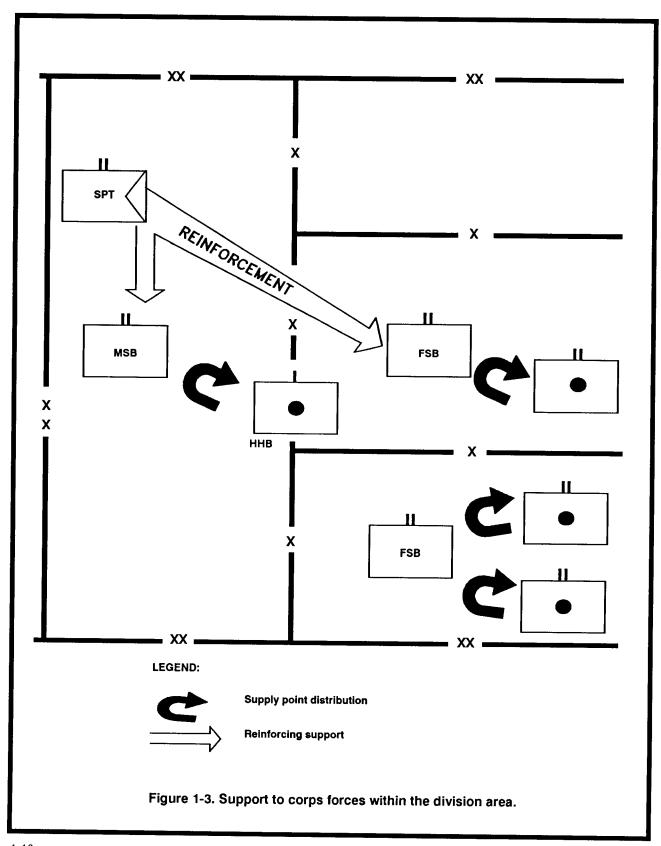
Area Support Within the Division Area

The normal support arrangement for supporting nondivision units within division boundaries is to provide area support from the CSB in the division area. FSBs and the MSB can provide some support to nondivision units operating in the division area, but only within their capability. To provide support to corps forces beyond that capability, FSBs and MSBs must be reinforced or augmented by the CSB in the division area. Refer to Figure 1-3. Based on coordination between the CSG's LNO and FSB support operations staff, this CSB augments or reinforces FSBs to enable them to provide support to corps forces, such as corps FA, corps engineer, and ADA battalions, which employ in the brigade area. The forward CSB may also augment or reinforce the MSB to enable it to provide support to corps forces which employ in the division area. Based on coordination between the DISCOM/FSBs support operations staff and forward CSG, this CSB may establish forward supply, maintenance, and service points in the division area.

Area Support Within a New Division/New Corps Area

Area support is still the prevailing method when corps forces, such as an FA brigade, engineer brigade, or ADA brigade, move to a new division area (same corps) or to a new corps area. Those corps forces would receive support from the FSB in the new division area or new corps area. As required, that FSB would be reinforced with assets from the CSB in the division area.

CSG/CSB LNOs at the DISCOM and FSBs coordinate requirements to support corps organizations with the DISCOM/FSB support operations officer. The brigade S4 coordinates with the support operations officer of the CSG supporting the new division sector as well as with the support, operations officer of the FSB(s) providing area support in the brigade's new AO. The forward CSB would then be restructured to provide reinforcing support to FSBs/MSB to enable them to support corps forces in the brigade or



division area. The forward CSGs coordinate the assets to be moved between their forward CSBs.

Area support continues to be the primary method of support when corps organizations move to a new corps area. However, coordination must be more comprehensive. Coordination needs to occur between the old and new COSCOM support structure. The operation order which directed the detachment and consequent attachment of the corps organizations alerts the COSCOMs of both corps. The COSCOMs coordinate which assets, to include MSTs, may be moved between corps. The COSCOMs cross level assets among forward CSGs to meet requirements. They also ensure that CSBs which operate along the route of march provide specified support, such as refuel-on-the move and maintenance and recovery assistance. Refer to Figure 1-4.

ACCOMPANYING SUPPORT ELEMENT/SLICE

METT-T may require that corps organizations, such as corps FA brigade, engineer brigade, or ADA brigade, be ordered out of the Army AO to support a sister Service or an ally. Since the brigade will be operating away from an Army support area, a different method of support is used. In this case, the COSCOM/forward CSGs must form a support element/slice to accompany those organizations to provide required support. Refer to Figure 1-5. There are two scenarios in which an element or slice of support must accompanying corps forces.

Operations in Support of a Sister Service

The sister Service may provide some Class I, III, IV, and selected II and V support. However, corps forces will still need to rely on the Army support structure for other support, principally maintenance and repair parts. Verbal or written agreements must be clear as to what and how much support will be provided by the host Service.

In most instances, the accompanying support element/slice is provided by the losing corps COSCOM. The brigade S4 coordinates with the COSCOM support operations officer to arrange for the corps support which accompanies the brigade or its battalions into the new AO. A reliable LOC must be established to ensure that resupply stocks will reach the support element.

The accompanying support element composition varies depending upon the requirements and the degree of support to be provided by the host Service. A maintenance element with a custom ASL usually is the core of the task organized support element.

The order directing the support mission must clarify the command relationship between the brigade and support element, whether it be DS, operational control, or attached.

Operations in Support of an Ally

Operations in support of corps forces in an allied sector are similar to those in support of corps forces in another service area. The major difference is that less support can be expected because of a greater dissimilarity in equipment and munitions. Consequently, the accompanying support element will probably be larger.

The range and degree of coordination are greater. As with supporting a sister Service, the greatest challenge may be establishing LOCs and a responsive transportation network.

BASIC SUPPORT CONCEPTS

Though specific support is subject to the details expressed in OPORDs and administrative/logistics plans/orders or the service support portion of a particular tactical plan, basic support concepts are as follows:

Direct Support

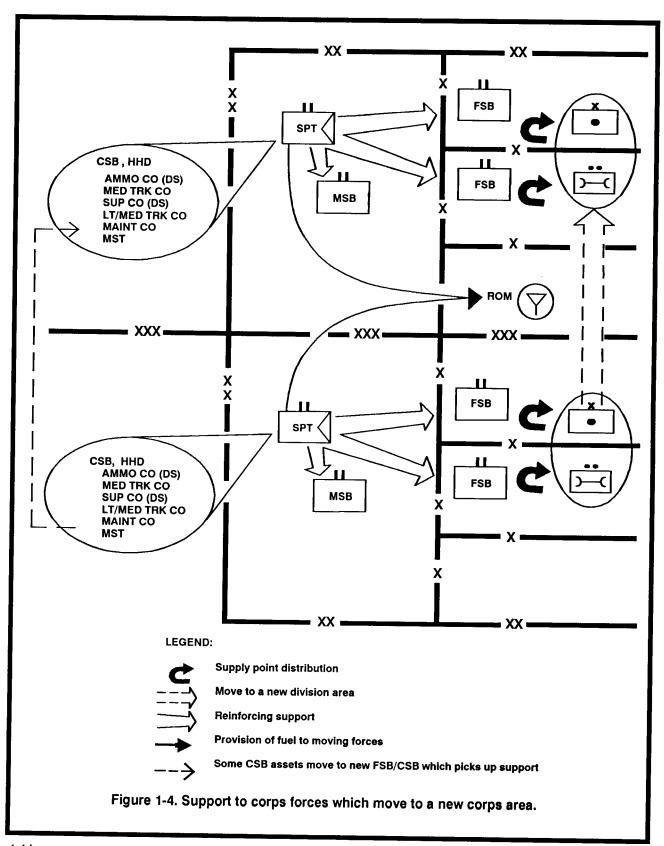
Direct support refers to supply and maintenance support provided directly to a using or consuming unit. DS supply and DS maintenance units provide support to logistics units and to –

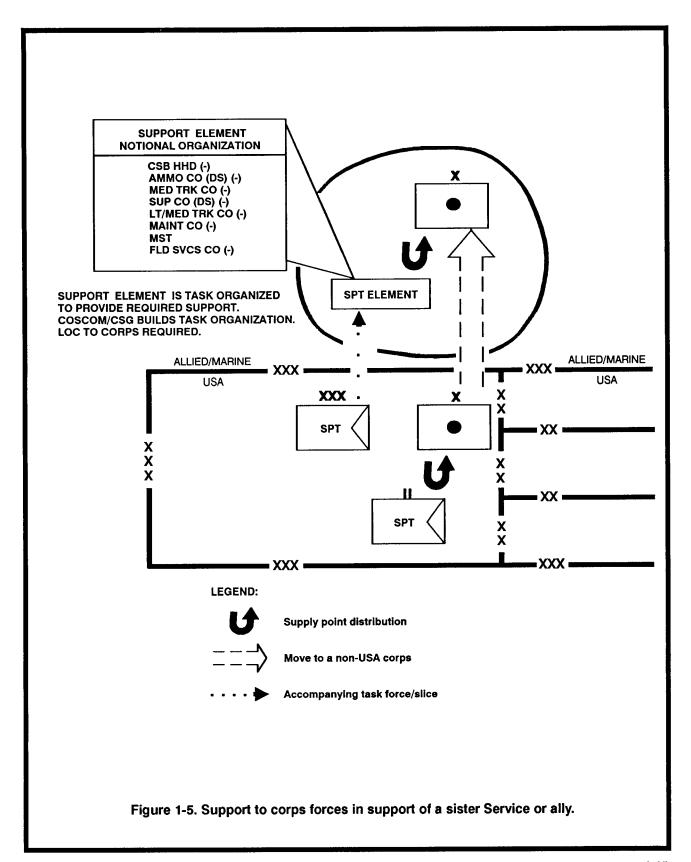
- Corps artillery units.
- Corps ADA units.
- MP brigade units.
- MI brigade units.
- Combat aviation brigade units.
- Corps engineer units.
- Corps signal units.
- Corps chemical units.

General Support

General support focuses on resupply of DS supply and maintenance units. GS supply units, heavy materiel supply units, and repair parts supply units provide GS supply to –

- Divisions.
- Separate brigades.
- ACRs.
- COSCOM DS units.





Supply Point Distribution

This is the normal distribution method for units which receive direct support from DS supply and maintenance units. Supported units use their organic transportation assets to pick up supplies at supporting supply points or maintenance units.

Unit Distribution

Corps or theater transportation assets deliver supplies to customer units. The receiving unit is responsible for timely down-loading of transportation assets. Unit distribution is the preferred method of distribution to using units and should be used whenever resources permit. It is also the standard method of distribution from GS to DS supply units.

Throughput

Throughput is a method of supply distribution wherein an intermediate supply source is bypassed in order to provide more efficient support. For example, EAC trucks bypass GS supply points to deliver directly to DS supply points. Engineer barrier material may be shipped directly from corps or theater Class IV GS points to the emplacing unit. The receiving unit provides for timely down-loading of transportation assets.

Throughput is not automatic. It needs to be specified in appropriate plans and coordinated by COSCOM support operations staff, the CMMC, and CMCC.

Push System

The initial go-to-war supply system in an undeveloped theater is a push system. The push system of resupply dots not require the submission of formal requisitions. Supporting supply elements automatically ship a predetermined quantity of push packages or supplies to a predetermined unit or location. Supplies are shipped to the theater to replenish expended supplies. The quantity of supplies shipped depends on previous coordination or anticipation of requirements.

COSCOM policy may be to routinely ship Class I, III, and V to divisions, separate brigades, and ACRs. These commands coordinate initial requirements with the COSCOM support operations officer. After implementation status reports update requirements. When update reports are not provided, the COSCOM continues to push resupply based on previous coordinated quantities or historical demand.

Pull System

The pull system of resupply is used in a mature theater that has prepositioned war reserve stocks. Unlike the push system, this system reacts to formal requisitions.

SUPPORT TO OTHER SERVICES AND ALLIES

The COSCOM provides logistics support to other Services and allies taking part in a joint or combined operation. Operations in support of another Service normally are with the Marine Corps, although support to the Air Force or Navy could be required. For example, the COSCOM routinely provides jet fuel to the Air Force. Depending upon METIT-T, it provides the following support to Marine amphibious forces, Navy elements operating ashore, and the Air Force

- Rations and water.
- Common ammunition items.
- Mortuary affairs services.
- Petroleum laboratory support.
- Health service support.
- Ground transportation support.

Verbal or written agreement and commitment must be clear and unequivocal as to what and how much support will be provided to the sister Service.

As a result of bilateral or negotiated agreement the COSCOM supports forces of allied nations. Allied forces forecast their needs and associated lead times. Agreements may cover —

- HNS.
- Base support.
- LOCs.
- Interoperable computer systems.
- Interoperable allied command control, and communications.

The CMMC develops a catalog of common material to aid in identifying allied requirements. It reports logistics support requirements for allied forces separately.

This section implements STANAG 2135

EMERGENCY LOGISTICS ASSISTANCE

Under the provisions of STANAG 2135, combat commanders have authority to seek emergency logistics assistance from an adjacent or ally unit. Commanders faced with critical deficiencies may submit requests for logistics assistance to another commander. Allied corps can use the procedures in STANAG 2135 to affect emergency logistics assistance between one another.

Forces of NATO nations, international headquarters, or multinational formations may obtain emergency logistics assistance from one another. Nations with critical deficiencies submit requests to allied logistics company centers for emergency logistics assistance from other nations. The request should use NATO stock numbers and NATO accepted item names.

Reimbursement for emergency logistics assistance may be financial in kind (as negotiated), or as prescribed in specific agreements. The standard NATO invoice/claim form is used to substantiate each emergency logistics assistance transaction.

COSCOM SUPPORT ORGANIZATION

The COSCOM support organization depends on the AO, number of soldiers to be supported type of organizations supported, number and types of weapon systems to repair, and tonnage of supplies to be issued and transported.

COSCOM ORGANIZATION

The corps commander assigns or attaches organizations to the COSCOM. The number and types of units assigned to the COSCOM vary based on the support requirements of the corps force. The COSCOM further attaches organizations or units to its major subordinate commands. Corps troop lists and plans identify the actual organization.

The COSCOM consists of a special troops battalion and headquarters company, functional control centers, a variable number of CSGs, and a medical brigade. A transportation group may be attached if three or more functional transportation battalions are assigned or attached to the COSCOM. See Figure 1-6.

Based on the scenario and tactical situation in the AO, the corps commander attaches CA or chemical units to the COSCOM's special troops battalion. To effectively support the theater commander's OPLANs, the TA commander may attach EAC logistics units to the COSCOM from TA resources, including TAACOMs.

COSCOM HHC

The mission of the COSCOM HHC is to command, control, and supervise assigned and attached units. Its staff officers plan logistics support to the corps. They coordinate support requirements with COSCOM units and provide advice and assistance to supported commands. Chapter 2 describes the COSCOM HHC. Figure 2-5 depicts the COSCOM HHC organization.

FUNCTIONAL CONTROL CENTERS

The CMMC and CMCC implement COSCOM policies and directives. The CMMC provides centralized management over supply and maintenance. The CMCC

provides centralized movement control and highway regulation for the corps. The centers task or work load COSCOM units. Both the CMMC and CMCC are covered in Chapter 3 of this manual.

CORPS SUPPORT GROUPS

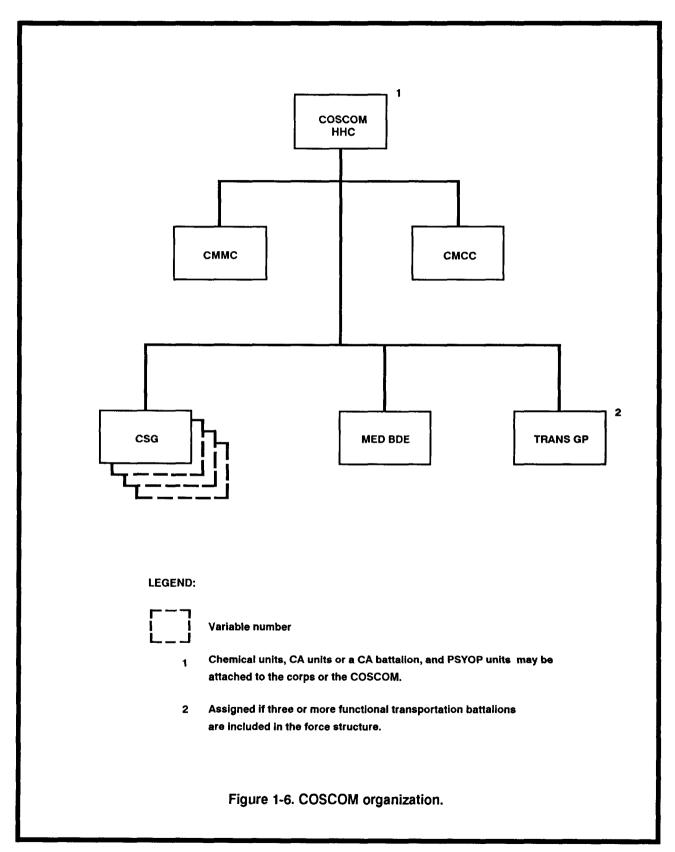
CSG headquarters (TOE 63422L000) provides command, control, staff planning and supervision of three to seven assigned and attached logistics battalions. There is no standard CSG organizational structure. However, as shown by Figure 1-7, the forward CSG consists of CSBs, the rear CSG consists of one or more CSBs and functional battalions. The COSCOM tailors CSGs based upon logistics support requirements or workloads of supported customer units in their AO.

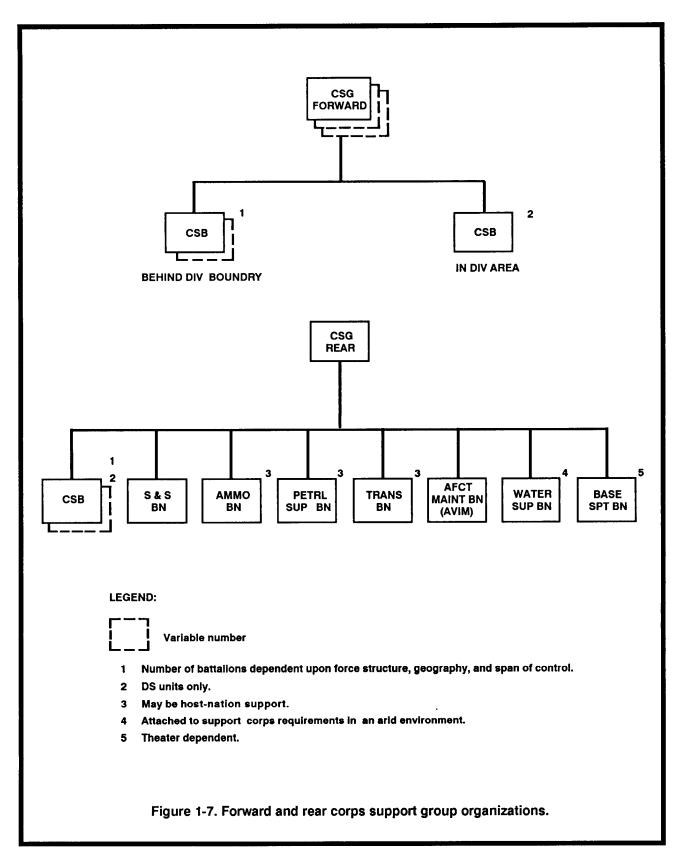
Forward Corps Support Groups

Forward CSGs employ in support of nondivison forces. Primary focus is on providing forward support to nondivison elements operating in the division AO. Forward CSGs provide support on an area basis to corps CS and CSS forces which support divisions, separate brigades, and ACRs. Because they provide reinforcing support to the committed division, forward CSG support operations staff officers habitually work with the DISCOM staff. The CSG's support operations officer serves as the initial point of coordination for the DISCOM.

Each forward CSG task organizes a CSB to support nondivision units operating in the division area. The remaining CSBs of the forward CSGs employ behind the division rear boundary to support nondivision units in their area of responsibility. Based on threat employment in the corps rear area, distance for attrited units to travel and time available, one of these CSBs can provide the nucleus for regeneration operations. The rear CSG then sends supplies to a regeneration site in the forward CSG's AO.

Forward CSGs are allocated on the basis of one CSG per division. Figure 1-8 depicts CSGs and their subordinate battalions employed to support a notional corps. Space constraints limit the figure to depicting only two of the normal four divisions on line. The number of CSBs





which the COSCOM attaches to forward CSGs depends on the work load.

As shown on Figure 1-8, each forward CSG deploys a CSB in the division area to provide more responsive support to forward employed nonditilon elements. This forward CSB reduces the C3 problems caused by the long distances between supported nondivision elements and supporting COSCOM units in the corps rear area. Unlike the DISCOM's freed structure MSB and FSBs, the CSB is tailored to the requirements of nondivision units operating in the division sector. It consists only of DS level units.

Figure 1-9 depicts a CSB task organized to provide DS support in the division area. It consists of a DS supply, ammunition, field services, transportation, and maintenance unit. To ensure more responsive support to corps forces, such as corps FA and corps engineer battalions, employed in the brigade and division area, this CSB provides reinforcing or augmenting support to the FSBs and MSB.

Though employed in the division area and merged with division bases or base clusters for rear operations security, forward CSBs remain under the command and control of the forward CSG. However, they will coordinate terrain management and highway regulation with the division rear CP and DTO.

The remaining CSBs of each forward CSG deploy behind the division sector. Unlike the forward CSB in the division area, these CSBs consist of GS as well as DS level units. Refer again to Figure 1-9. These CSBs provide area support to units in their assigned area of responsibility. They also provide GS supply, reinforcing maintenance, and field services support to the division, separate brigades, and ACR. If required, the CSB headquarters provides S-staff support for logistics elements providing support at a regeneration site.

Depending on the task organization of these CSBs, a –

- DS supply company provides DS supply to nondivision units.
- GS petroleum supply company, GS ammunition supply company, or GS supply company use habitually supporting truck unit assets to distribute supplies to nondivision DS supply units or DS ammunition unit, as appropriate. They also resupply DS level supply units of the division, separate brigades, and ACR.
- Field services company provides CEB and

- renovation support to both nondivision and division units.
- DS maintenance unit provides DS maintenance support to nondivision units and reinforcing DS maintenance to the committed division, separate brigades, and ACR.

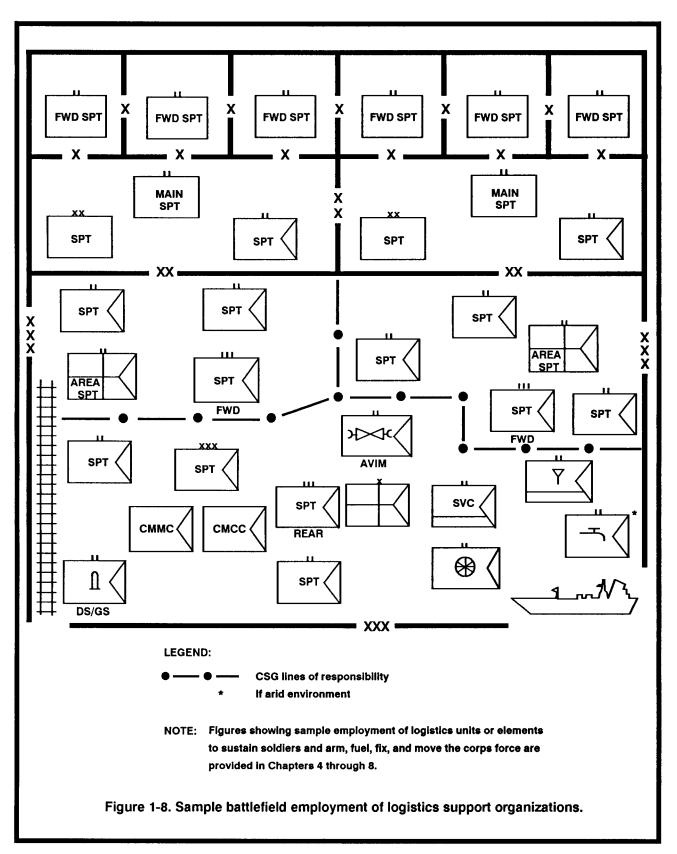
The actual organization of each CSB depends on METT-T. When the supported division is pulled off line, the forward CSG realigns or tailors its CSBs to more effectively meet the requirements of the CS or CSS elements supporting the new division type.

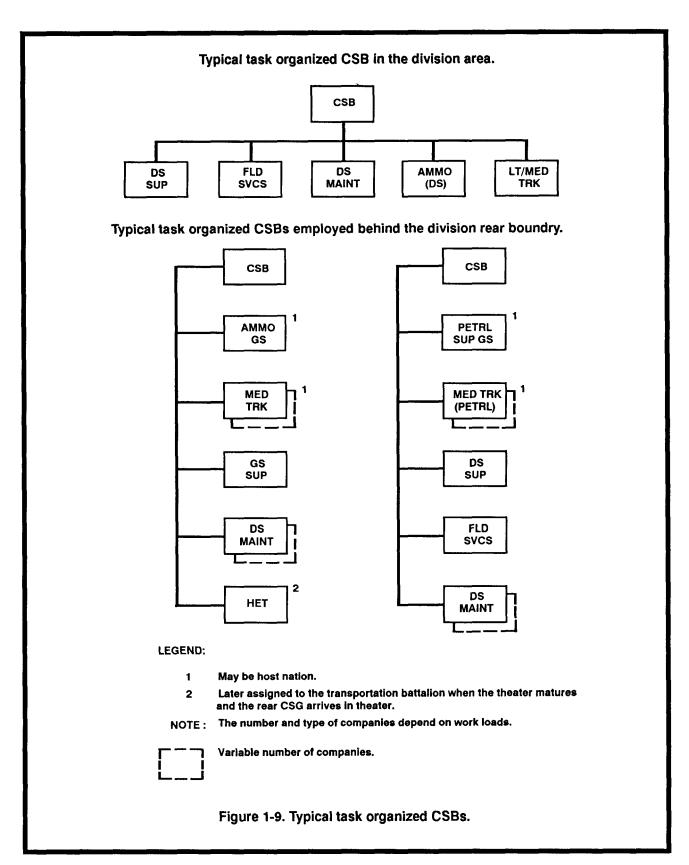
Rear Corps Support Group

A rear corps support group is allocated per COSCOM. The rear CSG focuses on supporting the corps and providing reinforcing support to the forward CSGs. As shown previously on Figure 1-7, the rear CSG consists of functional battalions and one or more multifunctional CSBs. The CSBs provide DS level support on an area support basis to units in or passing through the rear portion of the corps rear area. These include hospitals, replacement units, signal units, corps headquarters elements, and corps units supporting a reserve division. The rear CSG can tailor a CSB to provide the nucleus of logistics regeneration support at a regeneration site in the rear CSG's AO.

The following rear CSG's functional battalions provide corpswide logistics support to corps forces as well as reinforcing support to the forward CSGs:

- The S&S battalion, ammunition battalion, and petroleum supply battalion maintain the corps' reserve stocks. These stocks provide the corps commander the ability to support combat and the surge capability to win.
- The transportation battalion provides corpswide transportation support of tactical operations. It supports supply and replacement distribution systems. Depending on its organization, –
- Truck companies move cargo, unit equipment, and ammunition and relocate heavy maneuver forces.
- ☐ Cargo transfer companies operate either a breakbulk or container operation at air, rail, or motor terminals and water terminals with EAC augmentation. They can also support hub-and-spoke distribution at the terminal.
- ☐ Trailer transfer teams operate trailer transfer points to support trailer interchange operations.





- The AVIM battalion provides corpswide AVIM support and reinforcing AVUM.
- A water supply battalion may be attached to the rear CSG to support requirements in an arid environment.

Theater dependent, a base support battalion maintains facilities in caretaker status for future reactivation to provide base operations support. Base operations support includes assistance with or control of—

- Reception.
- Deployment.
- NEO.
- Fixed assets.
- Real property maintenance.
- Engineer resources.
- HN contract services and supplies.

MEDICAL BRIGADE

The medical brigade provides command, control, and administrative supervision of assigned and attached corps medical units. The Medical Brigade HHC (TOE 08422L100) task organizes medical assets to meet the patient work load demand and requirements for HSS and medical assets. Figure 1-10 depicts the organization of a medical brigade. Subordinate elements provide dental, psychiatric, laboratory, preventive medicine, and veterinary services.

As a composite, the medical brigade provides –

- Medical regulating coordination with subordinate corps medical groups.
- Patient movement and scheduling to COMMZ level facilities.
- Preventive medicine consultation and support.
 This includes -
- Coordination of attached preventive medicine detachments operating in the AO.
- Evaluation of the medical threat and the impact of NBC and directed enemy weapons.
- ☐ Evaluation of environmental health and sanitary engineering.
- Nursing care.
- Mental health and neuropsychiatric consultation.
 This includes –

Coordination	of the	combat	stress	control	com
panies in the	A0.				

- Monitoring the treatment of battle fatigue casualties.
- ☐ Monitoring alcohol and drug misuse patients.
- Dental services. (The dental surgeon exercises technical control over dental services within the medical brigade's AO. In the absence of a subordinate dental headquarters, he exercises operational control of dental area support units. He provides technical advice, reports, and recommendations on dental policies, and task organizes dental support.)
- Advice and assistance on site selection and preparation for HSS facilities.
- Supervision of Class VIII.
- Supervision of supply usage, resupply, and distribution within the medical brigade.
- Veterinary support, to include care of government-owned animals.

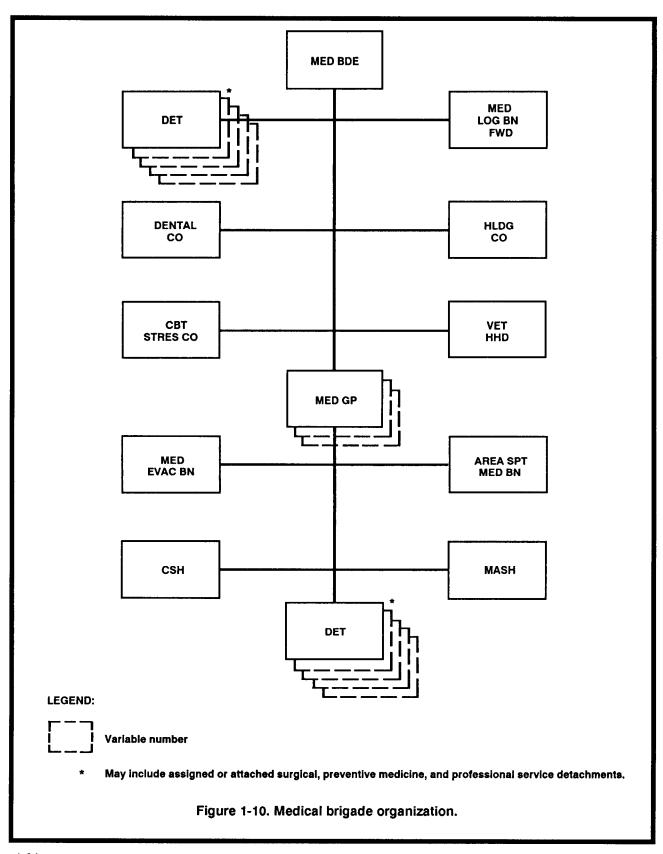
TRANSPORTATION GROUP

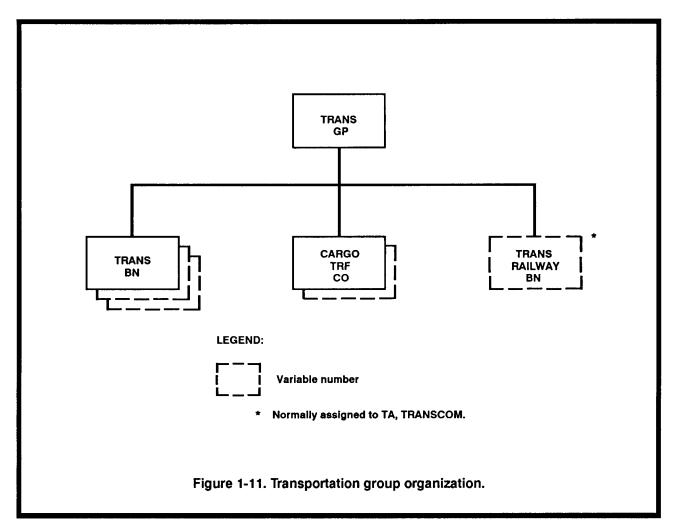
If three or more functional transportation battalions are included in the force structure, a transportation group could be attached to the COSCOM. The transportation group would focus on providing corpswide transportation support of tactical operations and supporting supply and replacement distribution systems. Figure 1-11 depicts a transportation group organization. Based on METT-T, the corps can attach a railway battalion to supervise the operations and maintenance of a railway approximately 90 to 150 miles long (145 to 240 kilometers).

The transportation group headquarters from EAC force structure provides command, staff planning, and control of the operations of attached transportation battalions and truck units in support of a corps force

Subordinate transportation battalions provide corpswide transportation support of operations. They support supply and replacement distribution systems.

Cargo transfer companies operate either a breakbulk or container operation at air, rail, or motor terminals and water terminals with EAC augmentation. Trailer transfer teams operate trailer transfer points to support trailer interchange operations.





SUPPORT TO DIVISIONS, SEPARATE BRIGADES, AND ACRS

DISCOMs, support battalions, and support squadrons provide for most of the logistics support required by the divisions, separate brigades, and ACRs. However, the divisions, separate brigades, and ACRs depend on the COSCOM to provide —

- GS level supplies.
- Reinforcing DS maintenance.
- Transportation support.
- Medical supplies and evacuation.
- Reinforcing medical treatment support.
- Airdrop support.
- Mortuary affairs support.
- Secondary field services support (CEB, laundry, renovation, and salvage).

To provide support to nondivision units, such as

corps artillery and engineer battalions, employing in the brigade or division area, FSBs and MSBs must be augmented with elements or resources from the CSB in the division area. This reinforcing support will be coordinated between the CSG LO at the FSBs and DISCOM and the FSB/DISCOM support operations officer.

Divisions also require augmentation with specialized equipment and organizations. For example, in arid climates, the COSCOM provides additional water storage and distribution. Extremes in temperatures and weather conditions degrade support capabilities and require augmentation with specialized equipment and organizations.

SUPPORT TO HEAVY DIVISIONS Supply Distribution Support

Supply Point Distribution Support. Corps transportation

assets deliver GS level supplies to MSB/FSB supply points and maintenance units. The MSB then resupplies the FSBs. Division units, and designated corps organizations, then go to the supporting supply points or maintenance unit to pickup their supplies.

Unit Distribution Support. Whenever possible, the COSCOM delivers Class IV barrier or fortification material directly to emplacement sites. Corps transportation assets also deliver aviation fuel directly to the aviation brigade in the division.

Aerial Resupply. When necessary, the COSCOM coordinates aerial resupply of critical fuels, ammunition, repair parts, rations, and blood supplies. Air movement of supplies by Army air or Air Force needs to be planned well in advance. See FMs 55-10 and 100-27.

Transportation Support

In addition to supporting supply distribution systems, corps truck units can support the movement of personnel and heavy equipment as well as cargo transfer operations.

Maintenance Support

COSCOM DS maintenance units or AVIM units provide reinforcing maintenance support to division units. The corps G4 determines the priority of maintenance support. This is listed in the service support annex to the corps/COSCOM OPLAN. The COSCOM may also attach MSTs to a division task force.

Field Services Support

The DS field services company provides CEB, laundry, and renovation support to division as well as nondivision soldiers.

The mortuary affairs collection company operates collection points throughout the corps, division, and brigade areas. These collection points receive remains and perform initial identification of corps forces. Until the collection company is fielded, augmentation mortuary affairs platoons (TOE 42507 LA) can offset mortuary affairs support previously provided by S&S and field services companies.

Health Service Support

Corps air and ground ambulance evacuation assets evacuate patients from division treatment stations to corps hospitals. Corps HSS elements provide reinforcing treatment, dental, and preventative medical support. Units assigned to the corps MEDLOG

battalion (forward) build prepackaged resupply sets of consumable medical supplies to support heavy division requirements.

SUPPORT TO LIGHT DIVISIONS

Organic CSS assets of light divisions, especially LIDs, perform only essential logistics support and HSS functions. Light divisions stock only mission essential supplies. They depend on corps and EAC units to provide resupply to the DISCOM, reinforcing DS maintenance, transportation, HSS, laundry, and airdrop support.

Supply Support

Since the LID MSB has the ability to resupply FSBs the LID requires more throughput from the corps rear area to the BSA. Throughput to a LID must be carefully planned so that the COSCOM doesn't provide too many supplies because the LID has extremely limited ability to move assets around the battlefield. Consumption rates for the LID are much less for many classes of supply.

Maintenance Support

Maintenance support and capabilities within light divisions, especially the LID, are limited. The LID maintenance system relies on replacement versus repair of components. ORF may be used in support of the LID. There is an increased maintenance work load passback to nondivision DS maintenance units. COSCOM maintenance support branch personnel must be sensitive to the different types and densities of equipment in light divisions.

Transportation Support

Different requirements are placed on the COSCOM, particularly for LID and airborne divisions. The airborne division is the only light division with organic airdrop support.

Health Service Support

The LID has no surgical capability. The COSCOM provides HSS augmentation, to include the forward stationing of medical evacuation assets. In contrast to heavy divisions, the air assault division has organic air ambulance.

LID Augmentation

The LID was designed for low-intensity conflict. Firm constraints were placed on total personnel. Projected combat intensity quickly drives up support requirements.

Specific COSCOM elements have been designed or identified to perform required functions or offset work loads beyond the organic capabilities of LID DISCOMs. This augmented support, over and above the normal COSCOM support, is sometimes referred to as the corps slice.

The corps teams, detachments, and platoons which augment LID support organizations include the –

- LID Quartermaster Supply Support Detachment (TOE 42510LY00). This detachment provides materiel management support functions. It performs ADP related processes beyond the organic capabilities of the LID. It collocates with either the CMMC or the LID's DISCOM.
- Light/Medium Truck Company (TOE 55719L000).
 This company may offset the driver shortfall in the LID which resulted from an allocation of only one driver per vehicle for single shift operations. Other sources include using individual replacements and converting units to provide vehicle driver support.
- LID Missile Support Team (TOE 09550H3EY).
 This team is assigned to the corps DS missile support company to augment the division missile support element. LID missile maintenance support is limited to exchange of reparable items. Repairs are performed at corps.
- LID Aviation Intermediate Maintenance Support Team (TOE 01577LA00). This team is attached to a COSCOM AVIM company. It offsets an estimated 21 percent AVIM work load passed back to the corps.
- LID Maintenance Support Team (TOE 43509LP00).
 This team augments an estimated 20 percent ground maintenance work load passed back to a nondivision DS maintenance company providing direct support to a LID.
- Perishable Subsistence Platoon (TOE 42518LB00).
 Assigned to the general supply company, this platoon provides perishable subsistence support. It augments the LID's MSB HSC, providing A and B Ration storage and issue capability.
- CEB Team (TOE 42507LB00). This CEB team provides CEB support as required.
- LID Graves Registration Team (TOE 42507LA00).
 This team augments the MSB headquarters and supply company. It can process 79 remains per day, perform search and recovery as required, and operate a collection and evacuation point.

- Fielding of the corps MA collection company negates the requirement for this augmentation.
- Hot/Arid Environment Water Team (TOE 42526LC00). This team provides additional water storage and distribution capability in arid environments.

Even with corps slice augmentation, a LID places more support requirements on a COSCOM than other divisions. For a complete list of augmentation assets, refer to FM 71-100. For more information on support to light divisions, refer to FM 63-2-1.

LID Preconfigured Unit Loads

PUL provide a way to streamline supply support to the LID. They consist of a predetermined quantity of selected expendable supplies. They support a specific number of LID troops and equipment for a specified period of time. PUL are configured by function under one NSN. Thus LID units requisition one NSN instead of numerous stock numbers.

Three PUL have been created for LID units. They include -

- Class IV barrier PUL. They consist of all supplies needed to emplace 100 meters of hasty barrier material.
- Chemical defense equipment PUL. They consist of replacement MOPP gear and chemical related Class IX for 25 soldiers.
- Administrative PUL. They consist of administrative and housekeeping supplies designed to support a battalion size element for 15 days.

Unlike unit configured loads assembled in the corps by supply units, PUL are assembled and stored in a CONUS depot. However, to shorten response time and allow for turnover, COSCOM units supporting a LID might maintain limited PUL stockage. PUL are packaged so that they can be airlifted and airdropped. Corps transportation assets throughput PUL to the DSA or BSA.

SUPPORT TO SEPARATE BRIGADES AND ACRS

As with support to the divisions, the COSCOM provides GS supply support, reinforcing maintenance support, HSS, corpswide field services, and corps transportation support to separate brigades and ACRs. Refer to FM 63-1. When a separate brigade or ACR is the forerunner of a corps-size force, elements of a forward CSG deploy to provide support. Their deployment depends on the requirements of combat,

CS, and CSS units to be supported. Elements to deploy depend upon the –

- Size, type, and mission of the separate brigade or ACR force deploying.
- Self-supporting capability of the separate brigade or ACR.
- Support capability of the force to which the brigade or ACR is assigned.
- Agreed upon HNS.
- Possibility for local procurement.

Depending upon how the forward CSB is task organized, it may provide –

- Ammunition support from ASPS or the nondivision ammunition company's ATP.
- Reinforcing DS maintenance support and MSTs.
- Field services support (CEB and laundry teams).

Depending upon the task organization of the CSBs employed behind the division boundary, the supporting forward CSG may provide –

- GS ammunition supply from a CSA to brigade/ACR ATPs.
- GS bulk fuel trucked to Class III points in the BSA/RSA.
- GS general supplies to resupply Class I, II, packaged III, IV, VI, and VII stocks at DS supply points.
- Reinforcing DS maintenance support and MST teams.
- Field services support, to include mortuary affairs support provided by forward collection platoons.
- HET movement support.

When a separate brigade deploys adjacent to US forces and the allied force to which it is assigned cannot adequately support the combat force, forward CSG/CSB reinforcing support elements from adjacent US forces provide out-of-sector-support. If this support is precluded by distance, terrain, or the size of the force to be supported, CSG/CSB elements deploy with the brigade/ACR to augment the support battalion/support squadron.

SUPPORT FROM OTHER SOURCES

In addition to support provided by the COSCOM, support to corps forces may derive from other sources. These include –

- MSB/FSBs.
- Corps elements.
- TAACOM/Theater Army.
- NATO allies.
- HNS/WHNS.
- Contractors.
- Logistics Civil Augmentation Program.
- DA civilians.
- Captured or found materiel.

SUPPORT FROM MSB/FSBs

Table 1-3 lists corps combat and CS elements which normally locate in a heavy division sector. While the actual number varies, nearly 8,000 nondivision soldiers require support. Corps elements in the division area can receive support from the MSB/FSBs within their capability. However, to provide support to larger forces, such as corps FA, engineer, or ADA battalions, the MSB/FSBs need to be augmented or reinforced by elements or resources of the CSB operating in the division sector.

To coordinate more responsive support of corps units in the division sector, forward CSGs/CSBs provide unstaffed LOS from their support operations section to the DISCOM or FSB headquarters. LO placement is METT-T driven. The LOS coordinate with DISCOM/FSB support operations staff in determining which of the following three support options to use:

- The FSBs/MSB could support corps elements or teams operating in the brigade/division rear area. This occurs only when there is a limited number of corps personnel to be supported, and if it does not create a significant work load for the FSBs/MSB.
- The corps augments the FSBs/MSB with corps assets, if the logistics work load generated by the corps units exceeds FSB/MSB capabilities. This option has the advantage of not increasing the number of support locations within the FSB/MSB area.
- The CSG can establish forward logistics points in the FSB/MSB area. Since the FSB and the DIS-COM commanders are the respective terrain managers for the BSA and DSA, the CSB/CSG LO needs to coordinate the placement of these

Table 1-3. Representative corps support elements in a heavy division sector.

- 1 Field Artillery Bde Headquarters
- 1-2 8" SP Artillery Battalions *
- 1-2 155 mm SP Artillery Battalions *
- 2-3 MLRS Battalions
- 1 Attack Helicopter Battalion (Corps)
- Air Defense Artillery (Chap) Battalion
- 2 Engineer Battalions (Mech)
- 1 Engineer Combat Support Equipment Company
- 1 Engineer Battalion (Corps) (Wheeled)
- 1 Medium Girder Bridge Company
- 1 Ribbon Bridge Company
- 1 Smoke Generating Company (Mech)
- 1 Decon Company
- 1 Engineer Team, Terrain Analysis (DS)
- 1 Civil Affairs Company
- 1 Long Range Surveillance Detachment
- 1 PSYOP Company
- 1 Corps Area Signal Company
- 1 Combat Support MP Company
- 1 Electronic Warfare Company
- 1 Public Affairs, Chaplain Support, CID, History Team
- 1 Medical Company, Air Ambulance
- 1 Medical Company, Ground Ambulance
- 1 Area Support Medical Company

^{*} The type of corps field artillery battalions will vary. Typically, three to five battalions provide support in the division sector.

forward logistics points with the FSB/DISCOM and their move with the DTO.

SUPPORT FROM CORPS ELEMENTS

While the COSCOM supports corps elements logistically, it depends upon corps elements for specific support. FM 100-15 describes these corps elements. The corps issues mission-type orders to describe the support which the following corps organizations provide in support of the COSCOM:

- Corps rear CP operations cell and subordinate RAOCs. These elements coordinate rear operations functions. FM 100-15 describes rear operations support in the corps rear area.
- Corps signal brigade. The signal brigade provides area signal support and connectivity to CONUS units via DDN through its subordinate corps area signal companies. FM 24-1 prescribes basic signal support doctrine. FM 11-30 describes the organization and mission tasks of the corps signal brigade and its subordinate signal battalions.
- Military police brigade. MP companies perform battlefield circulation control, area security, EPW operations, and law and order functions. FM 19-1 describes MP support functions. The corps provost marshal sets the priorities of need for MP operations based on corps commander intent.
- Engineer brigade. Engineer units perform mobility, countermobility, survivability, and sustainment engineering support missions for corps units. Engineer assets protect key logistics activities. FM 5-100 describes engineer combat operations.
- Air defense artillery brigade. ADA units counter low to medium altitude air threats to critical assets, such as CSAs and Class III points.
- Chemical brigade. This brigade provides centralized control of chemical companies. Chemical companies provide NBC reconnaissance, decontamination, and smoke screen production. FM 3-101 describes chemical unit support operations.
- Civil affairs brigade. CA brigade staffs perform area studies which identify available local resources, facilities, and HN support. CA elements coordinate requirements for and assist the COSCOM's contracting agent in the acquisition of local resources, facilities, and support. CA personnel also coordinate the distribution of life-sustaining goods and services to civilians within

- occupied territory. FM 41-10 describes the mission of CA elements.
- Psychological operations battalion and cellular teams. PSYOP elements focus on weakening the will of enemy soldiers to fight. They create attitudes, emotions, or behavior that minimize civilian interference with military operations. FM 33-1 describes PSYOP elements.
- Personnel group. This group provides -
- Personnel services and personnel data base management through its personnel service companies.
- ☐ Replacements through a DS replacement company.
- ☐ Postal services through DS and GS postal companies. FM 12-6 describes personnel support doctrine.
- US legal services command (TOE 27602L000) and legal teams (TOE 27512LA00 to 27512LH00). As the theater expands, these teams are activated to provide legal services support to nondivision forces.
- Finance group. The finance group provides pay support to corps personnel through its subordinate finance support commands. FM 14-7 describes finance support operations.
- Chaplaincy support teams. These teams provide direct and general religious support to over 40,000 soldiers in the corps area assigned to units with no organic unit ministry team.

SUPPORT FROM TAACOM/THEATER ARMY

The TAACOM's primary mission is to provide logistics support to units located in or passing through its assigned area in the COMMZ. Its secondary mission is to provide backup logistics support to the corps.

- TAACOM/TA GSUs provide specified GS supply support to COSCOM GS/DS supply units.
- TAACOM units provide additional Class III, V, and VII supplies as well as Class IX repair parts required specifically for units to be reconstituted. The CMMC coordinates support requirements with the TAACOM MMC.
- The TAMMC work loads TAACOM GS maintenance units to repair items beyond nondivision DS maintenance unit capability. TAACOM DS maintenance units provide reinforcing DS maintenance for specified commodities.

- TAACOM GS field services units backup COSCOM DS field services units.
- The TAACOM's mortuary affairs company operates a personal effects depot in support of the theater. Depending upon the MA program in effect, it may operate two temporary cemeteries, a theater evacuation point, or an in-theater mortuary.
- TAACOM units assist in receiving and equipping arriving corps units and redeploying units.
- TA transportation assets supplement corps transportation assets.
- The TAMMC or TAACOM MMC can function as a backup CMMC.
- The TAACOM provides out-of-sector support to corps units deployed out of the geographical area normally considered the support responsibility of the COSCOM.

SUPPORT FROM A LOGISTICS SUPPORT ELEMENT

The COSCOM may also receive support from a LSE. LSE organizational elements can provide the COSCOM with limited depot-level/GS type logistics support on an interim basis, primarily from the COMMZ. LSE activities request supplies from the supporting MMC.

The LSE is a TDA civilian oriented element which supervises AMC elements as well as contractor activities, forward repair activities, individual DOD personnel, and HNS activities in the AO. It is under operational control of the US Army senior logistics headquarters. Though technical lines tie the LSE with elements of AMC, DLA, TRADOC, and FORSCOM, the senior logistics headquarters identifies force requirements and assigns tasks and priorities to the LSE.

Initially, the LSE is composed of battle rostered, emergency-essential civilians provided by existing TDAs and by AMC, TRADOC, and FORSCOM head-quarters, and their respective subordinate activities. DLA support of the logistics assistance program is determined by a memorandum of understanding. DLA personnel who provide direct support to the LSE remain under the operational control of the theater commander.

As TOE units fall in place and become functional, the mission and work force of the LSE will be adjusted to meet new or altered work requirements. Depending on requirements, LSE organizational elements can provide —

- Management, storage, and distribution of select high tech, high dollar-low density items.
- Control of various contractor operated activities in the theater.
- Administration of contracts for forward repair activities.
- Limited depot-level/GS maintenance for selected wheeled, track, and stationary equipment.
- Repair of designated items in support of the reparable exchange program.
- Limited depot-level repair of aircraft, their engines, and components.
- Maintenance of intelligence/electronic warfare systems.
- Logistics assistance program technical assistance to users of AMC fielded equipment in theater, to include new equipment fielding.
- TMDE program coordination.
- Administration of the Army Oil Analysis Program, coordinating oil sampling procedures and distributing test results.
- Quality assurance functions for various commodity/weapon systems.
- Logistics automation software support management, to include troubleshooting and software replacement.
- Special program requirements.
- Field assistance in science and technology. LSE/AMC advisors coordinate changes in performance specifications and provide technical requirement changes to AMC laboratories and centers for solution.
- Retrograde/redistribution support, to include automated reporting of accountable transactions to NICPs under the materiel return program.

SUPPORT FROM NATO ALLIES

Dissimilarity between equipment and munitions may limit support. However, allies could provide Class I and III support.

This paragraph implements STANAG 2034/QSTAG 516

US forces will use the standard NATO invoice/claim form and NATO loading bill to document the request and receipt of supplies from national land forces or

national logistics support commands. These forms support national accounting procedures and subsequent reimbursement action. Unless specified in the logistics assistance agreement or special instructions from the CMMC, the requesting unit provides truck assets to pick up the supplies.

HOST-NATION SUPPORT

HNS includes civilian and military support services furnished by the HN to forces stationed on HN territory in times of peace and war. HNS helps to offset US manpower, equipment, and supply requirements. It is the preferred method of meeting unsatisfied military support requirements. In times of crisis, using HNS helps reduce the time required for deployment and fielding of US reinforcing units.

The two categories of HNS that offset US requirements include direct HNS and indirect HNS:

- Direct HNS consists of HN military or paramilitary units organized similarly to US type units. This HNS relates to comparable US organizations and capabilities.
- Indirect wartime HNS refers to support that is anticipated based on agreements with the host country.

In addition to HN military or paramilitary unit support, HNS includes –

- HN government agencies. These agencies may operate and maintain utilities and telephone networks or coordinate air traffic, rail operations, river traffic, and harbor pilot services.
- Host-country contractors. Contractors can coordinate construction and transportation labor; light textile repair, laundry, bath, and food services; and maintenance of equipment and facilities.
- HN civilians. Civilians may serve as laborers, stevedores, truck drivers, clerks, couriers, and technicians. WHNS allows for long-term civilian labor support for certain jobs. Other HN civilians who help at the outset of a conflict eventually need to be replaced by US military personnel.
- HN supplies and equipment. Food items and expendable are included.
- HN buildings or facilities. These include billets, warehouses, maintenance shops, gymnasiums and recreation facilities, and temporary grave sites.

The type and volume of HNS services provided depend upon agreements between the nations involved and the HN's actual capabilities. Table 1-4 lists questions which COSCOM ACofS, G5 section personnel need to ask in order to take advantage of logistics assets available in the AO. This helps minimize the need for strategic lift of logistics units, equipment, and supplies.

Specific requests need to be processed individually, through HN authorities, following procedures established by international agreements. As civilian relief agencies weaken, reciprocal support from US sources is required. Unless other provisions apply, the corps G5 coordinates with the finance group to reimburse the HN for contractually provided services.

Table 1-5 lists the logistics functional areas and tasks which may be accomplished by HNS. Due to the proximity of combat operations, some functions should only be performed by HN military personnel. HN civilian firms can provide bath, laundry, and food services. HN buildings and facilities and HN transportation and distribution systems can offset logistics support requirements, particularly in port areas. COSCOM ACofS, G5 section personnel conduct a risk assessment to determine the impact when planned HNS of logistics areas is not available.

Table 1-6 lists combat support operational areas provided by HNS.

Depending upon the HN's economic development, its relationship with the US, existing agreements, and risk assessments, —

- HN civilian labor groups or labor units contract to build obstacles or repair highways, railroads, and pipelines as well as provide construction and barrier materials.
- HN police and military or paramilitary units provide highway regulation and traffic control of supply movements to forward locations as well as security for critical logistics facilities.
- HNS of NBC defensive and smoke operations in the corps area is limited to those areas shown on Table 1-6. The HN provides fog oil if it has oil refineries.
- HNS of intelligence, security, and EW operations includes interpreters, translators, and interviewers or liaison teams that use the HN language and language of the enemy forces.
- HN communications structures provide communications support to initially deploying forces as well as supported operations. HN signal facilities help keep the civilian population informed. This

Table 1-4. Determining HNS availability.

GENERAL

- Is HNS available for military operations?
- Is HNS available for NEO?
- What are the location and nature of HN government facilities?

SUPPLIES AND SERVICES

- What is the Class I status for the local population?
- What type of agriculture products does this country produce (dairy, fish, crops, lumber)?
- What sundry items can be obtained from the HN?
- What is the local source of gravel, sand, concrete, and steel?
- What are the number, type, and capabilities of local police, fire fighting, and military organizations?
- Are local laborers available to work? What are the prevailing wages?
- What is the water situation in the AO? Where are the sources of water?
- What are the local sources of fuel?
- Do local fuel testing capabilities exist?

COMMUNICATIONS

- What in-country communications are available?
- What military and civilian C-E facilities exist?
- What communications problems can be expected?

ELECTRICAL POWER

- Where are power plants located?
- What fuel is produced by power plants?
- What are the capabilities of the power plants?

REAL PROPERTY/HOLDING AREAS

- Is real property available?
- Are there significant maintenance facilities in the AO?
- Where are major hotels located? What are their capacities?
- Where are restaurants located? What are their capacities?
- What are the type, size, and status of civilian and military schools in the AO?
- What are the location and size of military and civilian detention centers in the AO?

Table 1-5. Applicability	y of HNS for logistics functional areas.	
HNS of SUPPLY OPERATIONS	Class I & Water	
IIII JU JUFFLI OFLIATIONS	Receipt,Storage,Issue	МАХ
	Accountability	NO
	Class III (Bulk Fuel)	
	Receipt,Storage,Issue ———	— МАХ
	Accountability	
	Pipeline	
	Class V (Conventional)	
	Receipt, Storage, Issue	МАХ
	Material Handling	
	Surveillance	
	Class VII	
	Receipt, Storage, Issue	— LIM
	Prepositioned Materiel	
	Accountability	
	Class IX	
	Requisition	
	Receipt, Storage, Issue	
	Accountability	— ио
	General Supply	
	Requisition	
	Receipt,Storage,Issue ————	
	Accountability	NO
HNS of FIELD SERVICES	Clothing Exchange & Bath	МАХ
	Laundry	
	Clothing Repair	
	Food Service	
	Mortuary Affairs	
	Salvage	
	Light Textile Repair	MAX
HNS of MAINTENANCE	Unit-Level Maintenance	
	DS Maintenance	
	AVIM	
	Missile Maintenance	
	COMSEC Maintenance	
	ADPE Maintenance TMDE	
	Facilities	— NU
	racinites	LIM

HNS of TRANSPORTATION	Movement Control	LIM
	Highway Regulation	
	Cargo Transfer	- MAY
	Cargo Transfer Motor Operations Rail Operations	- MAX
	Rail Onerations	- MAX
	Medium Lift Helicopter	— MII
	Ocean Terminal Operations	MAX
	Logistics Over-the-Shore	— LIM
	Cargo Documentation	— LIM
	River Traffic	MAX
HNS of MEDICAL SERVICES	Aidman Care	LIM
	Emergency Treatment	
	Initial Resuscitative	LIM
	Resuscitative Treatment	
	Definitive Treatment	
	Convalescent Care	NA
	PW Health Care Triage	MAX
	Triage ————	— ио
	Sorting for Evacuation	NO
	Sorting for Evacuation Litter Bearing	— MAX
	Patient Decontamination ———	LIM
	Ground Medical Evacuation	
	Dental Treatment	
	Optometric Service ————	LIM
	Laboratory Service -	I IM
	Blood Acquisition	— Lim
	Blood Distribution	—— LIM
	Patient Administration	— NO
	Med Supply Accountability	— NO
	Med Supply Receipt, Storage, & Issue	LIM
	Medical Maintenance	— LIM
	Local Acquisition of Med	1 184
	Supply and Drugs Subsistence Inspection	— LIM
	Potrogrado Corre Inspection	NU
	Retrograde Cargo Inspection — Environmental Sanitation	
	Animal Care	
	Pest Management	LIVI
	Solid Waste Disposal	LIM

Table 1-6. Applicability of HNS to perform engineer, MP, NBC, intelligence, EW, and signal support functions.

HNS of ENGINEER OPERATIONS	Transition	Contingency	Sustainment	
Real Estate Procurement	LIM	LIM	MAX	
Camouflage	LIM	LIM	LIM	
Obstacle Development —	LIM	NO	MAX	
Bed Down & Facilities Construction				
Site Hardening —	LIM	LIM	LIM	
LOC Damage to Rail & Bridges	— LIM ——	LIM	MAX	
POMCUS Site Damage Repair ————	— LIM ——	NA	NA	
Petrl Pipeline Repair	— LIM ——	NO	MAX	
Well Drilling				
Real Property Repair				
Emergency Port Construction ————				
Runway Repair	LIM	NO	LIM	
Emergency Airbase Recovery				
Heliports —				
ADA Protective Positions	LIM	NO	MAX	
Manufacture of Construction				
Materials and Equip ——————	LIM	LIM	MAX	
Survey	— LIM ——	LIM	MAX	
Terrain Analysis				
Topography Distribution	LIM	LIM	MAX	
Cartography ————————————————————————————————————				
Classified Topography Product	NO	NO	LIM	
HNS of MILITARY POLICY OPERATIONS	Transition	Contingency	Sustainment	
Battlefield Circulation Control				
Military Units	NO		NO	
Military Vehicles				
Civilian Movements	LIM	LIM	LIM	
Area Security				
Convoy Security Escort —————				
Security of Fixed Installations				
Security of Logistics Supplies				
	MIL	MIL	MIL	
Security of Logistics Facilities Prisoner of War Custody				

Table 1-6. Applicability of HNS to perform engineer, MP, NBC, intelligence,
EW, and signal support functions. (cont.)

INS of NBC and SMOKE OPERATIONS	All Phases
NBC Reconnaissance	LIM
Decontamination ————————————————————————————————————	
Smoke	
D of Unknown Agents	NA
NBC Center Operations	LIM
HNS of INTELLIGENCE, SECURITY, and EW OPERATIONS	All Phases
Support of OPSEC	
Incident Investigator	
COMSEC Monitor	MIL
EW Support Measures	
Comm Intelligence	LIM
Translations	LIM
HN Personnel Security	
Investigations —	MIL
Screening Refugees	
Interviewing	LIM
Interpreting ————————————————————————————————————	MAX
Translating ————	LIM
Interrogation of Enemy POW	
Interrogating	LIM
Interpreting	MAX
Translating ————————————————————————————————————	LIM
HNS of SIGNAL OPERATIONS	All Phases
Telephone Cable Repair	BAAV
Telephone Cable Repair ————————————————————————————————————	MAX MAX
Signal Fauinment Densire	
Signal Equipment Repairs Signal Parts	NO
Organia i arto	1 IM
Cable Wire Antenna	
Cable, Wire, Antenna Site Security	MAX

minimizes civilian disruption of combat operations. HNS of signal operations encompass the supply and maintenance functions required to install cable, wire, and antenna systems.

COSCOM ACofS, G5 section personnel plan and coordinate HNS that has been negotiated and agreed upon by the HN in peacetime. This negotiated HNS is expected to be provided in wartime to offset the COSCOM's support mission. ACofS, G5 section personnel serve as the single point of coordination with the HN concerning COSCOM HNS requirements (preplanned and ad hoc). They coordinate actions with the corps G5, CA teams, and subordinate CSG HNS section personnel. CSG HNS section personnel –

- Monitor the performance of logistics HNS activities within their geographical area.
- Ensure that HNS products and services are inspected and quality controlled.
- Task subordinate battalions to provide technical support on a temporary basis to the HNS activity.
- Coordinate the deliveries of reparable and US supplies to the HN activity.
- Facilitate the delivery of HNS supplies or services to US units. The CMCC commits HN truck assets.
- Report to COSCOM ACofS, G5 section staff and the CMMC on HNS production or services.

In support of LIC operations, a HNS coordination team (contingency) (TOE 63500 LA) can be assigned to the senior logistics headquarters of the task force. This team locates, obtains, and coordinates available HNS resources. It coordinates closely with CA teams accompanying the contingency force. The team obtains HNS resources through local purchase or contracts. It coordinates with finance and legal activities in execution of HNS contracts.

WARTIME HOST-NATION SUPPORT

Based on national agreements, WHNS reinforces forward deployed corps forces. The composition of WHNS is unique to each forward deployed corps. Depending upon the theater of operations, WHNS may consist of ammunition supply, petroleum supply, transportation, casualty evacuation, and security as well as smoke generator battalion/companies or even bridge companies.

Cellular logistics teams provide the liaison and interface between US distribution systems and WHNS organizations supporting US logistics units.

These teams process work load data, maintain visibility on assets, and report status to the CMMC. Chapters 5 through 8 provide more detail on cellular logistics team missions/functions and their interface with the CMMC or CMCC.

CONTRACTING AND LOCAL PROCUREMENT

Contracting and procurement of locally available resources helps reduce dependence on a CONUS-based logistics system. Contracting provides a means to obtain local supplies and services in an area where no HNS agreements exist or where HNS agreements do not cover the required supplies or services. It improves response time and frees airlift and sealift for other priority requirements. The decision to purchase supplies on the local economy depends on need for the supplies as opposed to time and distance considerations if provided through normal supply channels.

Contracting augments existing supply and service capability. For example, contracting can augment the following supply and service areas:

- Class I fresh fruits, vegetables, and ice.
- Class II housekeeping supplies.
- Class III bulk fuels and packaged lubes and oils.
- Class IV construction materials.
- Class IX hardware and automotive parts.
- Laborers (stevedores, drivers, mechanics, etc.).
- Dining facility and KP service.
- Clothing exchange and bath services.
- Sanitation.
- Mortuary affairs services (within specific parameters).

COSCOM procurement support branch personnel coordinate contracting support for the corps. They maintain and update CA area studies and maps of potential areas of deployment. In conjunction with corps G4 and G5 staffs, they program, manage, and coordinate available contracting resources, LOGCAP, and HNS obtained to support corps forces. They coordinate corps requirements with the following staff and organizations:

- The corps G4/COSCOM support operations officer who determines whether the supply or service is filled from the military supply system, by HNS, contract, or LOGCAP.
- CA units which identify local resources, materials, and services available in the AO.

- Corps G5 staff officers who monitor LOG CAP and HNS resources and assess the impact of procurement of supplies and services on the local economy.
- Applicable CMMC divisions relative to direct purchase of items available on the local economy which are not readily available for issue.
- Corps G1 staff officers relative to policies and procedures governing use of indigenous civilian personnel.
- Corps engineers who determine construction requirements.
- Contracting staff officers in subordinate CSGs who coordinate contingency contracts for supplies and services prior to and immediately following deployment of division and corps CS elements.
- US Embassy officials and local nationals for locally available resources and requirements for interpreters.
- Finance support group staff for finance support of contracting actions.
- SJA staff for legal counsel during acquisition.

LOGISTICS CIVIL AUGMENTATION PROGRAM

LOGCAP provides contract augmentation capability to assist support base units get ready for war or contingencies not covered by global OPLANs. It is designed primarily for areas where no multilateral or bilateral agreements or treaties exist. LOGCAP may also be used in areas where HNS agreements or contracts exist. AR 700-137 governs the program.

COSCOM procurement support branch contracting personnel coordinate with the finance group for LOGCAP contracts to help resolve logistics shortfalls in OPLANS.

DA CIVILIANS

DA civilians and contract civilians who signed agreements to remain in place in overseas activities in

wartime provide another source of support. By continuing in their peacetime work, they supplement personnel required for essential logistics functions. The COSCOM FSOP needs to include DA civilian personnel management in its personnel annex.

CAPTURED OR FOUND MATERIEL

Captured or found materiel provides another source of supply support. The corps commander and G4 set policy. Support operations section staff officers recommend procedures regarding the use of captured or found materiel.

- Captured subsistence is used to feed EPWs and civilians. Found US subsistence feeds US troops. Subsistence must first be inspected by veterinary personnel and declared fit for consumption.
- Captured or commandeered fuels can decrease the drain on our own bulk fuel stocks. They must first be tested with a captured fuels test kit or by a petroleum laboratory specialist. A fuel transfer pump has been designed to allow tactical vehicles to use captured fuels.
- Barrier or fortification and construction materials can be used immediately. This reduces requirements on our logistics support system to supply and transport these items.
- Captured vehicles and equipment are reported through intelligence channels and turned into maintenance collection points. The CMMC provides disposition instructions.
- Captured enemy medical supplies treat EPWs and civilians. They are not authorized for use on US forces.

COSCOM weapon systems support branch and munitions support branch personnel must consider the work load which captured weapons and ammunition place on the support structure. This includes the receipt, storage, safeguarding, controlling, and movement of captured items.

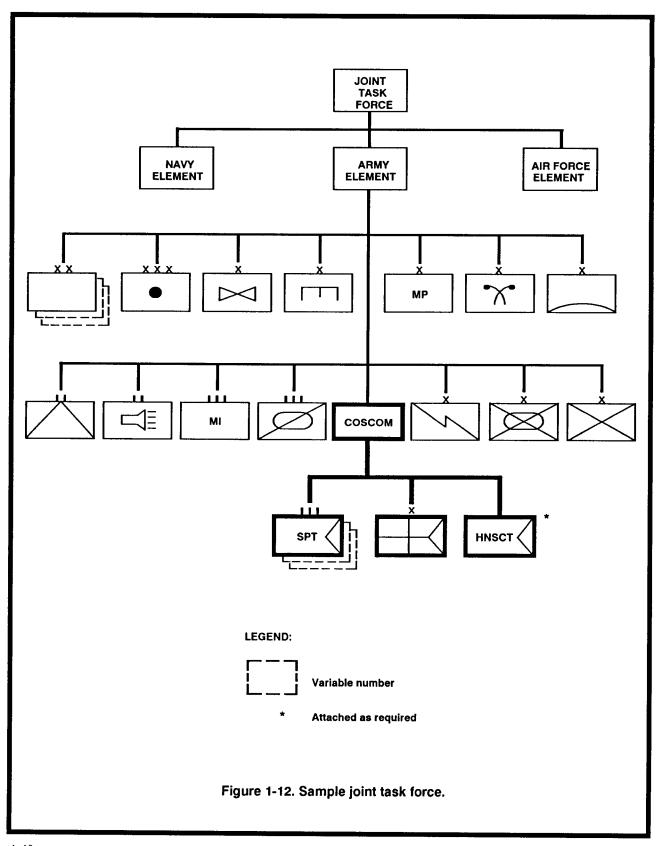
SUPPORT OF JOINT OPERATIONS

Corps forces can operate as part of a joint task force such as that shown in Figure 1-12. As the logistics command of the corps, the COSCOM supports corps units conducting joint operations. Joint Pub 3-O describes the interfaces for joint operations. In a single corps contingency environment, the COSCOM assumes the role of

theater level logistics manager. As directed it provides logistics support to other Services. Joint Pub 4-0 covers doctrine for logistics support in joint operations.

SINGLE SERVICE LOGISTICS SUPPORT

In principle, each military Service provides logistics support for its own forces. In practice, the joint task force



commander tasks the Service that is the dominant user to provide or coordinate support for all service components.

As necessary, the CINC allocates critical logistics assets among the Services. To resolve crisis conditions, the CINC issues directives to transfer logistics functions between Service components.

INTEROPERABILITY

Interoperability of military and commercial communication devices, automated systems, and message text formats is as critical to operations as interoperability of materiel used by forces. The CMMC and COSCOM CSS plans branch personnel need to be aware of interoperability requirements with other Services and allied nations. Interface requirements are specified in joint reports, allied standardization agreements, regulations, and directives. Joint Pub 6-04 prescribes the exchange of joint common service supply support requests and responses with other Services.

GENERAL SUPPLY SUPPORT

Subject to directives from the CINC, Service components provide supply support for their forces. Each Service performs its own requirements forecasting. Each needs to consider high-priority materiel needed at the outset of an operation and significant time-phased materiel requirements necessary to support the OPLAN. Services keep the CINC informed of the impact of supply on force readiness.

Common Item Support

Common item support is provided by the Service component command that is the predominant user. The CMMC needs to maintain a file of materiel commonalities among the Services.

Supply and Storage Requirements

Each Service establishes priorities and computes requirements for storage. This includes requirements for refrigerated, covered, and open storage; tankage; and hardstands. The CINC allocates available storage space and facilities between Services.

Map Supply Support

Based on agreements between the joint task force commander and the Defense Mapping Agency, the Army's map distribution system supports the map requirements of other Services.

SUBSISTENCE SUPPORT

COSCOM troop support branch personnel plan subsistence

support. Plans should consider the number of troops and rate of buildup as well as the possible allocation of subsistence to civilians in the occupied area.

Plans also need to include requirements for Army veterinary staff, AF environmental health personnel, or local health authorities to perform food inspections. Army veterinary personnel perform sanitary inspections of facilities supplying storing and issuing subsistence. They also inspect all subsistence received stored, and issued in operations following exposure to NBC contamination.

WATER SUPPORT

The Army is responsible for joint policy and procedures for all components responsible for water resources in support of land-based forces. COSCOM troop support branch personnel plan water support. Water resource support beyond a Service's capability is provided by the Army or another Service, as appropriate. Preventive medicine teams monitor water quality.

AMMUNITION SUPPORT

COSCOM munitions support branch personnel need to consider —

- Ammunition requirements to support a designated period of time.
- Ammunition requirements of assigned US forces and augmentation forces being deployed to the area.
- Requirements for allies.
- Support to other agencies from US stocks.
- Available ammunition stock which can be used to satisfy requirements.
- Ammunition handling systems to support the OPLAN.
- Capability to store and handle ammunition.
- Ability to transport ammunition.
- Limiting factors.

PETROLEUM SUPPORT

The Army coordinates inland distribution of fuel to all US-based forces within an overseas theater. COSCOM petroleum support branch personnel coordinate with supported units to develop plans based on time-phased requirements for Class III support during the deployment phase.

 $\begin{array}{c} {\rm COSCOM\ petroleum\ support\ branch\ personnel\ need\ to} \\ {\rm assess} \ - \end{array}$

 Petroleum requirements to support the OPLAN for a period determined by the commander.

- US forces in the theater.
- Augmentation forces being deployed to the theater.
- Bulk fuel resupply requirements.
- Requirements for allies, civilians, and other agencies supported from fuel stocks.
- Stocks available to meet requirements.
- Availability and capability of facilities to store and handle fuels.
- Capability to distribute fuels to required areas.
- Possibility of procurement of packaged products.
- Quality surveillance assets.
- Limiting factors.

MAINTENANCE SUPPORT

Each Service provides maintenance support for its own forces. Nondivision DS maintenance units can establish maintenance facilities for joint Service use. An example is a calibration facility for joint use. However, service components provide service maintenance of service peculiar items.

 $\begin{array}{c} {\rm COSCOM~maintenance~support~branch~personnel} \\ {\rm need~to~assess} \,- \end{array}$

- The type of units which require DS maintenance support.
- In-country repair sources to include other Services allies HN, or contractors.
- Evacuation to offshore bases or CONUS maintenance facilities.
- Development of preplanned and emergency resupply packages.
- Prepositioned requisitions for Class IX and maintenance-related Class II items.
- Capability to transport Class IX parts.
- Limiting factors.

TRANSPORTATION SUPPORT

Services share available airfields and road, rail, and inland waterway capabilities with allied forces and civil commerce. A joint transportation board recommends allocation of jointly used transportation resources.

In a joint command, the commander normally assigns the responsibility for providing and coordinating surface transport to support all US forces to the Army component commander. COSCOM transportation support branch personnel or the CMCC perform intratheater transportation planning in the absence of a

JMC established by the theater combatant commander.

The transportation annex to the logistics portion of the COSCOM OPLAN covers intertheater and intratheater movement. It details reception of personnel, materiel, and equipment from point of origin to destination. It addresses the means to coordinate and control the flow of materiel into the area so that throughput and lift capabilities are not exceeded.

 $\begin{array}{c} {\rm COSCOM\ transportation\ support\ branch\ person-} \\ {\rm nel\ need\ to\ analyze\ --} \end{array}$

- Type and quantity of transportation units needed in the AO.
- Capabilities and limitations of water and air terminals, ports, and beaches in the AO.
- Existing intratheater transportation network.
- Sequence requirements for desired destination arrival.
- Ports of debarkation and intermediate PODs.
- Movement constraints.
- Revisions to procedures to compensate for transportation shortages.

FIELD SERVICES SUPPORT

Field services may be performed by one Service as a result of interservice or cross-service agreements. Whenever possible, they should be performed by the HN or by contractors.

Services are responsible for providing MA and personal effects disposition for their own forces. The COSCOM is responsible for operating one or more collection points for the remains of all the Services. It provides for temporary internment until provisions are made for subsequent custody. If circumstances require internment in a temporary cemetery at EAC, the MA company at EAC provides separate sections for US, allied, and enemy remains.

Personal effects of allied dead are evacuated through logistics channels until the point specified for reversion to representatives of the nation concerned. A Joint Central Registration Office provides guidance on the transfer of allied and enemy remains and their personal effects to their respective governments.

BASE FACILITIES SUPPORT

Adequate base facilities are needed to support a military operation. Theater dependent, a base sup-

port battalion can coordinate joint service use of base facilities. BSB personnel provide assistance in utilities management, rear property transfer and acquisition, and land management.

HEALTH SERVICE SUPPORT

Joint Pub 4-02 provides doctrine for HSS in joint operations. Each Service component provides hospitalization support for its forces. Each determines HSS requirements based on service policy. Each Service provides HSS units for the interim care and treatment of its patients and, as required, for those of other Services. While each maintains command blood programs, the AF operates theater blood transshipment centers for the other Services. Each Service is responsible for its own medical supply and for maintenance support of its medical equipment. As directed, each provides care, treatment and hospitalization of EPWs and civilians in their areas of assigned responsibility.

Joint Service Use

The COSCOM's medical brigade/group can operate facilities for joint use. Hospitals are either staffed and used jointly or staffed by one Service and used by all others. To maximize the availability of HSS, Services jointly use –

- Aeromedical staging units and aeromedical evacuation.
- Medical laboratory support.

- Blood product distribution.
- Dental facilities and services.
- Veterinary support.
- Preventive medicine survey and support.
- Optical support.
- Combat stress reconditioning centers.

Support Agreements

HN and bilateral support agreements provide for interim hospitalization of US soldiers in allied facilities and vice versa. Agreements cover sharing of blood, medical materiel, and evacuation assets.

Support of Civilians and EPWs

Care of military patients in civilian and allied military facilities is restricted to emergencies. Provisions of the Geneva Convention prescribe care of civilian casualties in occupied areas and medical care of EPWs.

Evacuation

The Army is responsible for all medical evacuation by land. This includes inland water transportation within assigned areas. Except for areas supported by AF airlanded logistics support, the Army is also responsible for short distance aeromedical evacuation within the Army combat zone.

The AF is responsible for long distance aeromedical evacuation. The Military Airlift Command provides aeromedical evacuation for joint operations.

CHAPTER 2

COSCOM Command and Control of Support Operations

The COSCOM functions as the major subordinate command of the corps responsible for the direction and management of logistics and medical support for the corps. COSCOM headquarters staff officers coordinate and supervise the implementation of corps policies and directives relative to support of current and future operations. They develop plans and orders to ensure continuous logistics support of corps operations. The fluidity of battle demands constant changes to these support plans.

This chapter covers command and control from a COSCOM perspective. It describes the COSCOM HHC and how COSCOM staff officers integrate and coordinate with corps and CSG counterpart staff personnel. It also describes how the COSCOM headquarters staff uses automation and communications devices to accomplish the COSCOM's support mission.

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COMMAND AND CONTROL

For the COSCOM, C2 consists of coordinating and integrating personnel, equipment, facilities, communications, and procedures to accomplish the mission under the COSCOM commander's guidance and in compliance with the corps commander's intent. If the COSCOM headquarters is the senior logistics headquarters in the theater, it must be augmentated in those areas in which it lacks staff expertise. For example, the COSCOM headquarters staff might need to be augmented with comptroller and resource management staff officers or with additional transportation staff to enable it to oversea port clearance and terminal operations.

CORPS COMMANDER'S INTENT

The corps commander's intent is a statement of the desired end product of an engagement or battle. It clarifies the purpose of the operation. It needs to be stated in enough detail to ensure unity of effort and appropriate action by subordinates.

COSCOM COMMANDER'S ESTIMATE AND INTENT

Based on his staff's estimates and recommendations, the COSCOM commander decides how to best accomplish the COSCOMs mission and publishes his intent through the COSCOM OPORD.

COSCOM Commander's Estimate

COSCOM coordinating and special staffs prepare staff estimates which analyze factors that could impact on accomplishment of the mission. Their estimates result in recommendations concerning the feasibility of various courses of actions and the effects of each course of action on mission accomplishment.

The COSCOM commander then uses the commander's estimate to compare the feasible courses of action, their advantages and disadvantages or significant factors. He then decides on the best course of action to execute the COSCOM's mission in support of the operation. FM 101-5 describes the basic format and content of the commander's estimate.

COSCOM Commander's Intent

The COSCOM commander states his intent in the COSCOM OPORD. His statement of intent focuses on supporting the corps commander's intent by sustaining corps soldiers and arming fueling fixing and moving corps forces in support of the operation. His staff uses the statement of intent to develop plans as to how to provide that support.

CSS ESTIMATE

The CSS estimate provides a means for COSCOM support operations staff to analyze the feasibility of

various courses of action which effect accomplishment of the COSCOM's external support mission.

Intelligence and operations staff officers provide information on the intelligence and tactical situation and their impact on mission support. Personnel staff officers provide present and projected personnel data which will influence support operations.

Support operations subordinate branch staff officers provide input on the current support status, capability, and support problems. They compare the advantages and disadvantages of each course of possible action. They then determine the major logistics deficiencies that must be brought to the commander's attention. Finally, they recommend the courses of action which can best be supported and ways to reduce logistics deficiencies.

RISK-BENEFIT ANALYSIS

CSS commanders and staff officers must recognize that in planning the logistics support for combat operations they need to perform logistics risk analyses. They need to continuously balance the benefits derived from a particular support concept versus the risks involved in the support provided. They must ask themselves if the concept is supportable and if the responsiveness of the support provided outweighs the risks involved. The corps G3 must be kept informed of the results of this analysis so that sound and timely decisions can be made.

There is no question that the risks involved depend to a great extent on the circumstances prevailing at the time. There are no hard and fast rules to assist the planner. Each time the support operations staff officer must assess the circumstances, measure the risk, and decide upon the best course of action.

The location of support areas is one example of a CSS risk analysis. In order to provide the required support, will it be necessary to locate CSS activities within the range of enemy artillery? There is clearly a risk involved here. However, it may be necessary to assume the risk if that is the only way that critical support can be provided.

The circumstances requiring a risk-benefit analysis cannot be identified in advance. Therefore, it is incumbent upon all CSS commanders and staff planners to recognize that in combat every action contemplated must be subjected to a logistics risk analysis. Only after the risk-benefit analysis is completed can the planner be assured that the available CSS resources will be applied in the most effective manner possible. The analysis must also consider the additional resources

needed if personnel are required to operate in MOPP due to the NBC threat or the presence of NBC contamination.

COSCOM OPERATION PLANS/ORDERS

COSCOM OPLANs/OPORDs provide the COSCOM's general mission guidance. To ensure clarity, subparagraphs of the execution paragraph prescribe specific support to be provided by subordinate commands. They prescribe the support to be provided, where and how it will be provided, and the priority of that support. Commanders of subordinate commands ensure compliance with the provisions of COSCOM OPLANs/OPORDs.

The COSCOM OPLAN/OPORD repeats the priority of support listed in paragraph four of the corps OPLAN/OPORD. This provides instructions to subordinate units on where to place the priority of their support. Appendix F provides a sample COSCOM OPORD.

OPLANs are the responsibility of the ACofS, G3's force design/plans branch and support operations section's CSS plans branch. OPORDs are the responsibility of the ACofS, G3's operations branch. Coordinating and special staff prepare paragraphs or annexes and supporting documents and overlays. The force design/plans branch of the ACofS, G3 section publishes COSCOM OPLANs/OPORDs. An OPLAN can be easily converted to an OPORD via a fragmentary order stating to execute the OPLAN with noted changes.

The OPORD is based on the format prescribed by FM 101-5 and NATO STANAG 2014. This format uses the time zone of the area of operations. The title of paragraph four is Service Support. In contrast, the format prescribed by QSTAGs uses Greenwich Mean Time throughout the order and the title of paragraph four is Administrative Logistics.

CORPS SERVICE SUPPORT PLANS AND ORDERS

Corps service support plans and orders prescribe logistics support missions. They provide for coordinated CSS and administrative movements. Paragraphs or annexes provide information and instructions on materiel and services, medical evacuation and hospitalization, personnel, and civil-military operations. They provide information on the policies and procedures of support and where to obtain it. FM 101-5 describes format and content.

COSCOM support operations staff officers provide input on the logistics portions of the corps service support plans and orders based on corps G4 policy in paragraph four of the corps OPORD. The CMCC provides the corps highway regulation plan. The COSCOM develops a service support annex to enable subordinate groups/brigades to better implement the plans and orders of corps headquarters. Appendix G provides a sample of a COSCOM service support annex.

CSSCS software assists support operations staff with providing input to the corps service support plan/order. It provides a fill in the blanks type format for support operations staff officers to complete. CSSCS also enables G3/S3 staff officers to transmit published COSCOM orders and plans to individual or multiple addresses.

COMMAND AND STAFF RELATIONSHIPS

Command relationships that exist between the COS-COM headquarters and corps headquarters as well as its subordinate centers, groups/brigades and units are described below.

Corps Headquarters

Corps headquarters issues mission type orders to the COSCOM. Its staff prepares broad plans and guidance for support of anticipated operations. COSCOM staff officers develop detailed plans, policies, and directives for logistics support of the corps and allies or other Services which conform with corps policies, directives, and guidance.

Figure 2-1 depicts the corps headquarters staff with whom COSCOM staff primarily interface. The corps G3 and G4 determine priorities for logistics support of tactical operations. COSCOM staff officers coordinate and supervise the implementation of corps policies and priorities for support of current and future operations. They consolidate, analyze, and transmit changes in logistics support status and situation to their counterparts in the corps headquarters.

Table 2-1 lists areas of staff interaction with corps main and rear CP cells. COSCOM ACofS, G3 and support operations staff officers coordinate with corps headquarters staff to ensure integration of CSS and supportability of future operations. They ensure that corps planners understand the impact of the COSCOM's capability to support current and future operations.

Subordinate Control Centers

The COSCOM headquarters accomplishes centralized control and management through its subordinate functional control centers. Both the CMMC and CMCC operate under the staff supervision of the COSCOM support operations officer. CMMC and CMCC staff officers coordinate with support operations subordinate branch staffs and with their respective counterparts in separate brigade support battalions, the DMMC or division DTO, TAACOM MMC, and TAMMC and TAMCA.

Subordinate Groups/Brigades

The COSCOM commands and controls assigned and attached units through its subordinate groups/brigades. Its command section coordinates command and policy matters with subordinate groups/brigades through command channels. FM 101-5 prescribes inter and intra staff relationships.

Figure 2-2 depicts the counterpart staff relationship between COSCOM staffs and subordinate CSGs staffs. COSCOM general staff officers exercise staff supervision to ensure compliance with COSCOM policies. COSCOM support operations staff officers maintain informal liaison with their counterparts in subordinate commands relative to their technical area of interest.

While subordinate battalion staff officers supervise the day-to-day mission support activities of their subordinate companies, group and brigade staff officers focus on logistics support within their mission area. Group or brigade staffs ensure that their subordinate battalions receive support required to enable them to perform their missions.

Subordinate Units

The COSCOM commands, controls, and supervises all assigned and attached units and activities. Staff relationships are listed below

- Support operations staff coordinates the movement and positioning of logistics units with the CMCC/DTO and area RAOC.
- ACofS, G3 section personnel track the reception and forward employment of the down trace.
- ACofS, G4 section personnel assist subordinate unit headquarters with information and guidance on the use and availability of facilities. They submit requirements to the corps G3 for corps engineer support.
- ACofS, G3 staff officers submit requirements to

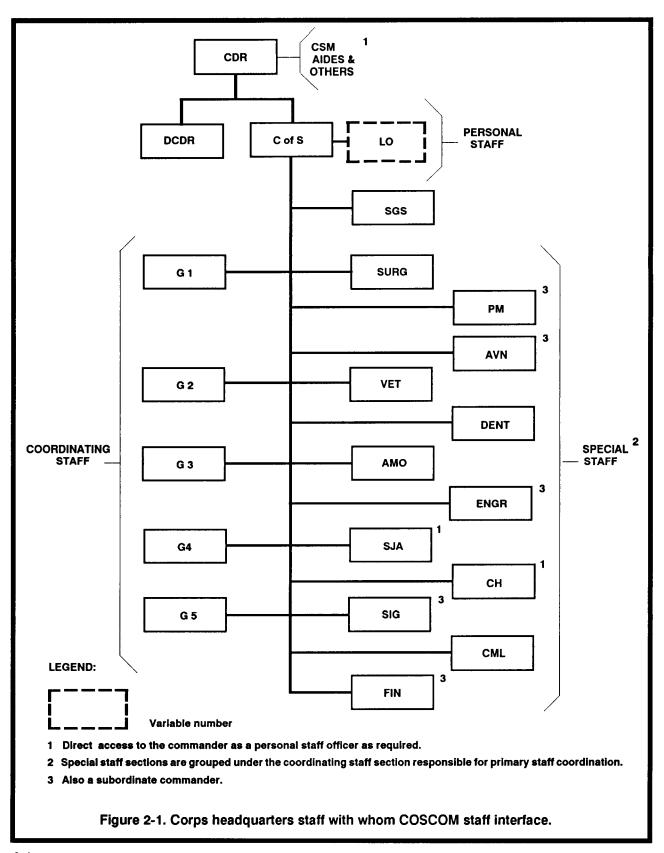
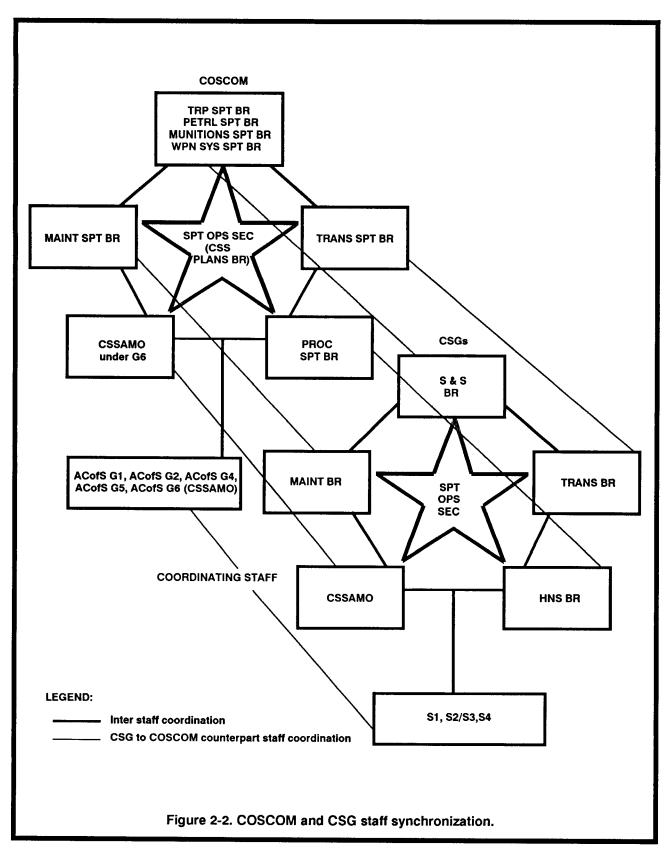


Table 2-1. COSCOM staff interaction with corps main and rear CP cells. INTERFACE WITH CORPS REAR CP							
COSCOM ELEMENT	CSS CELL	OPERATIONS CELL					
SPT OPS SEC PERSONNEL	 Compliance with corps orders and commander's intent. Synchronization of CSS with combat and CS. Support of regeneration of attrited units Impact of rear operations on logistics support of current and future operations. Positioning of COSCOM units in the corps rear area to effectively support operations. 	 Synchronization of combat, CS, and logistics support of rear security operations. Reconstitution planning and control. Logistics support of rear security operations — of response forces and the TCF. Corps G3 terrain management issues. 					
ACofS G2 SEC PERSONNEL	 Analysis of impact of situational information on COSCOM units. 	 Current situational information for the corps rear area. Early warning of enemy activities in areas occupied by COSCOM units. IPB products for the corps rear area. 					
ACofS G3 SEC PERSONNEL	 Tracking of incoming COSCOM augmentation elements/units. Identification of key COSCOM units and activities which require priority protection. 	occupied by COSCOM units. • Identification of response forces					
ACofS G4 SEC PERSONNEL	 Movement priorities and rerouting of administrative movements to deconflict with tactical movements. MSRs and alternate MSRs. 						
ACofS G5 SEC PERSONNEL	 CA and HN support of operations. CS status and civil affairs operations. 						
ACofS G6 SEC PERSONNEL		 Signal and automation interface with HN and allies. Status of signal and automation capabilities to support operations. 					

Table 2-1. COSCOM staff interaction with corps main and rear CP cells. (Cont.) INTERFACE WITH CORPS MAIN CP						
COSCOM ELEMENT	CSS CELL	OPERATIONS CELL				
SPT OPS SEC PERSONNEL	 Supportability and integration of logistics support for future operations. Adequate and timely logistics support of current operations. Status of major weapon systems. Status of critical supplies (fuel and munitions). Priorities for allocation and replacement of weapon systems. Priorities for maintenance support. Projection of logistics support capability 48 to 96 hours into the future. 	 Synchronization of movements with maneuver operations. Support of close and deep operations. Regeneration (reconstitution) requirements. 				
ACofS G1 SEC PERSONNEL	Status of personnel strength in COSCOM units.					
ACofS G2 SEC PERSONNEL	Assessment of impact of tactical situation and terrain analysis and weather on COSCOM units.	 Current and anticipated tactical situation. Priority information requirements of COSCOM units.* Monitoring of deep and current operations situational information.* * Also interface with main CP intelligence cell. 				
ACofS G3 SEC PERSONNEL	 Status of COSCOM units and the impact of current operations on future operations. Impact of tactical situation on forward employment of COSCOM elements. 	 Warning orders and OPORDs. Status of friendly forces in AO. Current operations plans. Deception actions required by COSCOM units. Release of chemical weapons. 				



the corps rear CP's operations cell for MP support. COSCOM units submit requirements for fire support through their supporting RAOC and S3/ACofS, G3 channels to the corps rear CP's operations cell. The operations cell coordinates with the corps FSCOORD for on-order fires to assist units in bases and base clusters.

SUPPORT RELATIONSHIPS

The COSCOM support operations section serves as the central point of coordination on all matters pertaining to logistics and medical support for —

- Supported divisions, separate brigades, and ACRs.
- Supported units and major commands.
- Sister Service or ally.
- TAACOM, MEDCOM, TRANSCOM, and TA staffs.

Divisions, Separate Brigades, and ACRs

COSCOM units provide GS supplies, field services, and reinforcing DS maintenance support to divisions, separate brigades, and ACRs in accordance with corps plans, policies, and priority guidance. Planning requirements must be submitted to the COSCOM support operations officer. Problems with support are reported to the support operations section of the supporting CSB, CSG, and COSCOM.

To provide more responsive support to corps CS and CSS forces employing in support of the divisions, separate brigades, and ACRs, a CSB employs in the division area. This CSB provides area support to nondivision units in the division area. It provides reinforcing support to augment FSB/MSB capability to provide responsive support to corps forces, such as corps artillery, engineer, and ADA battalions, employing in the brigade or division area. The CSG LO at the FSB/DISCOM coordinates support requirements with FSB/DISCOM support operations staff and the S4 of the corps force to be supported.

Supported Units/Commands

S4s of units/commands requiring support coordinate initially with the support operations staff of the supporting CSB to secure initial support, to reestablish support, or to resolve problems with support. CSG support operations staff or medical brigade staffs provide the next higher point of contact for resolution of problems with support. COSCOM support operations staff officers resolve support problems requiring exceptional support efforts, such as coordinating

support for a surge, for out-of-sector support, or for corps forces attached to a sister Service or another corps. Where CSGs cross-level support among subordinate battalions to resolve support problems, COSCOMs cross-level support among subordinate CSGs.

Sister Service or Ally

When corps forces are ordered out of the Army AO to support a sister Service or ally, COSCOM support operations staff officers coordinate with CSGs in forming a task organized support element to accompany the corps force into the new AO or allied sector. The composition of the accompanying task organized support element will vary depending upon requirements and the degree of support to be provided by the sister Service or ally.

TAACOM, MEDCOM, TRANSCOM and TA

COSCOM support operations staff officers coordinate support requirements and support interfaces with TAACOM, MEDCOM, TRANSCOM, and TA staffs. Areas requiring extensive planning and coordination between COSCOM support operations staff and staffs at major commands at EAC include –

- Reconstitution.
- Replacement weapon systems.
- Medical evacuation and medical RTD.
- Throughput distribution.
- 'Trailer transfer point operations.
- Port clearance.
- Command controlled items.

LIAISON REQUIREMENTS

LNOs promote cooperation and coordination through personal contact between COSCOM and corps headquarters staff. They serve as the primary information gathers for ACofS, G3 section and support operations section staff.

COSCOM LNOs

The COSCOM headquarters provides a LNO to the rear CP's operations cell and the CSS cell at both the corps rear CP and main CP. These LNOs are not an augmentation to the corps G3 or G4 staff. They are not TOE resourced. They are provided from available personnel resources.

COSCOM LNOs perform the following services —

Coordinate with the corps signal officer in

- maintaining communications between the corps and COSCOM headquarters.
- Attend daily briefings and provide input on COS-COM status and plans.
- Keep the corps informed of the COSCOM's logistics situation.
- Keep COSCOM headquarters staff informed of corps courses of action.
- Obtain information from the LNOs from corps troop organizations assigned to corps headquarters or represented in corps special staff divisions.

As necessary, LNOs are provided to Army force headquarters and allied headquarters. If reciprocal liaison is not possible, liaison needs to be established as follows:

- Higher unit provides liaison to lower echelon.
- Unit on the left provides liaison to the unit on the right.
- Supporting unit provides liaison to supported unit

HN Liaison Officer

The COSCOM also provides a LNO to the HN support command. In turn, the HN support command may provide a LNO to the COSCOM's logistics operation center, CMMC, and CMCC. Headquarters company personnel arrange billeting, ration support, and other required services for these LNOs.

COMMAND POSTS

COMMAND POST ELEMENTS

The COSCOM FSOP establishes the COSCOM's CP organization and composition.

Main CP

The main CP consists of those elements of the command group, principal and special staff sections, and administrative support personnel required for C2, staff supervision and life support. It includes the LOC, special staff area, life support area, and perimeter defense area.

Headquarters elements set up on a hardened site and, when possible, in a town or village. Figure 2-3 depicts a sample configuration for a main CP set up in existing buildings. Layout conforms to the structure of available buildings. The CP configuration reflects broad functional relationships, continuity of operations, and information flow between sections. The availability of existing facilities and terrain determines actual location of elements and supporting staff sections. The ACofS, G3 plans the actual layout.

Logistics Operations Center

The LOC serves as the focal point for the entire spectrum of COSCOM support operations. Within a field environment, the LOC is a limited access facility within the main CP. It consists of the command group and principal staff from the support operations section. The LOC may obtain a degree of mobility and survivability by setting up key staff elements in 5-ton expansion vans.

Life Support Area

The life support area includes facilities for providing field feeding, billets, and organizational supply and

maintenance. The headquarters company commandant coordinates these support areas as well as other essential support services, such as shower, laundry, and latrines.

In the field environment, life support areas should be incorporated within base perimeter wire. Food service facilities need to be located a minimum of 50 meters from other facilities.

Alternate or Rear CP

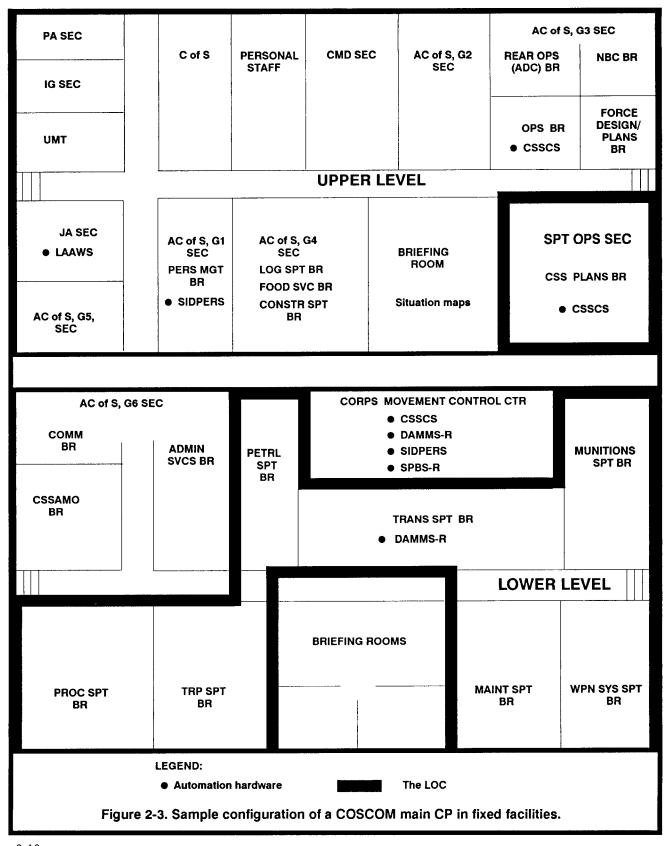
An alternate or rear CP provides continuity of C2 in the event of destruction or incapacity of the main CP. Primary and secondary alternate CPs can be selected from major subordinate commands. Selection depends upon the location of the subordinate CP and in-place communications. The rear CP may collocate with the rear CSG's main CP. Alternate CP staff consists of support operations section staff officers tasked to assist in reconstitution and to coordinate support of deep and rear operations from the rear CSG.

COMMAND POST DISPLACEMENT

The MARC code indicates that the COSCOM headquarters could move once every 8 to 17 days. The COSCOM headquarters displaces in the following phases or elements.

Advance or Quartering Party

The advance or quartering party, under control of the headquarters commandant, conducts the initial move to the new site. The quartering party conducts the initial security sweep. It maintains security while establishing the LOC and general location of the life support area. At least one NBC defense



monitoring team with equipment accompanies the quartering party.

Jump CP/Jump LOC

The jump CP or jump LOC consists of a nucleus of personnel and equipment which can displace on short notice. The headquarters commandant is responsible for coordinating transportation and logistics support. The jump CP may set up in the vicinity of a forward CSG or the corps rear CP jump element. It becomes operational in a minimum amount of time. The jump CP performs the following three primary functions:

- Reconnoiter the new main CP site and prepare detailed plans for relocating main CP elements.
- Secure the site until the main body arrives.
- Establish communications and maintain continuity of operations while the main CP is moving.

Jump LOC staff officers establish C2 of logistics distribution systems at the beginning of an operation. Support operations staff officers oversee the receipt of corps CSS units and supplies into the area. They may use a CSG's CSSCs and communications devices to interface with the COSCOM main CP and G4 staff in the CSS cell of the corps main and rear CP.

Main CP

The main CP is controlled by the COSCOM commander. It sets up near the CMMC and CMCC, preferably within available fixed facilities in a city, town, or industrial complex. The COSCOM ACofS, G3 selects several possible locations within the AO designated by the corps and in coordination with the supporting RAOC.

The headquarters commandant selects the exact site in coordination with the COSCOM C-E officer and corps headquarters commandant. The headquarters commandant is responsible for the movement and security of the LOC. He coordinates transportation support to ensure an orderly relocation of the main CP. The main CP requires more than one lift to move. Since the main CP locates in close proximity to the corps rear CP, he maintains continuous coordination with the corps headquarters commandant. A rear party remains to close out the location prior to joining the rest of the CP staff.

CP STAFF DEPLOYMENT

It is impracticable to deploy the entire COSCOM headquarters and its subordinate functional control centers in a body at the outset of an operation. A

portion of the COSCOM headquarters staff and special forces battalion remains to provide continuous C2 of the support force preparing to deploy. They also provide C2 of the force in transit and coordinate support to the deployed units. This CP element maintains an interface with NICPs and AMC and DLA item managers.

Primary staff officers provide C2 for the force establishing support operations in the objective area. Table 2-2 provides a sample COSCOM staff deployment schedule. Key personnel do not deploy on the same plane. The advance party sets up the jump CP in the objective area to coordinate support activities there.

Advance Party

The advance party precedes the first regular increment to establish working relationships with elements of corps headquarters, other Services, and HN officials. Normally, the COSCOM support operations officer accompanies the advance party to exercise control of logistics elements arriving in the area. Essential planning personnel from ACofS, G3 and support operations sections comprise the forward CP. Plans officers need to compare the tactical and logistics situation in the operations area with that in preconceived operations or contingency plans to determine required modifications to those plans.

METT-T dependent, advance party personnel review the –

- Condition and adequacy of facilities to receive and discharge ships and clear ports and stage onward movement.
- Requirements for engineer support.
- Locations and facilities for logistics and medical units.
- Negotiation for real estate, local procurement of supplies and services, and related support agreements with the HN.
- Extent of the threat within the operations area.
- Requirements for additional communications support due to terrain restrictions.

First Increment

If the operation occurs in a hostile country, the first logistics increment deploys to the operations area after combat forces have seized initial objectives and secured an operating base area. If the operation occurs in a nonactive combat situation, support operations staff officers and support elements precede combat elements to ensure

Table 2-2. Sample COSCOM headquarters staff deployment schedule. REMAINING **FIRST ADVANCE** COSCOM **INCREMENT INCREMENTS PARTY** STAFF CG --------- Р CofS/SGS ----- AC ----– N — — P/N — Spt Ops Off — м — CSS Plans Br ----- P/N ----—м — Troop Spt Br — -- P/N ---Munitions Spt Br — – P/N — – M — F Wpn Sys Spt Br — — P/N — Petri Spt Br ------ P/N ----Maint Spt Br ----— M ——— F — P/N — — м — Trans Spt Br — - P/N ---— P/CMCC — Procure Spt Br ---– P/N — - F ACofS, G1 -------- P/N -----— M — F ACofS, G2 ---- P/N ---— M -----ACofS, G3 — м —— — P/N -----ACofS, G4 -- P ------ N -----ACofS, G5 -- P/N ----— м — — м ——— ACofS, G6 ——— --- P/N ----Special Troops Bn — -- P/N ----HQ Co — P/N ----— N — - AR Unit Ministry Team ---- P/N COSCOM Surgeon — IG ----- P/N --- M F SJA ---— P/N —— F PAO -—— P F

Codes:

AR- As required

F- Follow-up elements

M- Main body

N- Nucleus staff

P- Principal, usually a key individual

AC- Alternate command of advance party

that required support is on hand and ready. The first increment may include the CMCC, CMMC teams, medical elements, and logistics elements attached to a CSB or special troops battalion. To arrange for the reception, processing, and support of logistics elements in the area, the first logistics increment —

- Arranges for communications and power.
- Selects sites for logistics facilities.
- Sets up field feeding, billeting, and shower areas.
- Evaluates the medical threat and determines required preventive medicine measures to counter the threat.
- Provides initial medical treatment and evacuation support.
- Arranges for unloading aircraft and ships.
- Establishes transportation and distribution networks.
- Establishes transportation movement control.
- Establishes a shipping control system with CONUS.
- Sets up a system for veterinary inspection and approval of local and HN food and ice sources.
- Establishes centralized receipt, storage, and inventory control of materiel.
- Sets up a system for receiving and processing containers.
- Provides potable water, if required. (Preventive medicine personnel approve the water source.)

Subordinate Control Centers

The COSCOM schedules the CMCC and required ATMCTs, MCTs, and MRTs for the earliest feasible arrival in the area. Airfield control personnel deploy first to control runway clearance. If the COSCOM supports other Services or nations, liaison personnel from the other Services and HNs augment the CMCC to coordinate their transportation requirements. The HNS coordination team identifies HNS that can reduce the types or numbers of US transportation forces required.

Due to its dependence upon the availability and adequacy of automation management systems and reliable communications and power, it may be impracticable to deploy the CMMC with the first increment. However, due to its criticality, CMMC teams or elements must deploy in the earliest phases of the operation. To establish early materiel management or stock control operations in the area, the COSCOM support operations officer must plan to

deploy mobile automation equipment and teams or elements from the CMMC. These CMMC teams or elements establish a limited capability to manage stocks and coordinate requisition procedures for each phase of the operation.

Successive Increments

The composition of COSCOM headquarters personnel in successive increments depends upon the personnel required to coordinate and supervise critical COSCOM support missions. Selected personnel need to remain at the home base to coordinate and control the preparation and deployment of follow-on logistics units.

Contingency Support Team

When the COSCOM supports a contingency operation, the corps can attach a contingency support team (TOE 63531 LA) to the COSCOM HHC. This team provides personnel and equipment to operate a centralized communications facility. Team personnel operate under the supervision of the COSCOM ACofS, G6's communications branch.

FUNCTIONAL COMMAND POST

FCP equipment provides a lightweight, mobile, rapid deployment and emplacement CP system. It standardizes CPs at each level, Containment by HMMWV or CUCV mounted shelters and vehicles allows for continuous operations during movements.

COMMAND POST SECURITY

CPs can employ a variety of survivability measures to improve survival of critical C2 nodes in a high-risk environment. If a hardened site is not available, CP dispersal should enhance survivability. The following measures can improve CP survivability:

- Duplication of CPs.
- Dispersion of elements within CPs.
- Deception
- Frequent and rapid displacement.
- Hardened shelters.
- Size reduction.
- Signature reduction.
- Location out of enemy weapon range.
- CP design.

The headquarters commandant is responsible for coordinating internal security and local defense

of the main CP. CP security includes establishing -

- Prepared defensive positions.
- Explosive and nonexplosive barrier items outside the perimeter.
- Manned guard posts.
- Sentries and guards for local internal security.
- Alternate positions.
- Quick reaction force.

Each staff section is responsible for routine internal security. This includes use of –

- Signs and countersigns.
- Camouflage, noise, and light discipline.
- Defensive positions.
- Access roster or pass.

Unless the main CP is within the perimeter of a larger secure base, the headquarters commandant controls access to the main CP. Though within a base perimeter, the CP needs to be enclosed by concertina wire. ACofS, G3 section personnel prepare and issue access passes. Access control may be provided by MP augmentation.

The headquarters commandant assigns crew served weapons. He is responsible for employment of M42 alarm units. Since the location of chemical detector units depends on local wind direction, the NBC officer designates their locations.

The headquarters commandant is also responsible for establishing an airborne early warning network. He implements an area alerting system for air and ground attacks. He notifies the supporting RAOC of attack and requests quick reaction forces through the ACofS, G3.

LOC MAP BOARDS

Support Operations Situation Map

Support operations staff officers track and post support data on a logistics operations situation map. Personnel in

subordinate branches track or post the following locations:

- Troop support branch supply personnel track the location of subordinate DS supply units and supply points.
- Troop support branch field services personnel post the location of subordinate service units as well as the location of CEBs and mortuary affairs collection points.
- Troop support branch personnel al.so post the locations of medical units hospital and ambulance company locations.
- Munitions support branch personnel post the locations of CSAs, ASPs and nondivision ATPs.
- Petroleum support branch personnel post the locations of Class III points and bulk fuel distribution system facilities.
- Maintenance support branch personnel track the locations of subordinate maintenance units and MSTs attached to task force elements.
- Transportation support branch personnel post transportation unit locations, MSRs, direction, 'and status; rail and rail nets, inland waterways and terminals:; and airfields based on CMCC input.

To assist in posting the logistics status situation to the map, the COSCOM support operations officer designates an officer to maintain the grid coordinates for subordinate units as well as annotate the unit's readiness and status.

Tactical Operations Situation Map

ACofS, G3 operations personnel post the FLOT boundaries, and other control areas. They also post the location of enemy units and friendly combat units. NBC branch personnel post the NBC situation.

Corps Rear Area Situation Map

This map depicts the COSCOM base defense cluster, enemy activity within the corps rear area, and NBC data which affect COSCOM CP survivability.

COSCOM HEADQUARTERS AND HEADQUARTERS COMPANY COSCOM headquarters' mission has COSCOM HHC MISSION

While the COSCOM headquarters' mission has not changed, the organizational structure has been realigned to focus on either external logistics mission support or internal support to COSCOM units. The COSCOM HHC has been reorganized to reflect logistics battlefield functional areas. This reorganization reflects the heightened role of the COSCOM in setting the operational limits of battle by planning the logistics supportability of tactical operations.

The COSCOM HHC performs the normal C2 functions of a higher headquarters. Its mission is to –

- Command, control, and supervise all assigned and attached units.
- Plan for and direct the provision of logistics support (less COMSEC logistics) through its functional management centers and subordinate

- commands to Army forces and other designated forces within the corps area.
- Plan for and direct the provision of specified logistics support of a contingency operation to the Army and other separate unified, specified or joint forces in a contingency area when directed and appropriately augmented by supplemental communication from TOE 63531LA00.

To perform its stated missions, COSCOM headquarters staff officers –

- Provide command, control, administration, and staff supervision for assigned and attached units.
- Develop detailed logistics plans and policies.
- Determine logistics support requirements.
- Recommend logistics support priorities and allocations to the corps rear CP's CSS cell.
- Prioritize and report COSCOM critical assets to the corps rear CP's operations cell.
- Develop and provide policies, guidance, priorities, and allocations to subordinate commands.
- Coordinate and exercise materiel management control through the CMMC.
- Coordinate movements within the corps area through the CMCC.
- Coordinate logistics requirements with the TAACOM, MEDCOM, TRANSCOM, TA, and NICPs, as appropriate.
- Pass requirements for backup logistics support to the TAMMC.

COSCOM HHC EMPLOYMENT

The COSCOM HHC and subordinate control centers normally locate in the corps rear area, within reasonable surface travel distance of the corps rear CP. Including its functional control centers, the COSCOM headquarters complex is the largest in the corps rear area. Inclusion of the CMMC and CMCC in the base cluster with the COSCOM HHC and corps rear CP makes it the largest CP structure in the corps rear area. As such, it is a prime threat target.

The COSCOM's ACofS, G3 staff officers perform a risk benefit analysis to analyze the risks associated with collocation of the corps rear CP with the COSCOM CP. They need to consider distances required to reduce vulnerability y to destruction of adjacent CP elements versus defensibility associated with base clustering.

Headquarters elements disperse to enhance survivability. However, dispersion cover, and concealment

needs to be balanced against headquarters mission accomplishment and acceptable risks. To reduce risks, the COSCOM HHC may move once every 8 to 17 days. To do this, it needs to maintain 50 percent mobility.

COSCOM HHC ORGANIZATION

As shown by Figure 2-4, the COSCOM HHC consists of a command section, chief of staff section, support operations section, special troops battalion headquarters, and headquarters company. TOE 63412L000 serves as the requirements document for this organization. The MTOE is the allocation document.

Command Section

The command section provides C2 for the COS-COM staff and staffs in subordinate groups/brigades. Command section staff attends corps briefings on upcoming operations. They relate the corps commander's guidance/intent and provide mission analysis guidance to principal staff from the chief of staff section and support operations section relative to subordinate element capability versus support requirements.

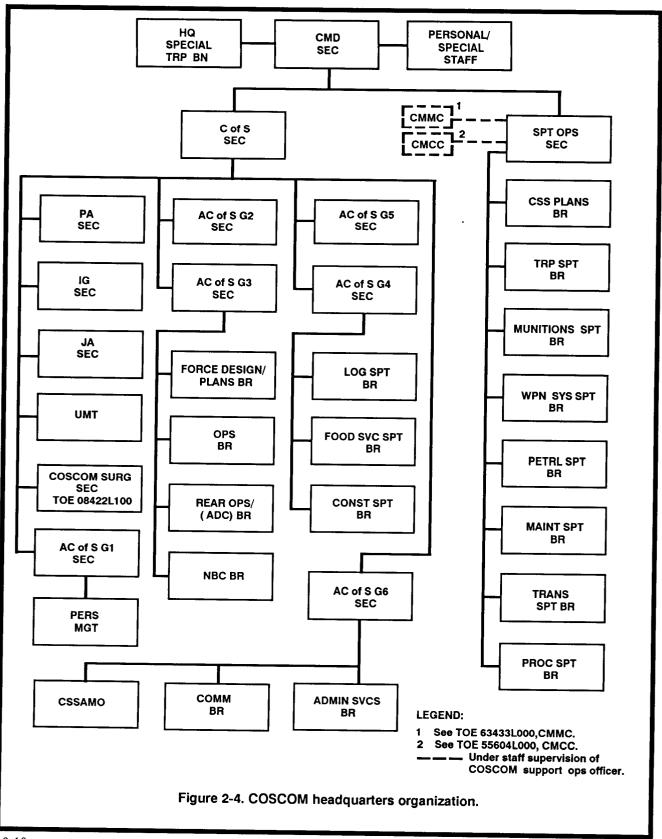
Chief of Staff Section

The chief of staff's focus is on the COSCOM soldier, internal support to COSCOM units, and protecting COSCOM units. He supervises the activities of ACofS, G1-G6 coordinating general staff and special staff sections. He coordinates development of estimates, to include –

- Personnel estimate.
- Intelligence estimate.
- PSYOP estimate.
- Deception estimate.
- Operation estimate.
- Logistics estimate (internal logistics).
- Civil-military operations estimate.
- OPSEC estimate.

The chief of staff reviews recommendations from coordinating general staff and special staff. He assigns staff officers to prepare plans, orders, and reports. He ensures that special staff sections and ACofS, G1-G6 coordinating general staff implement the COSCOM commander's decisions and intent.

ACofS, G1-G6 coordinating general staff officers perform the common staff responsibilities discussed in FM 101-5. They develop policies and plans in their



respective technical areas and provide guidance, priorities, and allocations to subordinate commands. They also review the plans of counterpart staff in subordinate groups/brigades.

Special staff officers provide technical advice and planning assistance to the COSCOM commander and staff on internal COSCOM activities. Chapter 9 describes the mission and functions of both special staff sections and coordinating general staff sections in supporting those elements assigned, attached, or detailed to the COSCOM.

Support Operations Section

The COSCOM DCDR serves as the COSCOM support operations officer. As such, he focuses on the external mission support provided by the COSCOM. Using the CSS plans branch staff, he coordinates development of estimates and plans for external logistics support, to include —

- Support operations estimates.
- Annexes to the COSCOM OPLAN/OPORD.
- Support analyses.
- Corps service support plans/orders.

As the COSCOM support officer, the COSCOM DCDR has staff supervision over the CMMC and CMCC and the subordinate branches of the support operations section. Coordinating support operations staff officers interface with these COSCOM's control centers and subordinate groups/brigades to support Army forces and other designated forces operating within the corps area. In coordination with the centers, support operations staff officers –

- Compute overall requirements for the corps.
- Manage reserve stocks.
- Coordinate movements and throughput with the TAMCA
- Develop and manage the maintenance plan.
- Cross-level resources.

COSCOM support operations staff officers exercise technical supervision over COSCOM external mission

support operations. As shown by Figure 2-5, subordinate branches of the support operations section reflect the COSCOM's mission to –

- Sustain the corps soldier Troop Support Branch.
- Arm the corps force Munitions Support Branch and Weapon Systems Support Branch.
- Fuel the corps force Petroleum Support Branch.
- Fix the corps force Maintenance Support Branch.
- Move the corps force Transportation Support Branch.

Figure 2-5 lists the general mission areas of the branches under the COSCOM support operations section. Branch personnel develop estimates, plans, policies, and procedures for their areas of responsibility. They provide policy, guidance, and staff supervision to CMMC branches and technical staff assistance to applicable CSG branches. Chapters 4 through 8 and 10 provide specific detail and describe the involvement of support operations staff officers in the COSCOM's external support missions.

In addition, a procurement support branch, which encompasses staff previously assigned to the procurement branch of the CMMC, provides a central contracting element for the corps. It provides contracting support to corps headquarters, corps nondivision units, and corps troops. It also provides back-up contracting support to CSG contracting staff. If the full corps is not deployed, it may provide a contracting task force tailored for the specific contingency, emergency, or operation.

Special Troops Battalion Headquarters and Headquarters Company

The special troops battalion headquarters provides the C2 for all special troops assigned or attached to the COSCOM. The headquarters company provides C2 and supervision of enlisted personnel assigned to the COSCOM HHC. Both headquarters are covered in Chapter 9.

COSCOM HHC AUTOMATION SUPPORT

COSCOM staff officers require accurate and timely data to prepare accurate estimates and responsive plans and orders. Their recommendations to the COSCOM commander and corps staff relate directly to the timeliness and accuracy of the data provided.

Automation support systems aid staff officers in decision making. Interactive systems enable staff officers to collect, collate, analyze, formulate, and disseminate information.

SUPPORT OPERATIONS SECTION

- COSCOM's external support missions
- Staff supervision over the CMMC and CMCC
- Synchronization of resources with corps priorities
- Interface with CSG support operations section

CSS PLANS BRANCH

- Contingency plans
- Input to the troop list
- Corps service support plans
- Input to COSCOM OPLANs and reconstitution plans
 Refer to Chapters 4 8.

TROOP SUPPORT BRANCH

- Class I, II, IV, VI, and water
- Field services support
- Guidance to the CMMC Troop Support Div and CSG S&S Br Refer to Chapter 4.

MUNITIONS SUPPORT BRANCH

- Munitions supply, surveillance, and maintenance
- CSR munitions requirements
- Advice to CSG ammunition officers and ammunition supply units
- Class IV mines and demolition stocks Refer to Chapter 5.

WEAPON SYSTEMS SUPPORT BRANCH

- Weapon systems management
- Class VII support
- Maintenance status of weapon systems and critical items
- Movement of special weapons Refer to Chapter 5.

PETROLEUM SUPPORT BRANCH

- Class III portion of estimates and plans
- Bulk fuel distribution and quality assurance
- Guidance to the CMMC Petroleum/Water Div Refer to Chapter 6.

MAINTENANCE SUPPORT BRANCH

- Maintenance support of corps forces
- Advice on DS maintenance support
- Guidance to CMMC maintenance branches and CSG Maint Br Refer to Chapter 7.

TRANSPORTATION SUPPORT BRANCH

- Movement control, mode operations, and terminal operations
- Corps distribution systems
- Input to the corps movement program
- Maintenance of routes, terminals, and facilities
- Guidance to the CMCC and CSG Trans Br
- Interzonal transportation issues
- Throughput policy with supporting TAACOMs
 Refer to Chapter 8.

PROCUREMENT SUPPORT BRANCH

- Resources in the AO
- Local procurement policy and quality control
- Contingency contracting
- Staff supervision over the CMMC Proc Br
- Ordering officer network Refer to Chapter 4.

Figure 2-5. Mission functions of support operations section's subordinate branches.

ARMY TACTICAL COMMAND AND CONTROL SYSTEM

As shown by Figure 2-6, ATCCS links the following automated control systems through an interoperable family of common computers:

- Maneuver Control System. MCS provides automated assistance for the collection of battlefield information, coordination of plans, and dissemination of orders by commanders and staffs at corps, division, brigade, and maneuver battalion levels.
- Advanced Field Artillery Tactical Data System. AFATDS automates fire support planning. This includes target analysis and coordination and control of all fire support assets.
- Forward Area Air Defense Command, Control, and Intelligence. FAAD C2I passes aircraft tracking data to air defense units and cues weapons to approaching aircraft.
- All-Source Analysis System. ASAS automates the processing and dissemination of battlefield intelligence.
- Combat Service Support Control System. CSSCS provides crit;cal CSS information for theater and force level commanders. CSSCS supports both tactical and logistics decision makers by providing logistics, medical, financial, and personnel command and control information.

Critical information on the five battlefield functional areas flows between the nodes to update the data base of each automated control system. ATCCS computers hook up to MSE communications equipment. This allows information to flow between the automated control systems over the MSE area communications network, SINGARS combat net radios, and data distribution systems.

COSCOM HHC AUTOMATION INTERFACE

COSCOM commanders and staffs obtain C2 information through a network of battlefield automated systems. Table 2-3 lists STAMIS to be run by COSCOM HHC elements and their interface with other elements. The current automation transition plan calls for the COSCOM HHC to be authorized common hardware and software to receive and process –

- CSSCS.
- SIDPERS.

- TAMMIS.
- DAMMS-R
- SPBS-R.
- ULLS.

Staff officers assigned to the support operations section's subordinate branches use keyboard and video display units to process and transfer data between the branches.

CSSAMO personnel use their TACCS and ULC devices to review STAMIS software and change packages to help resolve problem areas encountered by subordinate CSSAMOs.

CSS AUTOMATION MANAGEMENT OFFICE

COSCOM headquarters no longer depends upon a separate data processing unit. The CSSAMO, authorized the COSCOM ACofS, G6 section and each CSG, provides software support to COSCOM units using logistics STAMIS. The COSCOM CSSAMO serves as the system integrator for logistics STAMIS system support in the corps. It coordinates the actions of the CSSAMOs in subordinate CSGs and the DISCOM's CSSAMO. Mission tasks are listed in the ACofS, G6 section of Chapter 9.

COMBAT SERVICE SUPPORT CONTROL SYSTEM

CSSCS provides timely and reliable integrated logistics, medical, financial, and personnel information to the corps commander and subordinate logistics staff. Though variable, CSSCS interface reduces the time to obtain information from previous 12 to 24 hours to less than 3 hours.

CSSCS Interfaces

CSSCS provides COSCOM personnel access to summary data provided through the objective interface between CSSCS, ATCCS control systems, and the logistics STAMISs shown on Figure 2-7. This interface provides COSCOM support operations staff officers the necessary CSS C2 information required to assess logistics supportability of operations.

CCSSCS provides the automation interface between COSCOM HHC elements and subordinate commands, the corps G4, supported DISCOMs, separate brigades, and ACRs. Figure 2-8 depicts the CSSCS interface with ATCCS automated control systems and objective CSS STAMISs at each echelon.

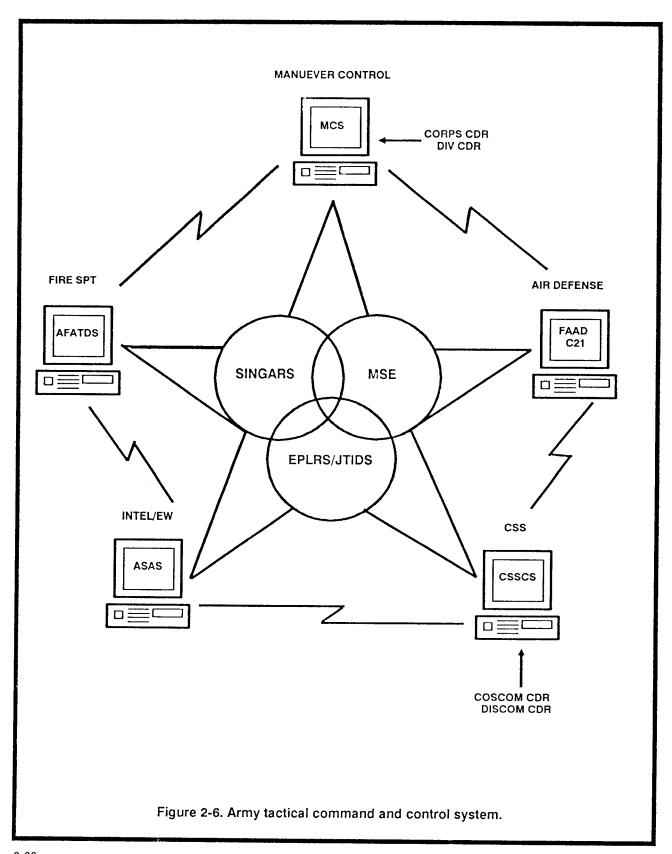
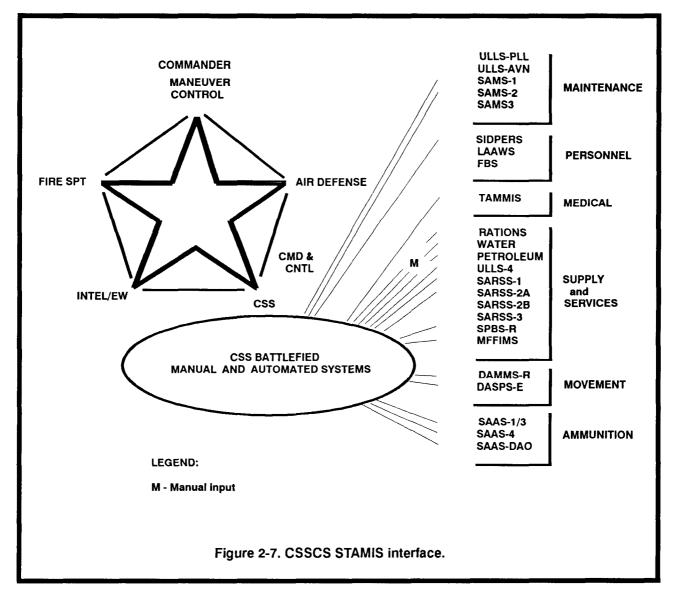


Table 2-3. COSCOM HHC STAMIS and interfaces.					
COSCOM HHC ELEMENT	STAMIS	INTERFACES WITH:			
ACofS, G1 Section Personnel Mgt Branch	SIDPERS	Corps G1 Corps Personnel Group Replacement Company CMMC CMCC HQ, Special Troops S1 HQ Company Corps Support Group S1 Medical Bde/Group S1			
ACofS, G3 Sec	csscs	COSCOM Support Ops Sec COSCOM Units			
Support Ops Sec CSS Plans Branch	csscs	Corps G4 CMMC CMCC CSGs' Support Ops Sec Medical Bde/Group TAMMIS DISCOMs Sep Bde Spt Bn ACR Spt Squadron			
Maintenance Spt Br	CSSCS/SAMS-2	СММС			
Transportation Spt Br	CSSCS/SAMS-2	CMCC			
Special Troops Bn	SIDPERS SPBS-4 ULLS-4	COSCOM ACofS, G1 COSCOM ACofS, G4			
HQ Company	ULLS-PLL				



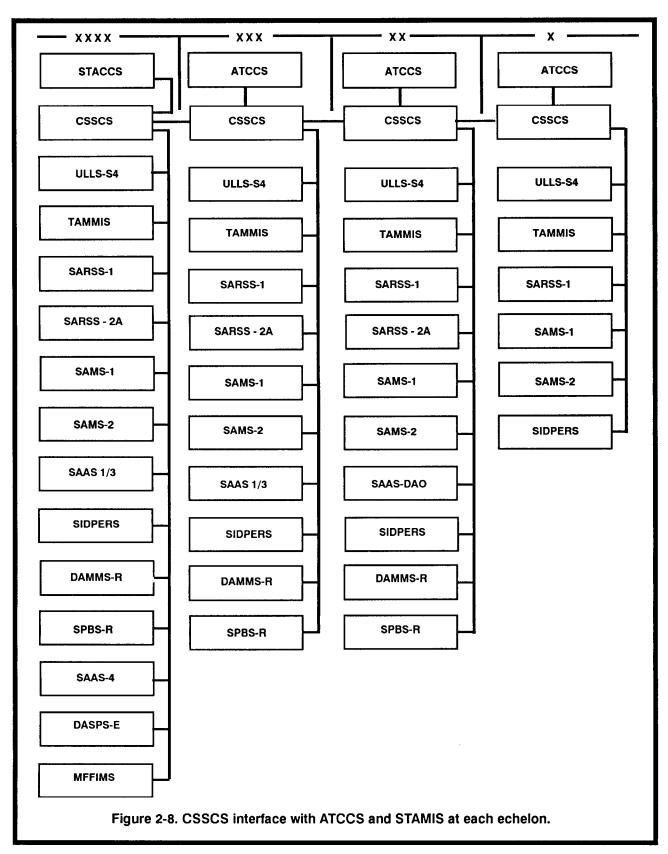
CSSCS Data Base

CSSCS maintains a data base of planning and consumption factors used in logistics planning and forecasting. In addition to unclassified factors from sources such as FM 101-10-1/2, the CSSCS data base maintains —

- Force commander's critical CSS data requirements.
- CSS commander's critical CSS data requirements.
- CSS coordinating staff CSS data requirements.
- Summary CSS data on organizations two levels below the force level supported.
- Summary CSS data on maneuver brigades.

CSSCS transmits logistics estimates, supply status, petroleum status, ammunition status, resupply rates, and equipment requirements. COSCOM support operations staff officers use CSSCS to —

- Project resource requirements.
- Monitor critical assets.
- Assess shortfalls in supply, maintenance, transportation, and medical resources.
- Analyze supportability of tactical plans.
- Determine the supportability of alternate courses of action.
- Plan logistics support operations, to include support of reconstitution operations.



- Plan logistics support of contingencies and future operations.
- Respond to emergency or special requirements, such as support of a reaction task force, support of a corps surge, or assistance with retrograde operations.
- Assess logistics support risks involved when considering support options.
- Determine support priorities.
- Cross level resources through greater visibility of assets.
- Synchronize logistics to support tactical plans.
- Control critical assets.

Decision-Making Support

CSSCS supports staff officer decision making and course of action analysis. It processes selected logistics, medical, and financial critical resource data into a form such as Figure 2-9 used by COSCOM support operations staff officers for locally developed planning and forecasting factors. CSSCS report screens such as Figure 2-9 alert COSCOM support operations staff officers to critical red and amber areas.

CSSCS also supports decision making through its message formats. The computer can generate and transmit orders previously written or given verbally.

Course of Action Evaluation

CSSCS provides a course of action logistics planning capability to help staff officers evaluate the supportability y of proposed courses of action. Algorithmic functions enable COSCOM and subordinate CSG and medical brigade commanders and staff to analyze multiple courses of action for logistics supportability.

CSSCS allows COSCOM staff officers to assess the courses of action in light of external factors, to include —

- Area of operations (terrain, roads, and weather).
- Enemy capabilities directed against logistics activities.
- Civil military situations (refugees and damage to the area).

CSSCS allows staff officers to evaluate each course of action by displaying the requirement and projected availability for each resource. It calculates Class III, IV, V, VII, and IX requirements for each course of action. Based on projected availability of resources, CSSCS projects the force status during course of ac-

tion execution. CSSCS helps support operations staff officers determine current and projected capabilities for a specific force. It correlates support capabilities with various battle intensities and scenarios.

For example, CSSCS can project the ability of transportation assets and capacity of supply routes to deliver required resources to destinations in support of each course of action. Based on battle losses, maintenance work loads, maintenance returns, and supply actions, CSSCS can also project weapon systems status during each course of action execution.

STANDARD INSTALLATION PERSONNEL SYSTEMS

COSCOM ACofS, G1 section personnel use SIDPERS software programs to coordinate personnel management functions with the personnel group assigned to corps headquarters. They use SIDPERS to transmit replacement requirements, combat loss data, and personnel management data for the COSCOM. Subordinate group/brigade S1s transmit information summary copies of personnel status reports to the ACofS, G1 section via SIDPERS. Facsimile machines, a UGC-144, and additional DNVTS with TACCS help to offset the requirement for large volume, hard copy message traffic and personnel management data flow between subordinate organization S1s and corps personnel elements.

Headquarters, special troops battalion personnel use SIDPERS software programs to transmit strength accounting data and by-name personnel accounting information for the COSCOM HHC and any attached units via a TACCS device to the supporting personnel support unit.

THEATER ARMY MEDICAL MANAGEMENT INFORMATION SYSTEM

COSCOM and nondivision HSS staff officers use TAMMIS to obtain timely, accurate, and relevant HSS data. The COSCOM surgeon and ACofS, G1 staff officers use TAMMIS to monitor evacuation, treatment, and tracking of patients from the divisions throughout the corps rear area.

DEPARTMENT OF THE ARMY MOVEMENTS MANAGEMENT SYSTEM-REDESIGN

COSCOM transportation support branch personnel use DAMMS-R to plan and project transport capability and to monitor transportation distribution network status. They use DAMMS-R software to review movement

UNCLASSIFIED CSSCS Capability Report

					RESOURCE CRITICALITY						
TIME	CBT POS	CBT INTENSITY	OVERALI STATUS		АММО	FUEL	TRANS	MAINT	MED	OTHER SUP	SVCS
				20	10	10	10	10	10	10	5
LAST 24 HRS		L	G	G	G	G	G	G	G	G	G
CURREI 24 HRS	NT	Н	G	G	A	A	G	G	G	G	G
NEXT 24 HRS		М	A	A	R	A	A	G	G	G	G
24-48 HI	RS	н	A	A	A	A	R	G	G	G	G
48-72 HI	RS	L	A	A	A	A	A	G	G	G	G
72-96 HI	RS	М	A	A	A	A	A	G	G	G	G
REMAR	KS:	G= Green	A= Amber	R= Red	L= Low	, M=	Medium	H= Hi	gh		

UNCLASSSIFIED

Figure 2-9. Sample CSS capability report.

commitments. DAMMS-R data helps them analyze transportation requirements, movement status, mode capabilities, and transportation network resources. They can then take action to expedite delivery of critical supplies. Transportation support branch personnel use DAMMS-R status data when coordinating with –

- Corps G4 transportation staff officers in forecasting movement requirements, identifying and resolving asset shortfalls, and programming movements of logistics stocks.
- CMCC staff to resolve conflicts with allied forces and civilian agencies regarding use and regulation of ground LOCs.
- CMMC and CMCC staff and other COSCOM support operations staff in tracing and diverting critical cargo intransit.

STANDARD PROPERTY BOOK SYSTEM-REDESIGNED

SPBS-R software programs provide property book accounting for Class VII and nonexpendable Class II and IV items. They enable the special troops battalion property book officer to keep the COSCOM commander and ACofS, G3 personnel informed of the unit status of the COSCOM HHC.

UNIT-LEVEL LOGISTICS SYSTEM

Headquarters company personnel use ULLS software to maintain the PLL for the COSCOM HHC. They also use ULLS to transmit materiel readiness data, unit equipment status data, and maintenance requirements on the headquarters' ULC device.

AUTOMATION INFORMATION SECURITY

COSCOM ACofS, G6 section personnel develop a security plan (to include physical access controls and

database access administrative controls) to ensure security when processing classified and unclassified-sensitive information. They develop a contingency plan so that if data are modified or destroyed unexpectedly, recovery procedures are available. They perform a risk analysis to include an analysis of data criticality, the sensitivity levels of data processed, local criminal and intelligence threat, and the vulnerability of automation.

Software controls protect against compromise, subversion or unauthorized manipulation. Appropriate safeguards need to be implemented to detect and minimize inadvertent or malicious modification or destruction of data from malicious software or software virus. To minimize the impact of unauthorized changes, a backup or master copy of the software needs to be maintained and safeguarded.

Hardware security controls include preventing unauthorized access. CTASC-II systems at the CMMC and CMCC must be included in the physical security plan. CSSAMO personnel need to observe contract maintenance personnel performing maintenance operations.

CONTINUITY OF OPERATIONS

Computer hardware electronic components can be affected by high altitude electromagnetic pulses and NBC contamination. For COOP, each site needs to consolidate and save information at the completion of each day's processing. Operators should move selected system files to a removable disk cartridge, then store cartridges away from the site.

If a site becomes inoperative, another site can run mission essential support data. Software systems can be run on a TACCS at the parent unit. Requisitions may be passed to the next supply echelon.

COSCOM HHC COMMUNICATIONS SUPPORT

Logistics support is communications dependent. To enable COSCOM headquarters staff officers to exercise C2 and coordinate support issues with staff counterparts, the COSCOM HHC must possess reliable communications. It must maintain access to the MSE communications network. Theater dependent, it may also need to interface with the theater army area communications system.

MSE AREA COMMUNICATIONS SYSTEM

MSE ensures near real-time communications between COSCOM headquarters, corps headquarters, and the headquarters of subordinate groups/brigades. MSE provides secure area communications to static customers

authorized subscriber terminals located in or near CPs, It uses a fixed directory and possesses a flood search ability. Customer phone numbers do not change as customers move about the battlefield. Once a customer's 7-digit phone number has been dialed, MSE completes the call as long as the customer remains connetted to a switchboard or in a vehicle equipped with a MSRT.

Area Coverage

MSE provides common user support throughout a geographic area as opposed to dedicated support to a specific unit or customer. The MSE network extends

from the corps rear area forward to the supported divisions. The typical MSE corps system provides communications support for a five division corps occupying an area of about 15,000 square miles (37,500 square kilometers). The corps signal brigade controls the entire nodal system and the switchboards located in the corps area. See FM 11-30 for coverage of combat communications within the corps area.

Wire Subscriber Access

Wire subscriber access points provide the entry points or interface between fixed subscriber terminal equipment owned and operated by users and the MSE area system operated by signal units.

Nonsecure Telephones

DNVTs provide nonsecure voice access to wire sub scribers, usually at CP locations. DNVTs tie into the MSE area system via field wire. They interface with facsimiles for informal record traffic. They interface with single sub scriber terminals for formal worldwide record traffic. DNVTs also interface with TACCS and ULC, for processing STAMIS software systems, and with ATCCS for entry into CSSCS. Check the latest TOE/MTOE for DNVT authorization.

Mobile Radiotelephones

MSRTs provide a mobile radiotelephone capability for secure command net communication on-the-move. MSRTs consist of a high frequency radio and a digital secure phone mounted on a vehicle. MSRTs can also be used in CPs to allow access to staff and personnel. For example the MSRT allows the COSCOMDCDR contact with subordinate units and EAC units beyond FM range while in his vehicle. The ACofS, G4 can use a MSRT to manage ADC operations and allocate facilities throughout the COSCOM. Refer to the latest TOE/MTOE for MSRT authorization.

MSRTs interface with the MSE system through a radio access unit. As long as the radio unit maintains line-of-sight contact with the RAU, it connects into the area system. The operational planning range extends to 15 kilometers from any RAU.

User Responsibility

User personnel install DNVTs and MSRTs and lay field wire to MSE interface points. The amount of wire the COSCOM HHC needs depends on the dispersion requirements of subordinate headquarters. FSOPs cover internal wire installation and connectivity to MSE interface points. They need to specify who does the installation and connection and in what priority.

Retention of Current Wire Net Equipment

Current organic two-wire switchboards and telephones cannot enter the four-wire digital MSE system. Each COSCOM HHC retains the current two-wire switchboard and associated telephones for local security and internal operations. Retaining this internal backup system reduces message volume sent over the MSE net.

HN INTERFACE

HN commercial telephone service can supplement tactical communications systems. To reduce the burden on tactical communication systems, COSCOM units use this commercial phone system when available and practical.

Where HNS agreements exist, the COSCOM command net and CMMC net interface with supporting HN organizations. STANAG 5040 describes a NATO analog interface with MSE. Communications between the HN and COSCOM CP occur via fixed and field type communications links. To ensure interoperability with HN supporting units, US cellular logistics teams need communications and automation equipment which allows them to interface with the communications network of supporting HN organizations. Existing HN phone lines enable communications with US liaison teams.

STANAG 4214 covers digital interoperability with NATO units. STANAG 5000 covers facsimile AN/UXC-7 interoperability capabilities.

RADIO NETS

ACodS, G6 communications branch personnel analyze net requirements.

AM Net

ACofS, G3 section personnel establish and operate an AM radio command operations net to coordinate logistics supportability issues with corps headquarters and subordinate commands. The net consists of a long-range AN/GRC 193 radio authorized the ACofS, G3 section. This radio is capable of transmitting information over distances up to 80 kilometer/50 miles. The AM command net enables COSCOM staff to discuss critical support issues with –

- Corps G3 and G4 staff.
- Corps rear CP CSS and operations cells.
- Corps main CP CSS and operations staffs.
- COSCOM forward/jump CP.

The AM command net allows C2 to the COSCOM

from the corps headquarters and enables COSCOM staff to obtain real time information on changing corps operations and support priorities. It also enables the COSCOM to maintain C2 when operating a forward/jump CP beyond FM range of their main CP.

The COSCOM AM command net enables COSCOM command section staff and support operations staff officers to disseminate mission taskings and transmit critical requirements data with –

• Corps headquarters.

- Subordinate commands.
- Control centers.
- DISCOMs and DMMCs.
- Separate brigade support battalions and BMMCs.

FM Net

The FM net shown by Table 2-4 enables COSCOM headquarters and subordinate functional centers and commands to react quickly to changes in operational plans and support requirements and to direct/redirect subordinate units. It provides a means to transmit daily

Table 2-4. COSCOM FM command net/rear operations net.				
COSCOM HHC ELEMENT	FM RADIO	RATIONALE		
Command Section	AN/VRC-92 - CDR	C2 of COSCOM Monitor corps C2 FM Net		
	AN/VRC-92 - DCDR	Talk in COSCOM Cmd FM Net Talk in corps C2 FM Net		
Chief of Staff Sec	AN/VRC-90			
ACofS, G3 Sec Ops Br	AN/VRC-92 AN/VRC-90	Report time sensitive information Use corps Ops/Intel Net		
ACofS, G6 Officer Sec	AN/VRC-90 2 AN/VRC-92	Talk in COSCOM Cmd FM Net Transmit to forward and main FM nets		
Support Ops Officer	AN/VRC-90	Communicate with major supported commands		
		Affect supply responsiveness to critical customers		
Special Troops Bn	AN/VRC-90	C2 of special troops elements		
HQ Company	AN/VRC-90	Perimeter defense		

support data and supports inter-staff coordination. The FM net allows support operations staff officers to confer with staff counterparts in subordinate groups and battalions

COSCOM support operations staff officers use the FM net to redirect support efforts of subordinate commands. This in turn enables the corps commander to follow through when his division commanders take advantage of windows of opportunity.

The FM command net also allows support operations staff to transmit critical or sensitive information on the status of degraded units. Degraded unit status information and regeneration requirements pass from the assessment element of the RTF or battle damage assessment teams through the command net to COSCOM support operations staff.

Rear Operations Net

Organic short-range FM radios are also authorized to facilitate transmitting rear operations data. They allow the COSCOM headquarters to provide data to the corps rear CP's operations cell relative to sustainment of rear operations or logistics support required by a TCF. The rear operations net provides links to –

- Corps rear CP operations cell.
- Base cluster operations center.
- Other base/base cluster elements (CMMC and CMCC).
- Sector RAOC.
- MP security company.
- Rear corps support group (alternate COSCOM CP).

The special troops battalion commander and headquarters company commandant use their FM radio for base security and to communicate with other base elements. The net allows base/base cluster elements to report incidents to and request support from the area RAOC.

CONTINGENCY SATELLITE COMMUNICATIONS

To provide supplementary communications support, the corps can allocate a contingency support team (TOE 63531LA) to those COSCOM headquarters with a contingency operations mission. The team owns four TACSATCOM radio sets (AN/PSC-3). These battery operated backpack radio sets provide satellite/line-of-sight communications in the 225-to 400-MHz frequency range. They provide digital burst or emergency voice communications over a satellite channel. The radio sets

operate in both halt and on the move modes.

Though TACSATCOM radios enable more responsive support from CONUS NICPs, C-E officers need to consider the following use limitations:

- Limited availability of satellites.
- Satellite and network controls.
- Possible long lead time for satellite access.
- Preemption by higher priority users.
- Frequency constraints for satellite communications.
- Local restrictions, such as terrestrial links which should be honored.
- Need for guard bands to avoid interference.
- Affect of weather on satellite communication.
- Interference with other links.
- Limited EW survivability.

COSCOM C-E OFFICER

The ACofS, G6 serves as the COSCOM C-E officer. He formulates C-E plans, policies, and procedures and integrates those plans through coordinating directly with –

- COSCOM staff officers.
- Corps C-E officer.
- Communications operations chiefs of subordinate and attached units.
- Signal brigade staff officers, for detailed COS-COM communications requirements.
- Supporting area signal officers on local communications matters which pertain to COSCOM units.
- Military intelligence brigade staff officers.

Communications Support Planning

When preparing for projected operations, the C-E officer revises C-E estimates, plans, and orders. He performs the following tasks during the preparation of the C-E annex to the COSCOM OPLAN/OPORD –

- Analyzes the C-E requirements of the COSCOM HHC and COSCOM units for projected operations.
- Determines the extent of C-E support required.
- Determines the sources and availability of C-E assets.
- Coordinates with the CA planning officer to obtain estimates of HN C-E resources and their availability.

- Coordinates communications requirements with the signal brigade.
- Develops plans to provide the COSCOM HHC with continuous communications from the time of alert through establishment of operations in the AO.
- Determines requirements for critical items of communications equipment to be stockpiled.
- Coordinates requirements with the corps C-E officer.
- Provides information about current and future locations of subordinate unit CPs to the assistant corps signal officer in the signal control center.

The COSCOM C-E officer develops a contingency plan for redundant communication in the event of catastrophic failure of the MSE network, or inability of the COSCOM CP to interface with the MSE system. Destruction of the servicing node prevents the COSCOM CP from using the MSE network through that node. MSRTs provide limited redundancy to access the MSE system through the radio access unit network, but that capability is limited.

FMs 24-22 and 101-5 provide details on signal planning and prescribe the format and content of signal orders and instructions. FM 24-18 describes tactical single-channel radio communications techniques.

Staff Supervision

The COSCOM C-E officer exercises technical supervision over the communications elements assigned or attached to the COSCOM. To discharge this responsibility, he analyzes the –

- Internal communications system for the COS-COM HHC.
- Internal communications system for the COSCOMs functional control centers, groups, and brigades.
- Communications links and requirements between the COSCOM HHC, subordinate COSCOM elements, supported units, and the supporting

- area signal centers in the area communications system.
- Communications capability organic to COSCOM units and the linking of these capabilities into a workable COSCOM communications system.

TELECOMMUNICATIONS CENTER

The telecommunications center integrates the message processing functions of the communications center and message center. Center personnel receive, edit for format, and transmit or distribute record correspondence in message form for all elements of the headquarters. The center selects the means of message transmission based on precedence, traffic volume, backlog, and means available.

COMMUNICATIONS SECURITY

Sophisticated communications equipment and EW protection devices are worthless if personnel responsible for handling, storing, using, or having knowledge of classified COMSEC information fail to take measures to deny unauthorized persons information of value. Supervisors, hand-receipt holders, communications center personnel, and all personnel engaged in preparing and transmitting messages need to know and comply with COMSEC measures. AR 380-19 describes these measures. They include employing –

- Cryptographic security through using cryptosystems.
- Emission security to prevent unauthorized intercept and analysis of compromising emanations from COMSEC equipment and telecommunications systems.
- Transmission security to protect transmissions from interception and exploitation.
- Physical security to safeguard classified equipment, materiel, and documents from access or observation by unauthorized personnel.

CHAPTER 3

COSCOM Control Centers

To enable COSCOM units to accomplish their logistics support missions, supplies must be available in the right quantity and at the right place and time. The COSCOM's subordinate CMMC performs integrated supply and maintenance management of corps support assets. The CMCC provides centralized movement control and highway regulation for moving personnel and materiel into, within, or out of the corps rear area, ensuring effective and efficient use of available transportation capability.

These centers keep the COSCOM commander and support operations staff officers informed of status and

potential problem areas or trends that may impact on the readiness posture of the corps. Competent management of supplies, maintenance resources, and transportation assets ensures that corps forces remain combat ready to meet operational requirements.

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MANAGEMENT CONCEPTS

The COSCOM performs its support mission through centralized control of decentralized operations. The COSCOM's support operations staff, CMMC materiel managers, and CMCC transportation staff perform centralized control. Subordinate COSCOM units perform decentralized support missions.

CENTRALIZED CONTROL

The COSCOM support operations officer performs supervisory staff control over both the CMMC and CMCC. As applicable, subordinate branch chiefs provide guidance and relay directives to CMMC or CMCC divisions based on the COSCOM commander's guidance/corps commander's intent.

Corps MMC

The CMMC provides centralized control of all GS supply within the corps. It maintains asset visibility of selected DS level stocks in Class II, packaged III, IV, VII, and IX. It also manages DS maintenance support operations.

CMMC commodity managers perform centralized stock management of a specific supply class. They react to the requirements of supported units. Materiel managers provide consolidated materiel management of a specific commodity. They provide the interface between corps units and the TAMMC, AMC, DLA, GSA, and NICPs. They manage supply classes by exception, using selective controls, Commodity managers

compile, interpret, and report data to the appropriate logistics branch in the COSCOM's support operations section. They pull from the TAACOM to fill the CSGs' distribution systems.

Corps MCC

The CMCC provides centralized movement control and highway regulation. It monitors transportation usage, forecasts transportation needs, and coordinates transportation support activities with the CMMC. The CMCC uses its subordinate MCTs and MRTs to commit and allocate the movement of corps transportation assets within CSGs. However, it retains committal authority for exceptional requirements within the corps area. In response to unusual transportation support requirements, the CMCC takes control of transportation assets in truck companies attached to CSBs or transportation battalions. As required, it requests and coordinates for additional transportation support from EAC.

DECENTRALIZED EXECUTION

The COSCOM headquarters decentralizes day-to-day logistics support to its subordinate groups/brigades. Subordinate CSGs focus on providing daily logistics support in their AO. This frees COSCOM ACofS, G3 plans and operations staff and support operations staff officers to focus on supporting battles 48 to 72 hours in the future.

CORPS MATERIEL MANAGEMENT CENTER

The CMMC provides centralized materiel and maintenance management for the corps. It processes requisitions, issues MROs, and performs automated stock control. CMMC personnel review demands and compute corps requirements for supplies, equipment, and maintenance support. They evaluate the work load and capabilities of COSCOM supply and maintenance units and cross-level resources of subordinate CSGs to achieve maximum efficiency. They also direct repair of items according to maintenance priorities.

CMMC MISSION

The CMMC performs integrated supply management for the corps for all classes of supply (less classified maps, medical supply, and classified COMSEC). It also performs maintenance management for all maintenance activities for which the COSCOM has responsibility.

To perform its mission, CMMC personnel -

- Direct storage and distribution of supplies.
- Receive and process requisitions from DS supply activities and other designated forces and activities.
- Provide inventory management of GS level supplies stocked within the corps.
- Review and analyze requisitions and compute corps requirements for supplies (except medical, COMSEC, and classified maps), equipment, and maintenance support.
- Evaluate the work load and capabilities of supported supply and maintenance units and crosslevel work load or resources to achieve equipment compatibility and maximum efficiency.
- Recommend maintenance priorities and monitor corps DS maintenance operations.
- Collect, sort, analyze and act upon supply and maintenance data requirements.
- Coordinate with the CMCC to integrate supply, equipment, and retrograde movement requirements into movement programs.
- Provide materiel management data and reports required by the COSCOM headquarters.
- Implement plans, procedures, and programs for materiel management systems.

- Approve additions to or deletions from corps stockage lists and adjustments to ROs within established policies.
- Direct controlled exchange or cannibalization of salvage or unserviceable equipment.
- Operate SARSS 2A/2B and SAAS 1/3 automated supply systems which compute demand requirements for corps supplies and equipment.
- Determine the effects of new or modified supply directives on materiel management systems.
- Provide guidance to DMMCs on materiel evacuation and reinforcing support.

SPLIT-BASE OPERATIONS

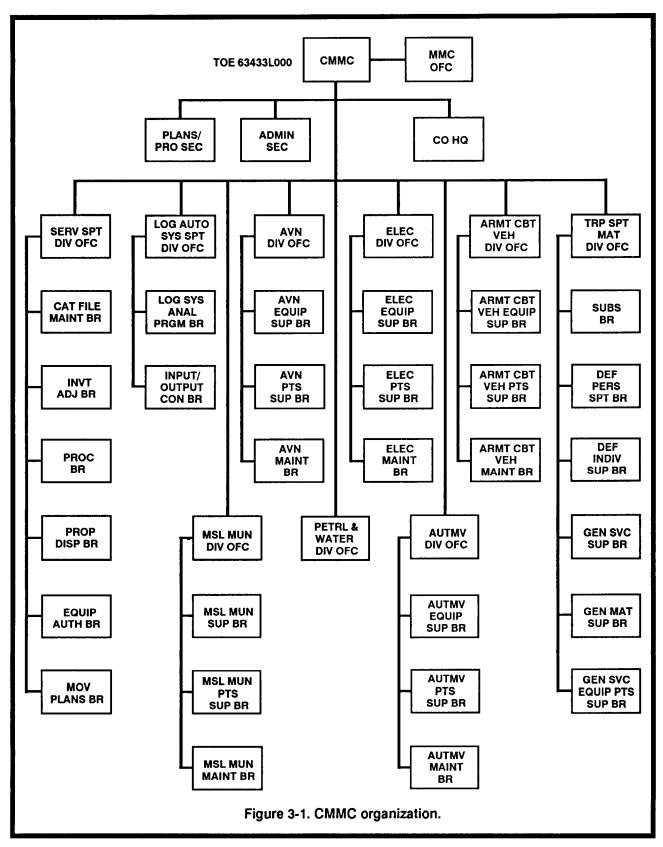
To provide on-site materiel management support of a force projection response to a crises from the force's initial entry into a threater through the culmination of operations, the CMMC must be able to displace in increments. The CMMC may have to deploy forward cells simultaneously to multiple locations.

The remaining part of the CMMC remains in a secure sanctuary installation location. This secure sanctuary location may be in the continental United States or forward stationed in the theater. The home based main CMMC is augmented with TDA authorized civilians who operate the nontactical central processing unit, processing the bulk of CMMC management activities.

The CMMC element in the sanctuary area processes the requirements for units in the sanctuary area and for those activities supported by the forward CMMC elements. It transmits MROs either directly to the storage site or through the forward CMMC elements to the storage site. When requirements cannot be met with stocks controlled by the CMMC, it transmits requirements, based upon the area of operations operating procedures, to the NICP or TAMMC. Assured communications to the CMMC element in the sanctuary area is required. A military or commercial system may provide the assured communications link to CONUS.

CMMC ORGANIZATION

Figure 3-1 depicts the organization of the CMMC. The seven materiel management divisions shown on Figure 3-1 are organized along functional lines to more closely interface with major subordinate commands of AMC or NICPs. The functional branch



breakdown within each division permits special management of supply, repair parts, and maintenance. FM 54-23 provides a detailed description of the functions performed by each of the divisions and their subordinate branches. As necessary, the CMMC can combine personnel in the functional branches to form a management team for intensive management of designated items.

Supply Branch/Parts Supply Branch Functions

In general personnel assigned to a supply branch/parts supply branch of the commodity divisions perform the following functions:

- Compute authorized levels.
- Establish and review ROs based on past demand experience and anticipated requirements.
- Monitor ROs created by the automated supply system.
- Establish mandatory stockage levels for items not automatically stocked, stored, and issued through automated software programs.
- Review and analyze demands.
- Identify items requiring intensive management.
- Perform reviews of ASLs from DMMCs, COSCOM GSUs, and DS maintenance units.
- Monitor ASL zero balance lines with dues out and take intensive management action to satisfy these dues out.
- Prepare distribution plans.
- Process requisitions on a daily basis.
- Review requisitions to determine if items are on the command controlled and regulated items list.
- Assure correct use of issue priority designators.
- Determine if requesting units are authorized to requisition the item(s) and if the quantity requested does not exceed authorized allowances.
- Direct corps GSUs to ship supplies or coordinate with NICPs or TAMMC, as appropriate, to fill requisitions.
- Maintain the stock record account.
- Coordinate and perform liaison functions with

- DMMCs, nondivision supply support activities, and NICPs.
- Take follow-up actions on requisitions, as required.
- Maintain the status of stocks on hand or being throughput from the corps rear area.
- Resolve distribution problems.
- Recommend cross-leveling of supplies among CSGs.

Maintenance Branch Functions

Personnel assigned to a maintenance branch of the various commodity divisions perform the following general functions:

- Provide guidance to COSCOM DS maintenance units on repair priorities.
- Evaluate and balance maintenance work loads and resources among subordinate CSGs.
- Coordinate with the commodity division's supply branch on repair parts requirements for maintenance of items in short supply.
- Provide intensive management of equipment deadlined due to lack of repair parts.
- Research documents to determine the status of requisitions for repair parts.
- Coordinate requirements for controlled cannibalization or parts fabrication with the commodity division's supply branch.
- Request the appropriate NICP expedite shipment of critically needed repair parts when the estimated delivery date is unsatisfactory.
- Conduct cross-leveling actions to resolve major assembly shortages.

FORCE PROJECTION MODULAR ELEMENTS

Modular elements from the CMMC deploy as part of the logistics slice supporting a force projection force. They provide a means to manage assets early in the conflict. These forward modular elements provide local integrated MMC support coverage to the RMMC, BMMC, DMMC, CSGs, and COSCOM. They may have to support other than US Army requirements.

Forward CMMC modular elements alert the main CMMC to materiel management problems in the AO.

They provide guidance and timely materiel management decisions to subordinate DSU and GSU organizations.

Since these forward modular CMMC elements require automated entry into the central data base and the ability to query the central data base for inventory asset visibility, they must have assured communications and appropriate automation hardware and software. The initial deployment package must include communications equipment which ties into the AO's communications system. CMMC modules access assured communications through a concentrate or.

COSCOM STAFF SUPERVISION

The CMMC operates under the supervisory staff control of the COSCOM support operations officer. The COSCOM support operations officer uses the CMMC to process requisitions and direct the receipt, temporary storage, issue, and distribution of supplies and equipment. The CMMC manages materiel assets needed to support corps operations. CMMC staff implements the plans, policy, and priorities of support of the COSCOM support operations officer and the corps G4. The COSCOM support operations officer provides stockage policy guidance. He provides guidance to the CMMC's divisions for preparation of the command controlled or regulated items list.

The CMMC receives, sorts, and analyzes data to assist COSCOM support operations staff in determining the effectiveness of support operations. CMMC division chiefs keep the support operations section's subordinate branch chiefs continuously advised on available and in-motion stocks as well as potential problem areas for supporting future operations. They refer materiel problems that deviate from the routine to the appropriate branch chief under the support operations section. They keep COSCOM maintenance support branch personnel informed of trends, problem areas, and deadlined equipment. Their personnel evaluate computer reports and listings and provide required reports and appropriate recommendations to the COSCOM support operations officer. They evaluate maintenance backlogs and recommend ways to balance work loads and maintenance resources.

SUPPLY REQUIREMENTS PLANNING

CMMC personnel assigned to the supply branch of each commodity division determine quantities of each item required within the corps. Supply requirements data depend on accumulated demand data, previous experience factors, troop strength, item density, and command guidance.

Initial Requirements Determination

CMMC supply personnel compute requirements for initial issue or requirements to fill shortages in the initial issue during the initial period of operation. They need to consider –

- Authorization data in TOEs/TDAs or equipment modification lists.
- Troop basis and allowances.
- Status of supplies in COSCOM units.
- Dates of arrival or activation of COSCOM units.
 Replacement and Consumption Requirements

CMMC commodity managers compute requirements required to keep initial equipment at authorized quantities and replenish supplies either consumed expended lost contaminated, or destroyed. They need to consider —

- Authorized days of supply.
- Projected troop strength data for the period.
- Changes in the composition of the forces supported.
- Seasonal requirements.
- Anticipated or actual operations, such as an NBC environment, that create special requirements.
- Replacement factors and consumption rates.

Supply Estimates

CMMC commodity managers estimate stockage to be received, stored, and distributed. Supply estimates depend on –

- Troop strength reported in personnel status reports or COSCOM/corps headquarters plans.
- Supply consumption rates. (In the absence of experience data for the type operation being supported, commodity managers modify rates published in FM 101-10-1/2 SB 38-26, and SB 710-2.)
- Required days of supply, based on the projected order/ship time and required operating and safety level.
- Required supplies to be prerigged for airdrop on call.

Distribution Requirements

CMMC plans and procedures section officers estimate the total tonnage moved into and throughout

the combat zone each day. Estimates vary based on formulas for daily resupply and buildup.

Storage Requirements

CMMC commodity managers also consider storage site requirements.

SUPPLY MANAGEMENT INFORMATION SYSTEMS

Combat Service Support Control System

CSSCS extracts selected information and files from other logistics STAMIS. CSSCS generates reports on -

- General supply status.
- Petroleum status.
- Ammunition status.
- Resupply rates.

These CSSCS reports help commodity managers maintain greater visibility of COSCOM resources. Commodity managers report supportability status and critical asset data to the COSCOM support operations section's subordinate branch chiefs.

Standard Army Retail Supply System Level-2A/2B

SARSS 2A and 2B programs provide CMMC commodity managers asset visibility down to DS level. This enables commodity managers to cross-level and redistribute excess stocks. SARSS provides for the immediate issue of on-hand Class II, packaged III, IV, VII, and IX materiel. It transmits unfilled requisitions to the GS level source of supply.

SARSS 2A. SARSS-2A interfaces with: SARSS 1, SARSS 2A/2B, SARSS 3, CSSCS, DAMMS-R, CBS-X, SAAS, SAMS-1, and SAMS-2. SARSS 2A automates time sensitive supply management activities. These include resource allocations, lateral referrals, redistribution, and excess disposition. SARSS 2A enables CMMC supply managers for Class II, packaged III, IV, VII, and IX to –

- Perform lateral referrals of requisitions among subordinate SARSS 1 activities when an emergency exists and asset availability files indicate item or substitute item availability.
- Route unfilled requisitions received from SARSS 1 to the appropriate source of supply, such as the NICP, the TAMMC, or local procurement by means of the Defense Automatic Addressing System.

• Identify controlled items in subordinate SARSS 1 activities and obtain manager approval to release these items.

SARSS 2B. SARSS 2B interfaces with SARSS 1, SARSS 2A, SARSS 3, CSSCS, SAMS-2, and SPBS-R. SARSS 2B enables CMMC supply managers to perform nontime sensitive management activities. These include —

- Maintenance of document history.
- Demand data accumulation.
- Demand analysis.
- Requirements determination.
- Demand history maintenance.
- Catalog maintenance through communication with the Catalog Data Activity.

SAAS-1/3

COSCOM ammunition units transmit SAAS-4 ammunition supply documents to the CMMC for input into SAAS-1/3. Missile-munitions division office personnel use SAAS-1/3 to perform stock control and supply management processing functions. SAAS-1/3 provides munitions managers visibility of Class V assets in each CSA and ASP. (ATP stocks are excluded from SAAS-1/3 once emplaced for division assets.) SAAS-1/3 reports the status of allocations, computes ASLs, and displays stock status. Status data includes stocks in transit from CONUS and TAACOM units.

The interface between SAAS-1/3 and CSSCS and DAMMS-R enables missile-munitions managers to divert or hold ammunition in transit. When the corps acts as an independent corps, missile-munitions managers use SAAS-1/3 to interface directly with CONUS NICPs.

MAINTENANCE MANAGEMENT INFORMATION SYSTEMS

The CMMC TOE authorizes materiel maintenance managers for each commodity oriented division office in the CMMC. They use SAMS-2 to monitor repair capability and control the work load of COSCOM maintenance units. SAMS-2 produces management information related to work orders, shop capabilities, backlogs, parts costs, and inoperative equipment status. It enables materiel maintenance managers to –

Work load maintenance units.

- Monitor inoperative equipment.
- Analyze materiel condition status reports.

CTASC-II

The CTASC-II system provides mainframe processor capability. It consists of commercial off-the-shelf computers and communications equipment housed in rigid wall shelters transported by three modified CUCVs and trailers.

Two CTASC-II systems are authorized the CMMC's logistics automation systems support division. One CTASC-II processes SARSS-2A/2B. The second processes SAAS-1/3. They provide data processing support for logistics STAMIS and allow the exchange of data with other information systems.

CTASC-II provides a sheltered environment. It is tactical air transportable and cross country mobile. CTASC-II possesses self-diagnostics built in for operator use. However, contractors provide maintenance beyond the operator level. CTASC-II equipment not supported by the standard Army maintenance and supply system includes the ADP and communications equipment integrated into rigid wall shelters. The system can operate on power from HN commercial sources or from power generators.

MSE and CIPEAC dial-up and/or dedicated packet data distribution circuity provides computer data communications between the CMMC and CONUS and between the CMMC and subordinate units. Based upon availability and priority, the Defense Communications System provides strategic switched communications systems support. When electronic means are not available, ACofS, G6 administrative services branch arranges to have couriers deliver diskette or magnetic tapes between the CMMC and supported activities.

STOCK CONTROL

The CMMC provides centralized management control of selected items. As an exception, the TAMMC manages items included in the selected item management system-expanded. To achieve item compatibility, the CMMC cross-levels resources. To meet urgent demands, the CMMC laterally transfers stocks or directs redistribution of stocks from supply support units with an excess of those stocks.

The CMMC drops supplies from stock record accountability when they are issued from GS level

stocks. It retains visibility as they are issued from DSUs. Stock control for supplies at DS supply level is maintained by the nondivision DSUs and by the DMMC for division DSUs.

REQUISITION FLOW AND SUPPLY DISTRIBUTION

The corps is supported from the COMMZ and CONUS. Except for air eligible items, the GS supply source for the COSCOM is the COMMZ. Surface, SEALOC, and ALOC supply systems support the force. During the transition to war, support operations staff officers need to plan for airlift of items normally shipped by SEALOC. Resupply to designated ALOC units continues from CONUS.

Requisition Flow

Stock replenishment requisitions vary based on anticipated requirements and accumulated demand history. As shown by Figure 3-2, the CMMC receives requisitions from DMMCs, BMMCs, RMMCs, and nondivision DS supply and maintenance units unable to fill requests. The CMMC either fills these requisitions from GS stocks, back orders against stock replenishment, or passes them on to the next higher source of supply.

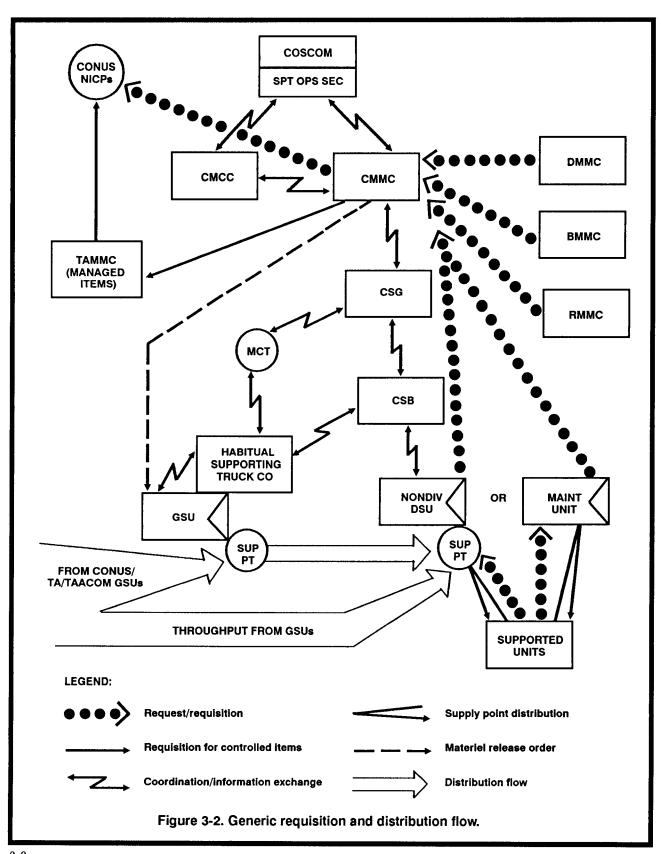
Figure 3-2 depicts a generic requisition and distribution flow. To the maximum extent possible. during peace. the requisition process follows that prescribed for war. Units submit requests to their supporting DS supply units or maintenance units. These units forward unfilled requisitions to the CMMC. The CMMC then follows local procedures to provide the requested item. Chapters 4 through 8 contain illustrations which identify specific source of support and differences in the normal flow.

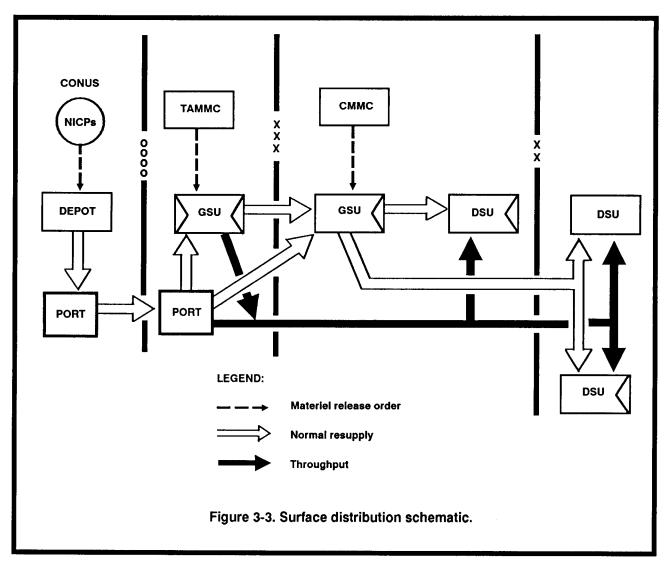
For line items available in COSCOM GSUs. the CMMC prepares an MRO directing the issue. GSUs fill requisitions according to pass-fill logic.

If required items do not exist in COSCOM GSUs, the CMMC transmits the requisition to CONUS NICPs. NICPs ship the items directly to a GSU/DSU or to an ALOC designated DS maintenance unit.

Airdrop resupply requests flow through operational channels for processing on an exception basis. If the CMMC can not fill the request, it transmits the requisition to the TAMMC.

For selected line items managed by the TAMMC, the CMMC transmits requisitions to the TAMMC. TA





GSUs till the requisitions according to pass-fill logic. The TAMMC transmits unfilled requisitions to CONUS NICPs for fill.

Supply Distribution

Supplies are distributed to the corps by means of surface and ALOC shipment.

Surface Shipment. Though urgency of need and aircraft availability may allow for some items to be shipped by air, items within the following classes of supply are normally shipped by surface supply:

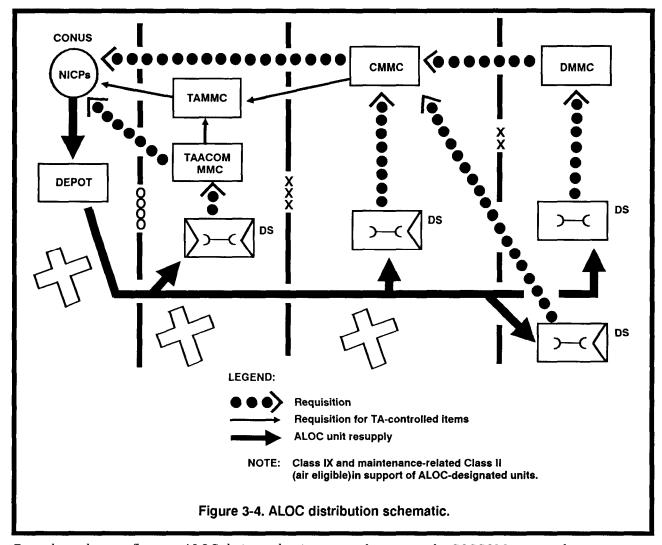
- Class I.
- Nonair-eligible Class II, III, and IV.
- Nonmissile component Class V.

Class VII.

As shown by Figure 3-3, surface supplies flow primarily to TAACOM and TA GSUs. When directed by the TAMMC, they are issued to the corps. Normal surface shipment is from TA GSUs or sea ports to corps GSUs and then from corps GSUs to nondivision or division DSUs.

Throughput of supplies to DSUs and DS maintenance units from seaports is normally restricted to NSL items. However, throughput of ASL items occurs whenever possible.

Air Shipment. Class VIII, IX, and maintenance-related air-eligible Class II items requisitioned by DA-designated ALOC units are trucked from NICP storage depots to a consolidation and containerization point.



From there, they are flown to ALOC designated units. If applicable, these units break the containerized shipments down for ASL replenishment or distribution to their forward elements. Refer to Figure 3-4.

COMMUNICATIONS INTERFACE

The CMMC owns limited organic communications equipment. It depends on the corps signal brigade for external communications services and support. The CMMC needs an AM high frequency AN/GRC 213

radio to enter the COSCOM command operations net.

Except for selected command controlled items retained for intensive management by the TAMMC, the CMMC communicates directly with NICPs. It transmits support requirements through the Defense Automatic Addressing System to CONUS based AMC commodity commands, the Defense Supply Agency, and the General Services Administration.

CORPS MOVEMENT CONTROL CENTER

The CMCC is the movement control organization at corps level. It provides the extensive regulation and coordination with allied forces and civil commerce required to prevent congestion and conflict of movements over LOCs within, into, and out of the corps area. CMCC personnel provide centralized movement management and highway traffic regulation in support of a corps. They determine, coordinate, and analyze transportation movement requirements within the corps area. They coordinate the corps commander's priorities with the TAMCA.

CMCC MISSION

The CMCC provides centralized movement control and highway regulation in support of a corps. The mission of the CMCC (TOE 55604L000) is to –

- Command, supervise, and allocate attached MCTs, MRTs, and ATMCTs within the corps area.
- Provide movement control for moving personnel and materiel within, into, or out of the area of responsibility by tasking transportation units and ensuring timely responsiveness and maximum use of available transport capability.
- Maintain liaison, as required, with transportation elements of other US forces and allied and HN transportation agencies for use of road, rail, airfield, water terminal, and inland waterways.

COSCOM STAFF SUPERVISION

The COSCOM support operations officer exercises staff supervision over the CMCC and COSCOM transportation resources. His transportation support branch chief provides staff supervision, policy, and guidance relating to movement of personnel and cargo by transportation assets available to the COSCOM. In implementing the priorities for routes and movements established by the corps G3, COSCOM transportation support branch personnel perform the following duties –

- Prepare movement management policies for the COSCOM.
- Coordinate with the corps G4's transportation officer on corps transportation priorities, policies, and procedures.
- Provide transportation advice to other COSCOM staff personnel.
- Recommend allocation and retention or use of corps transportation resources for special missions or movement of special weapons.
- Review the transportation aspects of operational and logistics support plans.
- Prepare implementing directives for the CMCC.
- Coordinate with other services and allies on the use of allocated transport assets.

 Coordinate with procurement support branch personnel on the acquisition and use of HN transportation resources.

CMCC ORGANIZATION

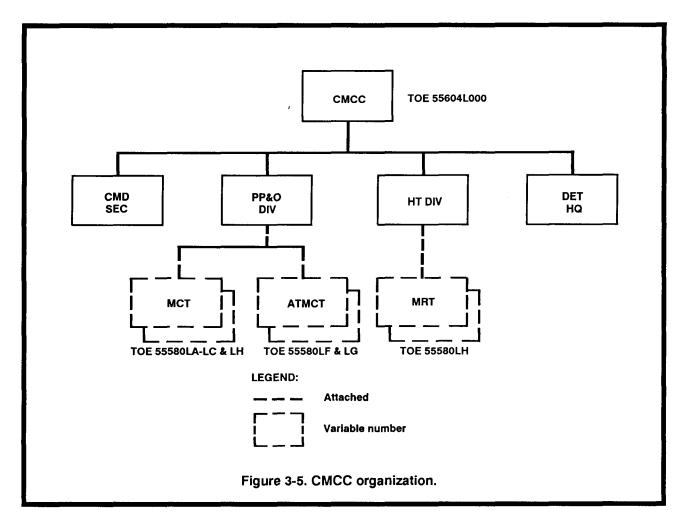
Figure 3-5 depicts the organization of the CMCC. As required, the COSCOM attaches MCTs, MRTs, and ATMCTs. MCTs and ATMCTs function under the operational control of the MCC's Plans, Programs, and Operations Division. MRTs operate under the operational control of the MCC's Highway Traffic Division.

The plans, programs, and operations division develops and implements the corps movement program, based on movement requirements submitted by the COSCOM transportation support branch and corps' major subordinate commands. It coordinates and monitors the status of inbound and outbound movements from the corps rear area. PP&O division personnel receive reports from the DTOs, CSGs, and MCTs. They –

- Plan support for reception and onward movement.
- Perform transportation planning according to priorities established by the corps G3/G4 in coordination with the COSCOM support operations officer.
- Program and commit transportation assets to meet movement requirements according to corps priorities.
- Coordinate transportation support and maintain status of transportation activities throughout the corps.
- Recommend reallocation or relocation of transportation units or assets to meet exceptional movement requirements.
- Maintain liaison with theater, joint, combined, and adjacent corps movement control activities.
- Maintain intransit visibility of shipments and divert, reconsign, or hold cargo in transit.
- Report the status and location of containers to maintain intransit visibility.

The highway traffic division performs highway regulation within the corps area of responsibility. It coordinates movements originating in the corps area which terminate outside the corps with the TAMCA, orther MCC HTDs, DTOs, and the HN. HTD personnel –

iProvide highway regulation planning assistance



to the corps **G4** and CTO to designate MSRs and establish control measures to support the concept of operations.

- Develop highway regulation plans.
- Coordinate unit movement requirements with the corps G3.
- Provide transportation route overlays and traffic circulation plans to support corps OPLANs.
- Coordinate with the corps G2, G3, engineer, PM, and MPs for route classification and selection.
- Coordinate placement of MRTs.
- Collect, process, and distribute information on MSR status.
- Plan, route, schedule, and deconflict traffic according to command priorities.

- Issue movement credits for approved movements.
- Provide instructions for diversion or rerouting based upon the condition of MSRs, enemy activity, or congestion.
- Synchronize large unit movement tables with other movements and maneuvers.
- Coordinate enforcement of highway regulation plans with the PM, MP brigade, and HN.

For more information on each element shown, refer to FMs 55-1 and 55-10 and Chapter 8 of this manual.

MOVEMENT CONTROL TEAMS

As required the COSCOM attaches MCTs to the CMCC to perform movement control functions at key transportation nodes or facilities. MCTs process movement requests and arrange transport for the movement of personnel, equipment, and units. They forward forecasts of shipping requirements to the

CMCC. TOEs 55580LA00 through 55580LH00 describe specific team capabilities.

MCTs deploy throughout the corps area to coordinate, expedite, and execute the corps movement program. They interface directly with the transporter, the shipper, and the receiving unit. They maintain status data on –

- Transportation requirements.
- Asset use capacity.
- Availability of modes of transport.
- Ability of units to ship and receive.
- Route capacity.
- General transportation movements situation in their area.

The CMCC recommends the assignment and location of the MCTs. An MCT (team LC) collocates with each CSG HHC. Other assignment recommendations depend on –

- LOCs.
- Mode operators.
- Supporting and supported units.
- Tactical situation.
- Quantity and location of railheads, terminals, and ports.
- HN transport capabilities.

The units with which MCTs collocate provide food service, supply, maintenance, supplemental transportation, and administration support. They also process administrative actions initiated by the MCT.

MOVEMENT REGULATING TEAMS

As required, the COSCOM attaches MRTs to the CMCC to operate movement regulating points which coordinate movement of authorized traffic. These teams regulate tactical as well as logistics moves, ensuring optimal use of road nets.

One team normally employs at each major point of access or departure along a highway net to enforce the highway regulation plan. They schedule traffic on controlled routes and regulate movements by granting or refusing highway clearances. As necessary, they investigate delays in the movement of personnel and equipment. Team personnel observe, follow, and report on the progress of vehicles along routes. As necessary, they adjust movement schedules and divert cargo. TOE 55588LH00 prescribes team capabilities.

AIR TERMINAL MOVEMENT CONTROL TEAMS

When a major Air Force air terminal sets up in the corps area, the COSCOM can attach an ATMCT (TOE 55580LF00 or 55580LG00) to the CMCC. ATMCTs coordinate the clearance of army cargo and personnel arriving at Air Force and civilian air terminals. They also coordinate the local movement of retrograde cargo and personnel.

Normally ATMCTs report directly to the CMCC. However, in exceptional cases, they coordinate throughput shipments directly with the TAMCA.

AUTOMATION MANAGEMENT INFORMATION SYSTEMS

DAMMS-R automates movements data in a theater of operation. DAMMS-R input data runs on CTASC-II at the CMCC. CTASC-II has the capability to input, format, manipulate, store, edit, and retrieve data from DAMMS-R and interface with other TACCS computers running logistics STAMIS.

COMMUNICATIONS INTERFACE

The CMCC enters the COSCOM command operations net through its authorized single channel long range AN/GRC 193. Its AN/VRC-89 radio enables the CMCC to enter the COSCOM rear operations net.

The CMCC uses the MSE area communication system for voice and data transfer between the CMCC, TAMCA, HNs, and supporting and supported units.

CHAPTER 4

Sustaining the Soldier

No matter how much fuel and munitions COSCOM units push to the front each day or how awesome and lethal weapon systems become, it is our soldiers who tight battles. Soldiers need rations, water, clothing, individual equipment, protective gear and shelter. Construction, barrier, and fortification materials enhance soldier survivability and provide protection against enemy advances and enemy fires.

The health, morale, welfare, and combat capability of our soldiers are also affected by the provision of health and comfort items, field services, and health services. How well our soldiers are cared for influences their will to continue fighting.

Whenever possible, secondary field services, such as bath, laundry, and textile renovation, should be provided by the HN or through local contractors. Procurement support branch personnel plan and coordinate the use of HN or contracted supplies and services to reduce dependence on CONUS-based resupply operations and requirements for US field services support elements.

This chapter does not cover personnel functions. Strength management, reception and replacement operations, postal operations, and MWR support are provided by units assigned to the corps personnel group. For doctrine on personnel functions, refer to FM 12-6.

This chapter also does not cover finance support operations provided by finance support commands assigned to the corps finance group. For doctrine on finance support, refer to FM 14-7.

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SOLDIER SUPPLY SUPPORT

The COSCOM support operations officer is responsible for the COSCOM's supply support of corps soldiers. He uses the COSCOM supply support structure to ensure that corps soldiers are provided rations, water, and clothing and individual equipment, as well as personal welfare and comfort items. He accomplishes this through his troop support branch and his supply management element, the CMMC.

CSS PLANS BRANCH

CSS plans branch personnel, assigned to the COSCOM

support operations section, develop estimates and plans to support corps soldiers with rations, water, and health and comfort items. They also prepare plans to support soldiers with clothing, OCIE, protective MOPP gear, and shelter. They coordinate with and provide input to staff officers assigned to the COSCOM ACofS, G3's force design/plans branch, They recommend changes to the troop list based on requirements and DS/GS supply unit capabilities as well as requirements for additional water support in arid environments.

TROOP SUPPORT BRANCH

Troop support branch supply personnel, assigned to the support operations section, develop policies and programs for the external supply support provided by COSCOM units. They provide technical staff assistance to supply staff in subordinate CSGs. They coordinate supply support operations of the COSCOM with the coordinating general and special staffs of the COSCOM.

Troop support branch supply personnel develop and maintain estimates, analyses, and summaries of requirements for support plans. They recommend allocations, supply levels, and priorities for COSCOM units engaged in supply support functions. To do so, they continually coordinate external supply support plans, policies, and priorities for support with personnel assigned to the other branches under the support operations section as well as with the staff in the ACofS, G3 plans and operations branches. For example, they coordinate transportation requirements with transportation support branch personnel. They coordinate supply unit locations and movements with ACofS, G3 plans and operations staff.

During the alert phase, troop support branch supply personnel review force requirements and consumption data for the AO. They perform the tasks listed on Table 4-1 in preparation for deployment and staging. They use CSSCS reports to continually assess the capabilities and limitations of subordinate supply activities. CSSCS helps them determine the impact of projected activities on those support capabilities. As required, they recommend elements to accompany corps forces operating out of sector or supporting allies or a sister Service.

PROCUREMENT SUPPORT BRANCH

Procurement support branch personnel, assigned to the COSCOM support operations section, plan and

coordinate the use of local resources to reduce dependence on CONUS-based resupply. They coordinate with CSG contracting personnel and with CA units on acquisition of HNS or contracted supplies. They validate that the items of supply are authorized to be obtained by contract.

Procurement support branch personnel obtain the following assistance from CA units:

- Area studies on possible areas of deployment.
- Data on locally available supplies.
- Contingency contracting kit materials (maps, telephone books).
- Recommendations from State Department Foreign Service personnel.
- Information on existing LOGCAP and HNS agreements for the AO.
- Access to the civilian and HN agencies.
- Translators.

Primary local supply requirements include fresh fruit, vegetables, and ice. Troop support branch personnel coordinate for mandatory veterinary inspections of these items.

LOGISTICS PREPARATION OF THE BATTLEFIELD

Advanced planning, based upon preplanned and updated intelligence data for contingency areas, is crucial for troop support. Identifying essential intelligence requirements improves planning. Troop support branch personnel make their priority intelligence requirements known to ACofS, G2 and G3 staff. They use the IPB products described in FM 34-130 as a source of planning data. IPB products aid them in anticipating requirements and developing plans on how to provide and protect troop support for a proposed operation.

SUBSISTENCE SUPPORT

CMMC SUBSISTENCE BRANCH

The subsistence branch of the CMMC's troop support materiel division manages subsistence items ranging from operational rations to refrigerated items. The branch implements the policies and plans of the COSCOM support operations officer/troop support branch chief. Branch personnel –

Keep the troop support branch subsistence officer

informed of trends and probable impacts.

- Analyze subsistence supply operations in the corps.
- Recommend changes in subsistence supply support to the COSCOM troop support branch chief.
- Forecast Class I requirements.
- Maintain visibility of subsistence the corps area.

Table 4-1. Troop support branch supply personnel deployment planning.

PREDEPLOYMENT

- Review plans to ensure that they are adequate to support the operation and revise plans and procedures for Class I, II, IV and water.
- Update the Class I, II, VI, and water supply portions of contingency OPLANs and OPORDs in coordination with ACofS, G3 force design/plans branch staff and corps G4 staff officers.
- Update the materiel and services portion of corps service support plans and orders.
- Assess the current capabilities of DS/GS supply and water units on the COSCOM troop list.
- Determine organizational requirements for DS/GS supply units, based upon the requirements of the task force.
- Determine water support requirements, based on the operational environment.
- Propose the mission assignments of DS/GS supply units and recommend priorities for deployment.
- Establish Class I, II, VI, and water supply levels based on directives from corps G4 staff.
- Determine storage requirements (space and types of facilities) for Class I, II, VI, and water.
- Coordinate with ACofS, G4 staff on real estate and facility requirements of COSCOM DS/GS supply units.
- Develop criteria for determining Class I, II, VI, and water requirements and consumption factors.
- Estimate Class I, II, VI, and water supply requirements for the task force.
- Develop policies, plans, and criteria for scheduled or automatic resupply of Class I and water, to include airdrop resupply.
- Develop criteria and processing procedures for emergency requisitions for Class I and water, to include airdrop resupply.
- Coordinate throughput distribution policies for Class I and water with transportation support branch staff and with appropriate coordinating staff sections of the TAMMC, TA HQ, and NICPs.
- Develop procedures in conjunction with procurement support branch personnel for obtaining supplemental Class I items and health and comfort items through local procurement.
- Develop policies and plans for the evacuation of Class I stocks.
- Establish trash disposal procedures for field feeding operations.

DEPLOYMENT

• Develop the troop basis and recommend modifications to MTOEs of DS/GS supply units and water units.

Table 4-1. Troop support branch supply personnel deployment planning. (cont)

- Establish a deployment activity address directory for deploying DS/GS supply units and water units.
- Provide AMC and the LCA with the activity address codes of deploying DS/GS supply units and water units.
- Establish continuous liaison with AMC for the preparation, development, and movement of preplanned Class I, II, and VI supply requirements.
- Coordinate the transfer of supply support of those DS/GS supply units and water units not included in the initial deployment.

STAGING

- Identify corps G4 staff counterparts.
- Coordinate with COSCOM ACofS, G5 section staff in establishing relations with the local US State Department office and HN officials relative to local procurement of bread, Class I supplements, health and comfort items, and Class II organizational items.
- Monitor the movement of DS/GS supply units and water units into the AO.
- Coordinate receipt and off-loading of incoming Class I, II, and VI supplies with transportation support branch personnel.
- Balance Class I, II, and VI stocks among DS/GS supply units in consonance with requirements of the tactical situation.
- Coordinate with preventive medicine personnel to approve water and ice sources.
- Coordinate with COSCOM maintenance support branch staff to ensure timely availability of repair parts, components, and assemblies for field feeding facilities, bakeries, and ROWPUs.
- Establish trash disposal procedures.
- Direct the storage and distribution of subsistence.
- Review and analyze demands.
- Process Class I requisitions from the DMMCs and nondivision DS supply units.
- Coordinate with veterinary personnel for the inspection and certification of subsistence items.
- Direct the GS supply company to ship subsistence items.
- Monitor bakery production in coordination with the GS supply company's bakery team.

- Transmit replenishment requisitions for subsistence items to NICPs for resupply from CONUS.
- Manage hospital rations.
- Manage ration supplement sundries packs.

SUPPORT REQUIREMENTS

Strength reports serve as the basis for computing requirements for Class I and VI supplies. Initial stockage of subsistence items depends on authorized strengths, mission requirements, and deployment schedule. As the theater stabilizes, strength reports submitted by units serve as the basis for requisitioning subsistence.

The CMMC subsistence branch computes requirements for Class I and VI based on strength reports, demand history, and anticipated mission requirements.

The subsistence officer and subsistence NCO assigned to the COSCOM's troop support branch use SIDPERS reports reflecting actual troop strength to help determine support requirements. However, SIDPERS reports do not include allied, HNS, or EPW feeding requirements. Stockage plans should allow for surges in the number of soldiers to be supported. The CMMC subsistence branch adjusts stockage at Class I points to reflect actual subsisted strength.

Subsistence support requirements are also affected by the field feeding standard and ration cycle announced in the corps service support plan or order. Subsistence stockage at Class I points are affected if units in the corps rear area transition to A or B Rations earlier than indicated in the feeding plan. Stockage would also be affected by having corps units continue on A and B Rations to conserve operational ration stocks.

FEEDING POLICY

The feeding policy is three quality meals per day. To support this feeding policy, field commanders select from individual and group rations. FM 10-23 describes ration types.

Commanders structure their field feeding plan to fit the following tactical and logistical situations:

- MREs should be used during intense levels of combat or when unit activity precludes the use of prepared group rations. For example, soldiers in fighting positions; conducting attacks, raids, or ambushes; or dispersed at remote sites would use MREs. Army policy limits the use of MREs to no more than 10 consecutive days.
- T/B/A group meals are used in more stable or uncontested regions on the battlefield. Their use depends on the tactical situation and storage and handling capabilities. For example, –
- Semiperishable B Ration components enhance T Ration menus. Standard B Ration meals can be served when operations permit extensive preparation by cooks.
- Medical B Ration unique items, identified in SB 10-495-1, support patient feeding requirements.
 Special planning and requisitioning must occur for patient feeding with hospital B Ration items

- and the liquid B Ration. Hospitalized patients require three hot medical B Ration meals and a night meal daily. MREs are not authorized for patient feeding, **except** in emergency situations.
- Perishable A Ration items require food preparation personnel and equipment plus refrigeration support.

Plastic trash bags are provided with T Ration components to assist in disposal of empty tray pack containers and associated trash. They need to be procured through supply channels when the situation allows for preparation and feeding of A or B Ration meals.

COSCOM SUBSISTENCE ORGANIZATION

Subordinate COSCOM elements which provide Class I supplies include the –

- Quartermaster Supply Company DS (TOE 42447L000). This company can provide nearly 40 STONs of Class I stocks each day. As applicable, it provides augmenting or reinforcing support to FSB/MSB Class I points to enable them to provide support to corps forces in the brigade or division area.
- Quartermaster Supply Company GS (TOE 42418L00). This company can receive, store, and issue 117 STONs of Class I stocks per day.
- GS Supply Company Bakery Team (TOE 42518LA00). This team can bake 8,208 pounds of bread per day.
- GS Supply Company Perishable Subsistence Platoon (TOE 42518LB00). This platoon can receive and issue 128 STONs of perishable Class I per day in support of up to 55,000 troops. It can store approximately 235 STONs of perishable products in walk-in reefers to support local procurement of perishable subsistence.

CLASS I DISTRIBUTION SYSTEM

During the initial stages of conflict, the CMMC computes the types and amounts of rations to be shipped and pushes rations forward to deployed units. The CMCC forecasts Class I movement requirements as input to the movement program.

The quantity shipped depends on anticipated troop strength, unit locations, type of operations, and field feeding capabilities. Based upon the theater command policy and authorized strength figures provided by the division and corps Gl, the CMMC directs GS supply companies to "push" Class I supplies to Class I points. While the push system ensures that rations are available in the AO, rations may not be in the right supply point in sufficient quantity to support units. Units have limited control on the types of rations they receive.

Once the theater or AO stabilizes, the CMMC implements a "pull" or request system. As shown by Figure 4-1, field kitchens submit requests to their supporting Class I supply point. Class I supply points consolidate these requests and submit a requisition to the Class I section of the appropriate MMC. The DMMC and separate brigade and regiment MMCs transmit consolidated requisitions to the CMMC. In the corps rear area, Class I points consolidate requests from nondivision units and submit requisitions to the CMMC. While the pull system is more responsive to user requests, it requires longer ordering lead times than the push system.

The CMMC converts personnel strength data to meal quantities for each type of standard meal ration. This is based on the current field feeding ration mix or the tactical commander's instruction. The CMMC's subsistence branch cuts an MRO directing the issue from the general supply company Class I point to the nondivision DS supply company Class I point. The CMMC's subsistence branch transmits a requisition to the TAMMC for replenishment and for items not available in the corps.

Corps transportation assets deliver Class I supplies to nondivision DS supply company Class I points and to the MSB's S&S company's Class I point. Class I is normally provided by supply point distribution. Class I supply point personnel transmit issue data to their supporting MMC for posting to accountable records.

NBC CONSIDERATIONS

Packaging and coverings provide some protection and reduce contamination from liquid agents and radioactive fallout. Storing subsistence items in warehouses, buildings, and basements provides additional protection,

Rations must not be prepared or consumed when NBC contamination is present. Veterinary service teams inspect subsistence exposed to contamination. FMs 3-5 and 8-505 describe decontamination methods for subsistence. Units withdraw from the contaminated area before decontaminating rations and equipment and preparing meals.

BREAD PRODUCTS

Bread products form an essential component of T/B/A ration meals. Pouch bread serves as the initial source of bread on the battlefield. Shelf-stable pouch bread supplements all types of rations. As soon as the situation permits, fresh bread should be obtained from field bakeries, HNS, AAFES, or contracted commercial sources.

MILK

As soon as possible, food service elements should provide milk. Although a component of the T Ration meal, milk is provided separately – either as dry milk, ultrahigh temperature milk, or fresh milk.

PERISHABLE SUBSISTENCE

The GS supply company's perishable subsistence platoon (TOE 42518LB00) provides perishable subsistence A Ration support to the corps. In the LID, this platoon augments the HSC company in the DSA when meals other than MREs and T Rations are introduced.

ICE

The COSCOM needs to procure ice prior to introduction of A Ration feeding and to cool beverages in warm environments. Sources include HNS, Logistics Civil Augmentation Program, or locally designated commercial sources. Veterinary personnel ensure that ice is safe for consumption.

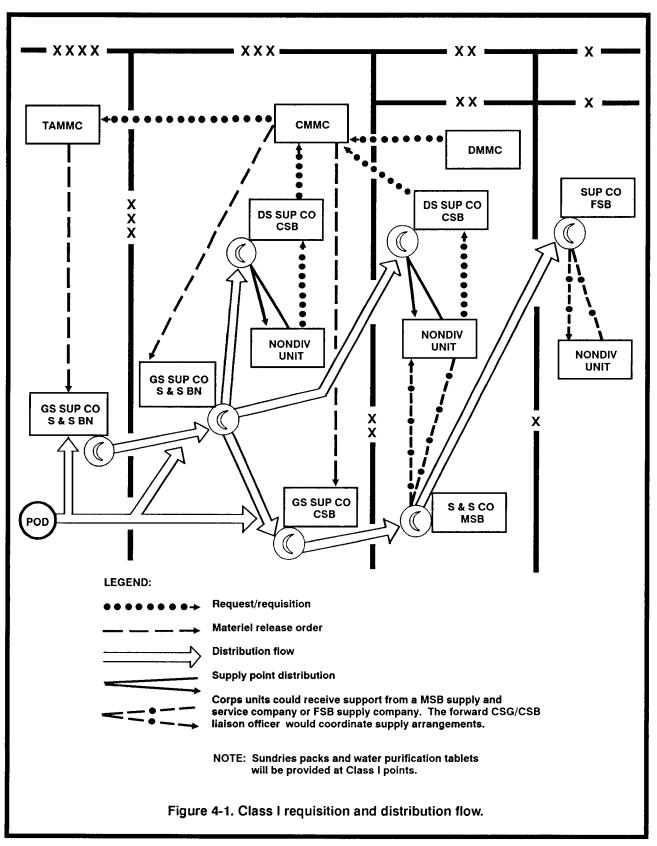
RATION SUPPLEMENT SUNDRIES PACKS

Ration supplement sundries packs contain Class VI personal hygiene and comfort items. They include candy, gum, stationery, soap, dental care products, and other items authorized by AR 700-23. A separate sundries pack exists for female soldiers.

Initially, soldiers carry personal hygiene and comfort items into the theater with them. As the supply system adjusts to demands, Class I points issue sundry packs with Class I items. Once the tactical situation stabilizes, soldiers may purchase personal demand items from mobile exchange sales teams. The COSCOM ACofS, G5 arranges for personal demand items through HN or contractor support. Command channels approve special requirements for sundries packs.

HUMANITARIAN SUPPORT

The subsistence officer assigned to the COSCOM's troop support branch needs to plan for subsistence and personal hygiene and comfort items to support



humanitarian actions. His estimates and recommendations for support should include geriatrics support as well as refugee support.

PRISONER OF WAR SUPPORT

Support for PWs occurs at EAC. In the corps area, support for PWs consist principally of food and water. Depending upon time and distance to PW camps, the troop support branch subsistence officer may need to plan for initial subsistence for PWs. Corps G2 staff officers provide estimates. If available, captured subsistence may be used to feed PWs.

CSSCS CLASS I, VI, AND WATER REPORTS

Class I, VI, and water asset data are collected manually from all Class I points and water points. CSSCS software provides status data on Class I, VI and water assets located within the corps area. The system also provides asset data both in terms of quantities available and days of supply.

COSCOM troop support branch supply personnel use CSSCS Class I, VI, and water capability and asset displays to monitor current and projected asset availability for the force. They monitor ration and water distribution quantities and schedules. They recommend changes to subordinate CSG customer lists to agree with changing priorities and tactical situations.

COSCOM troop support branch supply personnel use CSSCS capability reports on Class I, VI, and water to assess the need for extra transportation support. They then coordinate this requirement with the COSCOM's transportation support branch staff.

Subordinate CSG support operations staff officers use CSSCS asset displays to analyze unique situations at a particular Class I or water supply point or support area. For example, CSG supply and field service staff officers use the display to anticipate a shortage of Class I items and coordinate with the HN to augment support.

WATER SUPPORT

The COSCOM provides potable water throughout the corps on a demand basis. Water supply to non-division units in the corps area occurs on an area basis. Where circumstances permit, engineer utilities teams arrange for water to support units operating in freed facilities. Water sources must be approved by preventive medicine personnel.

COSCOM TROOP SUPPORT BRANCH

COSCOM troop support branch personnel plan water support for operations in arid environments. The water treatment NCO provides technical expertise on water quality control and treatment standards. Plans need to cover the following elements:

- Mission, size, and composition of the force to be supported.
- Amount and type of water required.
- Seasonal impacts.
- Storage and water distribution points.
- Distribution system or transportation mode.
- Water equipment required to support the operation.
- Organizations and personnel required to operate the water distribution system.

- Availability and capability of subordinate DS supply units or water units to provide the required support.
- Number and location of distribution points.
- Type of terrain and distance between units.
- Controls required in regions where water is a critical commodity.

CMMC PETROLEUM/WATER DIVSION

The CMMC's petroleum/water division provides centralized supply management, supply data, and information on COSCOM water supply support operations. This division's personnel perform the following functions

- Keep the troop support branch chief informed of water supply status data.
- Monitor water allocations and corps priorities for water resources.
- Ensure that maneuver units maintain adequate stocks to meet requirements.
- Divert water stocks as necessary.
- Direct water shipments using plans for specific operations.
- Provide data and other assistance to support operations planning.

Coordinate with preventive medicine teams on water quality matters.

Direct the movement of water forward to meet unexpected requirements.

WATER SUPPORT REQUIREMENTS

The type of warfare, type of battlefield (nuclear environment and requirement for MOPP gear), and type of environment affect water requirements. Factors which also affect water support requirements include –

- Troop density and personal hygiene requirements.
- Command policy on type of ration provided.
- Command policy on frequency of showers and laundry support.
- Requirements for chemical decontamination.
- Engineer construction requirements.
- Mortuary affairs support.

FM 10-52 provides water consumption planning factors. These factors need to be adjusted based on data reported from water supply point production and distribution summary reports.

WATER SUPPORT ORGANIZATION

Figure 4-2 depicts the water support organization for arid regions.

DS supply companies (TOE 42447L000). These companies provide water support on an area basis. Their organic water supply section provides water purification and storage at water supply points using approved water sources. Section water purification specialists use organic equipment to pump, demineralize, purify, store, and test water. Whenever possible, the water supply point collocates with a Class I supply point. As required, the DS supply company attached to the CSB in the division area provides reinforcing support to FSBs/MSB to enable them to support corps forces in the brigade or division area.

Water supply companies (TOE 10468L000). These companies can establish and operate two tactical water distribution systems and up to eight DS issue points. FM 10-115 describes the mission of water supply companies. Water supply companies maintain adequate capabilities for water treatment on temperate,

conventional battlefields. However, additional corps water purification capacity is required to provide for greatly increased requirements in hot, arid theaters and on integrated battlefields.

Corps water supply units produce a significant drain on transportation distribution capability. Water support teams can be attached to this company to provide additional bulk distribution capabilities.

ENGINEER SUPPORT

Engineer organizations identify surface water sources, drill wells, and perform water point construction support. Construction and maintenance encompass rigid water storage tanks, pipelines, and water utilities at fixed installations. COSCOM troop support branch personnel coordinate with COSCOM engineer staff on requirements for developing water sites, site access, and other construction support requirements.

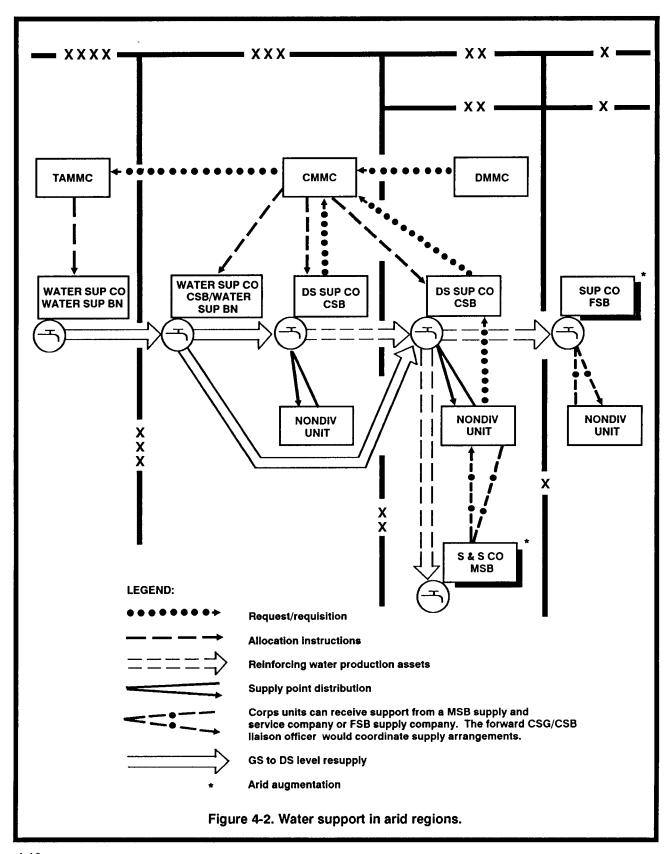
PREVENTIVE MEDICINE SUPPORT

Preventive medicine organizations approve water sources and provide routine surveillance to ensure that water quality meets appropriate standards. Water purification equipment operators analyze both untreated and treated water to ensure that purification equipment is operating properly. They also verify that water is being adequately treated.

NBC CONCERNS

Requirements for nonpotable water increase with requirements to decontaminate personnel and equipment. Water quality surveillance equipment detects chemical and radiological contaminants. Water purification equipment removes or destroys chemical, radiological, and biological contaminants. FM 10-52 describes contamination detection and treatment procedures. FM 3-5 describes water decontamination methods. However, water decontamination should be undertaken only by trained water purification personnel.

Water transport and distribution equipment prevents incidental contamination of potable water. Commanders ensure that units protect water from accidental or deliberate contamination and that sufficient potable water is available to prevent dehydration. A forced drinking policy can help prevent dehydration and heat casualties which result from wearing MOPP 4 gear.



CLOTHING AND OTHER CLASS II SUPPORT

Soldiers require clothing and MOPP gear as well as individual equipment and tentage. OCIE items are also required for RTD personnel, medical patients, contractors, reporters, essential civilians, NEO family members, local nationals, and EPWs.

The supply and service officer assigned to the COS-COM troop support branch develops policies and procedures for Class II support.

CMMC DEFENSE PERSONNEL SUPPLY BRANCH

The defense personnel supply branch, assigned to the CMMC's troop support materiel division, manages requirements for ,Class II (except maintenance related) supplies. This includes, but is not limited, to clothing, individual equipment, tents, and tarpaulins and associated textile fabrics. The branch implements the policies and plans of the COSCOM support operations officer/troop support branch chief. Branch personnel perform the following tasks:

- Review and analyze demands for Class II items.
- Prepare and maintain a list of command controlled and regulated Class II items.
- Implement policies outlined in AR 710-2 for operation of the stock record account.
- Ensure correct use of issue priority designators.
- Ensure that the quantity requested does not exceed authorized allowances.
- Forward validated requisitions to the CMMC input/output branch for preparation of shipping directives.
- Transmit requisitions to the appropriate NICP or the TAMMC.
- Direct the storage and distribution of Class II supplies.

CMMC GENERAL SERVICES SUPPLY BRANCH

The general services supply branch of the CMMC's troop support materiel division manages GSA materiel. Hand tools, office furniture, kitchen utensils and tableware, office supplies and machines, and personal toiletry products are examples of the supplies and equipment managed by this branch. The branch implements the policies and plans of the COSCOM support

operations officer/troop support branch chief. Branch personnel –

- Review and analyze demands.
- Establish and review ROs based on past demand experience and anticipated requirements.
- Implement policies outlined in AR 710-2 for operation of the stock record account.
- Monitor ASL zero balance lines with dues out.
- Identify items requiring intensive management.
- Take action to satisfy dues out.
- Establish procedures for processing off-line requisitions.
- Direct the storage and distribution of GSA materiel.

INITIAL CLASS II ALLOWANCES

The mobilization column of CTA 50-900 lists clothing allowances for contingency plans and mobilization. The task force commander or contingency force commander designates which items soldiers wear or carry and which are transported. This impacts on load plans.

CTA 50-970 lists initial stockage levels and initial expendable and durable items. Replenishment is based on demands and anticipated requirements.

CLASS II SUPPORT ORGANIZATION

COSCOM units which provide Class II supplies include the –

- DS supply company (TOE 42447L000). This company can provide 33.95 STONs of Class II items per day in support of 18,500 nondivision soldiers.
- GS supply company (TOE 42418L000). This company can provide 101 STONs of general supplies.

CLASS II REQUISITION AND DISTRIBUTION FLOW

DMMC and nondivision DS supply units transmit requisitions for personnel support items to the CMMC. As applicable, the CMMC's defense personnel supply branch and general services supply branch validate the requisitions. The CMMC transmits MROs to the general supply company for issue.

The general supply company issues the supplies to the DS supply company Class II point and sends activity summaries to the CMMC. CMMC Class II managers, the COSCOM transportation support branch, and the supporting transportation activity coordinate delivery.

When required Class II supplies are not available at the general supply company, the CMMC transmits requisitions to the NICP. When Class II items are controlled, the CMMC transmits requisitions to the TAMMC.

NBC CONSIDERATIONS

NBC protective clothing and equipment may be in critical demand. DS supply companies can expedite their issue through the use of preconfigured push packages.

FM 3-5 describes decontamination methods for removing NBC agents from clothing and textile items.

CSSCS CLASS II REPORTS

CSSCS software displays the status of Class II assets on the CSSCS tracked items list. Data from DS/GS Class II supply points enters CSSCS through its interface with SARSS-1.

COSCOM troop support branch supply personnel use CSSCS Class II asset status displays to assess the current and projected availability of Class II assets for the force. They use CSSCS reports to assess the capability of DS and GS supply units to support changes in tactical operations. CSSCS data enables them to plan for shifts in Class II requirements in offensive versus defensive operations.

Subordinate CSG support operations staff officers use CSSCS asset data to assess unique situations at subordinate Class II points. CSSCS Class II asset data enables them to assess storage and distribution requirements and evaluate those requirements against DS/GS supply unit capabilities.

UNCLASSIFIED MAP SUPPLY, REQUESTS, AND DISTRIBUTION

The COSCOM troop support branch supply and service officer sets map stockage policy and determines reserve stockage requirements. Requirements planning should follow AR 115-11, as supplemented by MACOMs or theater commanders.

BMMCs and DMMCs consolidate requests and transmit unclassified map requirements to the CMMC. Nondivision units order unclassified maps through their supporting DS supply company. Since DS supply companies maintain only limited quantities of currently used

unclassified maps, map requirements are transmitted to the CMMC.

The CMMC computes map requirements for the corps. It maintains stock status and asset visibility data on map products. Where no TAMMC exists, the CMMC coordinates issue of maps to units entering the theater without their basic load of maps. It preapproves requests for issue or replenishment stocks.

The COSCOM's general supply company's map storage site receives, stores, and maintains map and map products as well as corps reserve map stocks. This map storage site or DMA depot maintains "go to war" surge stocks. Upon receipt of MROs, map storage site personnel pull and prepare unclassified maps for shipment.

Corps transportation assets deliver maps to the DS supply company Class II, IV VII point. Maps are distributed by supply point distribution. Using units pickup maps at their supporting Class II, IV, VII point. Depending upon priority, maps can be pushed forward directly to the customer.

If maps are not available in the general supply company's map storage site, the CMMC requisitions maps through the TAMMC from the theater map depot or from DMA map storage sites in theater or CONUS. DMA ships map stock to the theater map depot operated by a TAACOM map supply detachment.

SPECIAL MAP PRODUCTS

Special map products satisfy specific command requests and do not normally enter the supply system. S2/G2 section staff officers validate requirements for special maps products, to include –

- Map overlays.
- Photo maps.
- Terrain related products.
- Small quantity quick response overprinting.
- Printing for support of a planned operation.

Requests for these products are sent through engineer channels to an engineer topographic unit. They are either hand carried to the requestor or picked up by the requestor.

CLASSIFIED MAP PRODUCTS

Classified map products are requisitioned through command channels on an exception basis. Intelligence officers prepare the classified map requirements appendix to OPLANs. OPSEC appendixes specify classified map product requisitioning procedures, destruction, and authorized disposal.

Maps ordered in advance of operations or ordered for operational planning are handled as classified documents. Map stockage needs to cover requirements for initial operational force deployment/employment and supported operations for a defined period of time during war, mobilization, or other crisis situations. The COSCOM support operations officer projects requirements to cover geographic areas where corps operations are likely.

Intelligence staff officers determine or verify classified map requirements in coordination with S3 operations staff prior to submission by S4s. S2/G2 section staff officers validate requests submitted to the CMMC for classified map products maintained at the GS level map storage site.

In accordance with AR 380-5 and OPSEC appendixes, classified map products are distributed to the requestor, not to the DS supply company. DSUs do not receive, store, or distribute classified map products.

BARRIER, FORTIFICATION, AND CONSTRUCTION MATERIALS SUPPORT

Barrier and fortification materials enhance soldier survivability, counter enemy advances, and provide protection against enemy fires.

PROTECTIVE POSITIONS, SHELTERS, AND FORTIFICATIONS

All units require some Class IV barrier and fortification materials to prepare individual and crew fighting and protective positions as well as field fortifications and perimeter defense.

Engineers require Class IV barrier and construction materials to prepare protective positions or protective shelters beyond the capabilities of supported maneuver elements. Engineers construct protective positions for –

- Artillery and air defense unit emplacements.
- Antitank guided missile systems and armored vehicles.
- Critical command and control facilities.
- Critical logistics facilities.

Engineers also require barrier materials to build dummy defensive or attack positions and emplace dummy minefield and weapon positions. More complex deception requires the use of prefabricated deception devices used in constructing dummy tank farms, supply points, or marshaling areas.

CONSTRUCTION AND BRIDGING MATERIALS

Existing road networks are rarely adequate for the heavy traffic associated with movement and support of corps forces. Rather than construct new roads, corps engineers upgrade or maintain existing roads. New construction is often limited to short access roads to

assembly areas and bypasses around obstacles. To support this, the COSCOM prepositions Class IV construction materials as far forward as the tactical situation allows.

Engineers also require Class IV construction materials for expedient construction of airstrips, landing zones, and forward arming and refueling points in support of forward aviation. Corps engineers focus on repairing extensive damage to critical airfields.

For deliberate crossings, engineers require Class IV construction and bridging materials to assemble rafts or bridges. While division engineers normally accompany assault forces across the river, corps engineers construct or repair approach and egress sites and build bridges for use by follow-on support forces.

Corps G3 plans and operations staff officers keep COSCOM troop support branch staff informed of breaching, bridging, barrier, or base development construction requirements which significantly change Class IV requirements estimates. The branch chief passes these requirements on to the CMMC commodity managers for Class IV material.

CLASS IV SUPPORT ORGANIZATION

The COSCOM's Class IV support organization consists of:

- DS Supply Companies (TOE 42447L000).
 These companies can receive, store, and issue 29.65 STONs of Class IV items per day to non-division units in their area of responsibility.
- A General Supply Company (TOE 42418L000).
 This company can receive, store, and issue

212 STONs of bridging equipment and fortification and construction supplies daily.

CLASS IV REQUEST AND DISTRIBUTION FLOW

The request flow depends on whether Class IV supplies are controlled or noncontrolled. Whenever possible, corps trucks deliver barrier materials to the emplacement site.

Controlled Class IV Supplies

Heavy tonnage Class IV supplies critical to base development or tactical operations may be command controlled. Units submit requests for controlled Class IV supplies through command channels. As early as possible, corps engineer units in the division sector need to make their requirements known to the COSCOM/CSG LO at the DISCOM or the CSB LO at the FSBs. The LO directs their proper disposition and assists as necessary.

Following command release approval, the COSCOM support operations officer/troop support branch chief directs the CMMC to release the supplies. The CMMC forwards an MRO to the GS supply company directing the issue. The CMMC also coordinates with the CMCC for throughput to engineer sites or for movement to forward supply points in the corps or division area. The GS supply company coordinates with the area MCT to obtain transportation support.

If controlled Class IV supplies are not on hand, the CMMC sends the requisition to the TAMMC. When supplies are on hand in a TAACOM subordinate GS supply company, the TAMMC directs their issue upon command approval. When supplies are not on hand, the TAMMC transmits the requisition to the appropriate CONUS NICP.

Noncontrolled Class IV Supplies

Units submit requests for noncontrolled Class IV supplies to their supporting DS supply company's Class II, packaged III, IV, and VII supply point. If the supplies are on hand, the supply point issues the supplies and notifies the CMMC of the issue through its SARSS-1 interface with the CMMC's SARSS 2A/2B.

If noncontrolled Class IV supplies are not on hand, the DS supply company transmits a requisition to the CMMC. If the supplies are available in the corps rear area, the CMMC cuts an MRO directing its issue. The CMMC coordinates with the CMCC for movement of

supplies to forward supply points. If the supplies are not available, the CMMC transmits the requisition to the appropriate CONUS NICP.

LOCAL PURCHASE

To minimize requirements placed on supply LOCs, the bulk of barrier material should be purchased locally. The COSCOM's procurement support branch personnel coordinate purchase requirements with CA elements. CA personnel assist subordinate CSG contracting personnel with the local procurement of Class IV construction supplies.

NBC CONSIDERATIONS

Warnings of impending nuclear strikes increase requirements to shield fortifications. However, the COSCOM's CSGs send construction and barrier materials forward only in support of specific plans or requirements.

CSSCS CLASS IV REPORTS

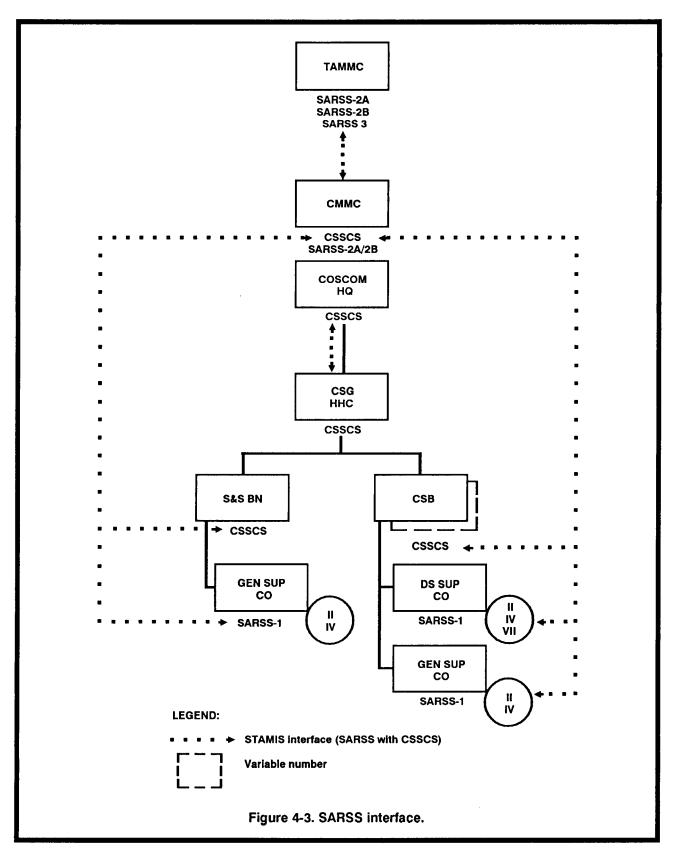
CSSCS software tracks Class IV assets which appear on the CSSCS tracked items list. It distinguishes between assets located in Class IV supply points and assets in individual units.

The interface between SARSS-1 and CSSCS enables supply points to report on Class IV assets in the supply points. Battalion and separate companies within the corps area manually enter data on a Class IV data collection form.

COSCOM troop support branch personnel assess the current and projected availability of Class IV assets for the force. They use Class IV asset display data to assess storage and distribution requirements. They use CSSCS to display the unique Class IV status of an individual unit or supply point. CSSCS reports help them plan for shifts in Class IV usage in support of offensive versus defensive operations.

SARSS STOCK STATUS REPORTS

Figure 4-3 depicts the interface between SARSS-1 at the supply units and SARSS-2A/2B at the CMMC. Subordinate DS and GS supply units transmit SARSS-1 stock status reports on Class IV stocks to the CMMC. As a backup to this electronic data network, couriers carry floppy disks of SARSS-1 unfilled supply requisitions to the CMMC. CMMC commodity managers use SARSS-2A/2B to aid them in controlling critical stocks, performing lateral issues, and computing requirements.



SOLDIER FIELD SERVICES SUPPORT

Soldier field services are divided into primary and secondary services. On an austere battlefield, the COSCOM may provide only mortuary affairs support. When the situation stabilizes, it provides the secondary services (CEB, laundry, and renovation). If possible, these secondary field services are provided by the HN or through local procurement. Otherwise, US or allied military services may be used. The necessity of these services to soldier welfare and morale is such that they should be provided even if HN sources are not available.

CSS PLANS BRANCH

CSS plans branch personnel, assigned to the COSCOM's support operations section, develop plans for providing field services support to all corps soldiers. The supply and service officer recommends allocations and priorities for COSCOM units engaged in field services functions. Appropriate plans branch personnel develop personnel and equipment requirements data and recommend changes to the troop basis and modification of field services unit MTOEs to the ACofS, G3's force design/plans branch.

TROOP SUPPORT BRANCH

Troop support branch field services personnel, assigned to the COSCOM's support operations section, recommend priorities of field services support. They coordinate field services support planning and policies with staff in the other support branches under the support operations section.

Troop Support Branch Chief

The troop support branch chief exercises staff supervision over field services support. He coordinates the development of policies, plans, and programs for field services support provided by COSCOM units, to include mortuary affairs, CEB, laundry, and renovation. The laundry and bath officer determines the frequency of use and requirements for local civilian labor to offset requirements for CEB and laundry services. The supply and field services officer coordinates with procurement support branch personnel on contracting HNS to offset shortfalls in field services support. He relays terrain/location requirements of field services units and mortuary affairs collection points to corps rear CP operations cell staff.

Troop Support Branch Field Services Staff

During the alert phase, troop support branch field

services personnel perform the deployment tasks listed on Table 4-2. They update policies and plans for field services support, to include location, area coverage, and scope. They provide technical advice on field services matters to the COSCOM support operations officer and to the COSCOM commander and staff. They update the services portion of estimates and corps service support plans. COSCOM field services staff officers assist field services staff in subordinate CSGs. Troop support branch field services staff officers use CSSCS displays to access overall field services capabilities and to analyze support problems.

PROCUREMENT SUPPORT BRANCH

Procurement support branch personnel, assigned to the COSCOM's support operations section, coordinate with troop support branch personnel for ways to offset corps field service requirements by contracting for services. The supply and services officer provides policy guidance on procurement of services, to include cost forecasting, contract formulation, cost analysis, source selection, and quality assurance.

ACofS, G5 SECTION

ACofS, G5 section personnel establish policies and procedures in coordination with the corps G4 and G1 for HN or contract of local services, to include –

- Dining facility and KP support.
- Bath services.
- Laundry.
- Local labor support.
- Sanitation support.
- Mortuary services (within specific parameters).

CA units provide information on services available in the AO. SJA personnel provide legal advice relative to the acquisition and ethics of field services contracts.

BATTLEFIELD EMPLOYMENT

Field services units provide support on an area basis to division as well as nondivision soldiers. Figure 4-4 depicts how a COSCOM might employ its field services elements on the battlefield.

In this example, the COSCOM attached a DS field services company to the forward CSG's CSB in the DSA. That company provides CEB, field laundry, and lightweight textile renovation. It attached the remaining

Table 4-2. Troop support branch field services personnel deployment planning.

PREDEPLOYMENT

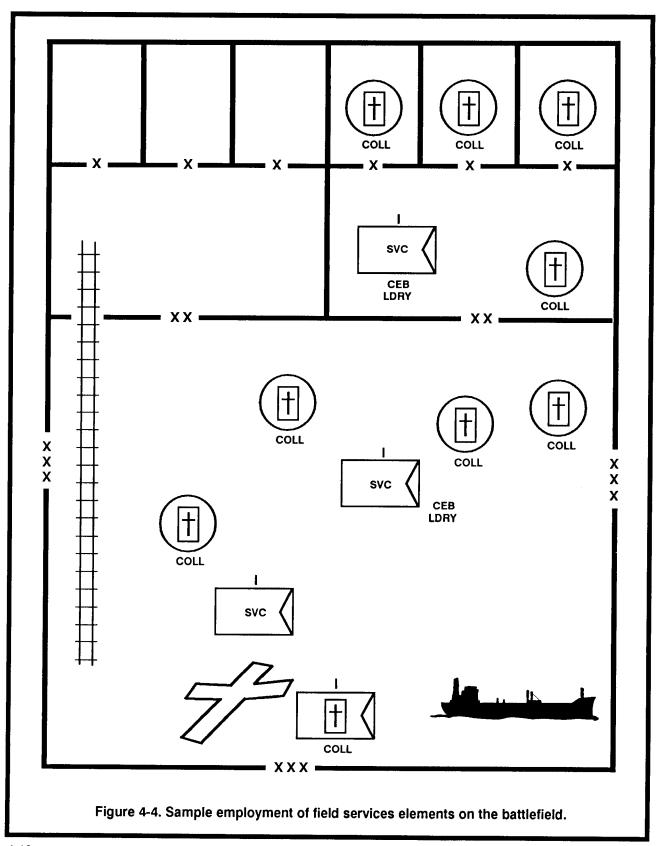
- Update the field services portion of corps service support plans and orders.
- Update the field services portion of COSCOM OPLANs.
- Gather data to determine personnel strengths to be supported and the extent of field services required.
- Develop the troop basis and make recommendations for modifications to the MTOEs of field services units and the MA collection company.
- Develop and coordinate requirements with ACofS, G4 section staff for real estate for field services facilities and prepare recommendations for their allocation.
- Develop policies and plans for the provision and location of laundry and bath facilities, the frequency of their usage, and criteria for establishment of CEB operations.
- Develop policies and plans for post exchange operations, including locations, area coverage, and scope of operations, and procedures for gratuitous issues, as appropriate.

DEPLOYMENT

- Develop priorities for the deployment of field services units.
- Coordinate real estate requirements with COSCOM ACofS, G4 staff and supporting RAOC and engineer units.
- Coordinate the assembly of equipment and materiels required to establish field services support operations.
- Provide directions on the procedures to be used in obtaining field services through local procurement in the AO.
- Coordinate with corps G4 staff on plans for positioning and attachment of MA collection points.

STAGING

- Coordinate with corps engineers on the allocation of real estate and facilities for field services support operations.
- Provide technical assistance to field services elements as they arrive and employ.
- Monitor the movement of field services elements into the AO and coordinate their location.
- Coordinate with procurement support branch personnel on contracting for field services support.



DS field services companies to CSBs on the basis of one company per 18,500 soldiers supported. To support reconstitution, it attached CEB and laundry teams and a mortuary affairs collection platoon to a regeneration task force.

The MA collection company, attached to the rear CSG's S&S battalion, is allocated on the basis of one company per corps to provide initial care and services for remains before evacuation to CONUS or to a mortuary or temporary cemetery in theater.

Forward Collection Platoons

These platoons operate collection points within corps, division, and brigade areas. The COSCOM/CSGs allocated mortuary affairs assets to provide collection support

where most needed. A total of 20 collection points set up to receive and evacuate remains and personal effects. They have limited capability to search for and recover remains. Collection section personnel can also operate in direct support of task forces, brigade-size or larger.

Main Collection Platoon

This platoon prepares and arranges for remains to be evacuated by air or surface transportation. During recent low-intensity conflicts, remains are normally evacuated directly from the battlefield to CONUS port of entry mortuaries. However, the tactical or logistical situation may require evacuation to a mortuary or temporary cemetery in theater.

CEB SUPPORT

The COSCOM provides CEB support as soon as the tactical situation permits. CEB support helps maintain soldier health, morale, comfort, and welfare. COSCOM field services units attempt to meet the Surgeon General's directive of a bath and exchange of clothing at least once a week for each soldier. COSCOM OPLANs indicate the priority of support. For example, priority of support normally goes to personnel deconlamination stations, regeneration sites, and hospitals. If chemical units are unable to provide decontamination support, CEB teams provide decontamination assistance.

COSCOM CEB SUPPORT ORGANIZATION

The Field Services Company, DS (TOE 42414L000)

provides CEB support. FM 10-280 describes CEB operations. HNS can help offset requirements for CEB support elements.

If units or individuals must assume responsibility for laundry and bath, the supporting DS supply unit provides appropriate supplies to the unit.

NBC CONCERNS

Contaminated soldiers must be separated from noncontaminated soldiers at the bath points. The nearest field laundry decontaminates clothing and towels. CEB teams decontaminate shower equipment and monitor runoff bath water for contamination.

LAUNDRY AND RENOVATION SUPPORT

FM 10-280 describes field laundry operations. As secondary field services, field laundry and renovation support are provided only when the tactical situation permits. Whenever possible, the HN or a designated contractor provides these services. Procuring laundry supplies lessens requirements on the US supply system.

COSCOM SUPPORTING UNITS

DS field services companies (TOE 42419L000) provide laundry and renovation services support. The laundry and bath officer assigned to the troop support branch coordinates backup support requirements

with the TAACOM ACofS, Services' section staff.

NBC CONCERNS

Battledress overgarments and lightweight chemical/biological protective garments are not designed for decontamination or reimpregnation. Burning heavily contaminated clothing items may create downwind vapor hazards. Units must obtain permission from higher headquarters before buryirig contaminated clothing and disposing of contaminated water in soakage pits prepared by engineers.

FIELD SANITATION

Garbage, rubbish, and liquid and solid waste material constitute a hazard to soldier health or welfare. Field

sanitation procedures promote soldier health and help control insect and rodents. Unit field sanitation teams provide technical advise on sanitation standards.

FM 21-10 describes field hygiene and sanitation procedures. Units dispose of liquid waste in a soakage pit or trench with a grease trap. They dispose of solid waste by burying in garbage pits or trenches. Burying helps to eliminate rat, fly, and mosquito hazards.

S4s establish central trash sites within each base or base cluster area. They make arrangements to backhaul garbage and set up a refuse collection schedule and a system of collection to agree with the method of refuse disposal within their area.

SOPS specify policy on garbage disposal in the AO. Each food service site provides facilities for collection and storage of refuse and garbage. Refuse can be disposed of by burying in a pit, trench, or sanitary fill; burning in an incineration trench; contracting with disposal services; or dumping at sea.

SANITARY LANDFILL

Sanitary fill sites provide a method of burying waste, to include dry trash, incombustible rubbish, and garbage. COSCOM ACofS, G4 staff offiers request that engineer elements prepare sanitary fill sites or regulated dumps to dispose of incombustible trash within each CSG's AO.

Engineer elements construct dumps of limited height and area near embankments or highway fills. The dumps should be compacted daily by truck traffic and ultimately leveled by a bulldozer. Units evacuate refuse to the sanitary fill or dump site.

DISPOSAL BY INCINERATION

Units in a site for more than one week burn solid waste in an open incinerator. CSG field services staff officers coordinate burning schedules within their AO with the area RAOC and affected base cluster S2/3s.

Engineer utilities teams construct small incinerators near hospital units. These teams also construct a central incinerator in each forward CSG area and multiple central incinerators throughout the rear CSG AO. The corps assigns utilities teams based upon the population served. Normal allocation is based on 2,500 to 4,000 soldiers supported.

The area RAOC approves central incinerator sites. Solid waste which cannot be burned because of the smoke signature created by incinerators should be buried or hauled to a refuse disposal site.

CONTRACTED DISPOSAL SERVICES

CSG and COSCOM procurement personnel coordinate refuse disposal contracts through area civil affairs teams. CSGs contract to use existing HN landfills or to have landfills created. They also contract to have local labor operate the landfills in their AO. Civilians can use edible garbage as animal food. CSG field services staff officers coordinate with S4s in subordinate units to ensure that units correctly dispose of hazardous waste and waste products generated by HSS facilities and maintenance operations.

DUMPING AT SEA

Dumping refuse at sea is not recommended if other disposal methods can be used. However, in island contingency situations, when sanitary fills or construction of incinerators is not feasible, units may dump refuse at sea. Garbage cans can be loaded onto barge, scow, or other offshore transport and hauled at least 5 miles offshore for dumping, Transportation officers coordinate with the vessel master to assure that prevailing winds and currents do not return garbage to defile inhabited friendly shores.

MORTUARY AFFAIRS SUPPORT

MA support is tailored to the tactical and logistics situation. Depending upon transportation assets, MA capability, and the MA subprogram in effect, remains are recovered and evacuated to CONUS port of entry mortuaries or to a mortuary or temporary cemetery in theater.

COSCOM TROOP SUPPORT BRANCH

Within the COSCOM, the troop support branch chief is responsible for MA support to corps forces. The memorial activities officer assigned to the troop support branch coordinates MA support requirements with other Services and allied forces. To offset shortfalls in NM capability, he recommends increased use of MA augmentation teams, an increase in concurrent returns, or the use of emergency/mass burial. If necessary, he coordinates with the sector RAOC, civil authorities ACofS, G5 section, and CA personnel for real estate for temporary cemeteries. The memorial activities officer coordinates with corps aviation units for aerial reconnaissance of search areas and with engineer units for cemetery construction.

The memorial activities officer and MA NCO coordinate with CSS plans branch staff in development of plans

for recovery of remains and MA support. They develop a remains evacuation flow diagram as an annex to the COSCOM OPLAN. That diagram should identify the responsible staff element at each point at which remains change custody. They provide input to the corps service support plan. Their input includes staff recommendations on —

- Evacuation policy.
- Processing of personal effects.
- Burial of allied soldiers, enemy soldiers, refugees, DA civilians, and PWs.
- MA equipment with which units deploy.
- Procedures for isolated burials, mass burials, and contaminated remains.

The COSCOM support operations officer obtains permission from the theater Joint Mortuary Affairs Office for mass burials. Emergency burials can be authorized by the senior commander of the affected unit when it is impossible to evacuate remains to a MA collection point. STANAG 2070 prescribes emergency burial procedures to be used by NATO forces.

MORTUARY AFFAIRS SUBPROGRAMS

The MA subprogram selected to support military operations depends on the size and location of the theater, projected death rates, and the capability to process remains. The theater commander determines which of the MA subprograms will be put in effect. Figure 4-5 depicts theater support under each subprogram.

During a low intensity non-NBC conflict, COSCOM units could provide mortuary supplies in support of a current death subprogram. When scenarios project high fatality rates that preclude immediate evacuation, the COSCOM could establish temporary cemeteries under the graves registration subprogram. Under the concurrent return subprogram, the two cemetery platoons at EAC combine to operate one in-theater mortuary. ARs 600-8-1 and 638-30 and FM 10-63 describe the following subprograms:

 Current Death Subprogram. During peacetime and in LIC situations, this subprogram provides mortuary supplies and services for the disposition of remains and personal effects of those for whom the Army is responsible.

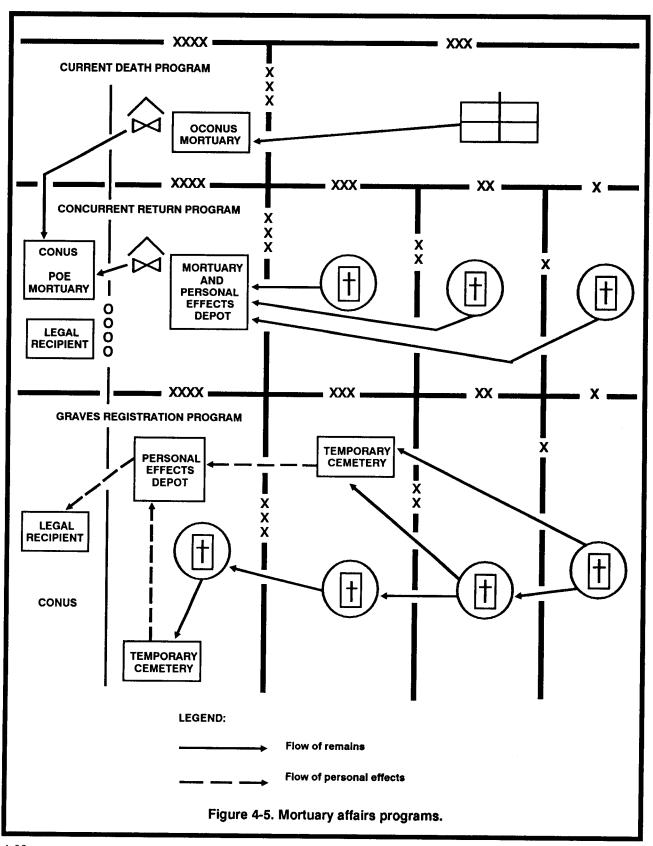
- Concurrent Return Subprogram. Following search and recovery, units evacuate remains to a mortuary where a positive identification is established, Mortuary personnel then embalm the remains for return per final disposition instructions by the next of kin. TDA augmentation of the MA company at EAC is required to provide civil service embalmers and identification specialists.
- Graves Registration Subprogram. Following search and recovery, units evacuate remains to a temporary cemetery in the corps rear area or COMMZ. Personnel effects are removed prior to temporary burial. They are sent to the personal effects depot at EAC for further disposition instructions. After tentative identification, remains are temporarily interred until the tactical and logistical situation allows for their return. When hostilities end, MA personnel exhume remains from temporary burial sites for return to CONUS or other designated location and permanent disposition under the return of remains program. Next of kin may request that the remains be interred in a permanent American cemetery overseas or shipped to a cemetery of their choice.

MORTUARY AFFAIRS SUPPORT ORGANIZATION

Each service must provide or arrange support for its deceased personnel and their personal effects. However, the Army provides general support to other Services when their requirements exceed their capabilities to provide MA support.

An MA collection company is normally attached to the S&S battalion of the rear CSG. The collection company has the capability to process a total of 400 remains per day. Its five forward collection platoons can operate four collection points each. This provides for a total of 20 collection points throughout the corps, division, and brigade areas. Collection platoons can also operate in direct support of contingency operations and task forces. Those collection points employed in the DSA can be attached to the DISCOM. Those employed in the BSA could be OPCON to FSBs.

Collection point personnel receive remains and personal effects and make initial identification. Each of the collection points can receive and perform initial



identification for approximately 20 remains per day, for an aggregate total of approximately 400 remains per day. Combat and CS units are responsible for performing initial search and recovery operations. However, the collection platoon can form search and recovery teams to help locate and recover remains and personal effects not recovered during combat and post combat operations or following an air crash or artillery strikes.

When the corps commander grants the authority to use emergency war burial or mass burial procedures, collection platoons can also conduct emergency war burial or mass burial operations. HNS and PW personnel can dig and fill mass burial graves. However, HN laborers must not handle or process remains or the personal effects of US personnel.

The collection company's main collection platoon locates in the corps rear area. It receives remains from the five forward collection platoons. The main collection platoon arranges for remains to be further evacuated to the rear by air and surface transportation to cemetery/mortuary platoons in the theater Army area. It also arranges for personal effects to be transported to the theater's personal effects depot.

AR 638-30 describes MA organizations and functions. FM 10-63 describes MA support in a theater.

NBC CONCERNS

Units do not evacuate contaminated remains to MA collection points unless the remains have been completely decontaminated. A mortuary affairs collection point-decontamination can be established. If not decontaminated, the remains are interred at a site as close to the site of death as possible. The memorial activities officer coordinates engineer support for emergency burial. STANAG 2070 and QSTAG 655 prescribe emergency war burial procedures. FM 10-63 and STANAG 2002 prescribe how to mark contaminated grave sites.

Once hostilities cease or time and resources permit, remains may be recovered and decontaminated following procedures in FM 3-5. Remains must be decontaminated before they leave the burial site. An NBC staff NCO advises on the proper procedures to use.

AUTOMATION SUPPORT

A mass fatality field information management system accounts for and tracks remains from the first collection point to the port of entry mortuary in CONUS. Systems interface between MA evacuation channels and medical facilities ensures accuracy and completeness of data transferred.

COSCOM HEALTH SERVICE SUPPORT

HSS conserves the fighting strength of the corps force. Echelon III HSS organizations in the corps area provide the divisions and troops in the corps area with hospitalization and other HSS for continued care and treatment of their sick, injured, and wounded. HSS is tailored to the mission requirements, composition of the corps force, and geographical AO. FM 8-10 describes both the current HSS force structure and Medical Force 2000 initiative. It provides a guide for obtaining as well as providing HSS. FM 8-10-2 prescribes HSS specifically for the corps.

COSCOM MEDICAL BRIGADE/GROUP

Depending upon the size of the corps, the senior medical organization in the corps may be a medical brigade or a medical group. COSCOM medical brigade or medical group staff officers establish HSS policies for the command. They coordinate plans, policies, and procedures for HSS operations in support of corps forces, to include:

• Intratheater medical evacuation.

- Hospitalization and treatment
- Medical laboratory services.
- Blood management.
- Health service logistics.
- Medical equipment maintenance.
- Preventive medicine.
- Dental services.
- Combat stress control.
- Veterinary services.

FM 8-55 provides doctrinal guidance for planning HSS. To preclude planning HSS operations which cannot be executed with limited medical and logistics resources, medical brigade/group staff officers coordinate HSS portions of OPLANs/OPORDs with medical plans personnel in the COSCOM support operations section's CSS plans branch. They also coordinate with the DISCOM to determine additional

HSS requirements for the division sector. These may include -

- Far forward surgical care provided by the MASH.
- Corps air and ground ambulance support.
- Reconstitution of forward elements.
- Combat stress control teams.
- Other requirements determined through the mission analysis process.

COSCOM medical brigade/group staff officers keep the COSCOM commander and staff informed of the status of HSS within medical brigade/group units. They may recommend the following ways to offset shortfalls in HSS capabilities:

- Temporarily reduce the corps evacuation policy.
- Cross-level evacuation assets.
- Increase the use of nonmedical ground and air assets to support medical evacuation.
- Divert assets from less critical missions.
- Seek assistance from supported units.
- Seek assistance from TA.
- Use ally or HN assets.

CSS PLANS BRANCH

The medical plans officer and medical NCO assigned to the CSS plans branch coordinate with medical brigade/group staff officers in adjusting the medical support portions of COSCOM OPLANs in consonance with probable AOs and assigned missions. They coordinate with medical brigade's medical materiel management center staff on providing and coordinating medical supply and medical maintenance. They refine COSCOM OPLANs in coordination with medical brigade/group's staff based on the factors of METT-T and data on the population to be supported, to include allies, EPW, and civilian personnel. They also provide input to the COSCOM ACofS, G3's force design/plans branch and ACofS, G5 staff on when medical elements phase into support operations.

Table 4-3 lists deployment planning tasks performed by medical plans personnel assigned to the CSS plans branch and the medical supply/maintenance officer assigned to the troop support branch. The medical brigade/group may have to supplement the medical personnel assigned to these branches.

TROOP SUPPORT BRANCH

The medical supply/maintenance officer and chief medical NCO assigned to the troop support branch focus on medical logistics support areas. They assess medical logistics requirements to support contingencies and tactical missions. They synchronize medical logistics support requirements with transportation and procurement support branch staff. They perform the following tasks:

- Keep the COSCOM support operations officer informed of medical logistics requirements.
- Monitor critical medical supply status.
- Plan ways to offset shortfalls in existing war reserves.
- Analyze requirements to adjust the content of follow-on preconfigured medical supply packages in light of the operational environment and possibility for local acquisition.
- Develop medical logistics plans for buildup to an approved theater stockage level.

The medical supply/maintenance officer and medical plans officer estimate the impact on distribution systems based on the requisition, procurement, storage, distribution, and maintenance of medical equipment and supplies. They also coordinate with transportation support branch and maintenance support branch personnel to prioritize medical supply and medical maintenance.

Troop support branch medical staff officers coordinate –

- Preconfigured medical resupply packages with the supporting MEDLOG battalion for initial resupply of deploying medical units.
- Sensitive and special transportation requirements for refrigeration and security of blood and medical supplies and equipment with the CMCC.
- Covered storage requirements for medical supplies with CSG support operations supply staff.
- Requests for nonmedical casualty evacuation support with transportation support branch personnel and ACofS, G5 staff.
- Repair status of medical evacuation assets with maintenance branch staff.
- Veterinary inspection of rations with medical brigade/group staff.

Table 4-3. COSCOM medical personnel deployment planning.

PREDEPLOYMENT

- Review the composition, intended mission, and deployment phasing of the medical organization required to provide HSS.
- Coordinate with the CA plans officer to determine HN medical facility resources.
- Determine the need for special medical equipment and facilities in the AO.
- Determine requirements for additional nonmedical transportation assets to support ground evacuation during the initial phases.
- Estimate HSS requirements of other military services, allies, HN military personnel, and civilian personnel. Include US noncombatants, HN civilians, selected third country personnel, retained and detained personnel, EPWs, and refugees in the estimates.
- Develop plans and agreements in coordination with ACofS, G5 staff and CA teams for use of HN health service facilities.

DEPLOYMENT

- Review priorities for the deployment of HSS elements based on the force deployment list.
- Use CSSCS interface with TAMMIS to monitor status of medical logistics.
- Keep the COSCOM staff informed of unique Class VIII storage and shipment requirements.

STAGING

- Establish channels of communication with the Office of The Surgeon General and the US Army Medical Materiel Agency.
- Monitor the arrival of HSS units in the area.
- Establish liaison with the Aeromedical Evacuation Control Center for patient evacuation.
- Coordinate with ACofS, G5 staff in establishing relations with HN health services officials.
- Survey HN health service facilities in coordination with ACofS, G5 section personnel and HN officials.
- Coordinate with COSCOM transportation support branch staff and the CMCC on the use of nonmedical transportation assets to supplement ground medical evacuation resources.
- Coordinate with COSCOM transportation support branch staff and CMCC on airdrop of medical supplies.
- Maintain liaison with supporting MEDLOG battalion units.
- Monitor Class VIII medical status reports and assess their impact on the transportation system.

- Throughput, on an exception basis, and backhaul of medical supplies with the CMCC.
- Humanitarian support requirements with ACofS, G5 staff.
- Local acquisition of items such as blankets, hospital linens, and compressed gases from the HN or contractors with procurement support branch staff and CA elements.
- Disposition of captured medical supplies and equipment with ACofS, G2 and medical brigade/group staff,
- Evacuation of medical materiel and equipment with CMCC to avoid imminent capture by enemy forces.
- Destruction or disposal of medical materiel with engineer units.

HEALTH SERVICE SUPPORT ORGANIZATION

The modular structure of the medical brigade/group HSS organization shown on Figure 1-10 allows medical resource managers to rapidly tailor, augment, reinforce, or reconstitute HSS elements. The corps HSS organization is designed to acquire, receive, and sort casualties; provide emergency medical treatment; and evacuate for further treatment.

The actual structure of any corps HSS system depends upon the mission, strength, and tactical disposition or composition of the corps. Depending upon the size of the corps, the HSS organization consists of a medical brigade or medical group. For a small corps,

one consisting of only two divisions, a medical group headquarters can provide C2 of corps HSS. The senior medical commander, whether medical brigade or group, serves as the COSCOM surgeon.

When several medical groups employ within a corps, they normally deploy geographically. The groups located in the forward portion of the combat zone focus primarily on evacuation and hospitalization of patients from the division areas. They provide area HSS for personnel located in their AO.

Medical groups located in the corps rear area provide backup support to the forward medical groups. They also provide area HSS to soldiers in the corps rear area.

Figure 4-6 depicts the sample employment of a medical group and its subordinate elements on the battlefield. For simplicity, only those elements supporting one division on line are shown.

The area support medical battalion (TOE 08455L000) provides routine Level I and emergency Level II medical treatment on an area support basis to those units within the corps that do not have organic medical resources. It also provides medical evacuation support on an area basis from site of injury or unit location to the treatment facility.

In a contingency operation, due to the rapid expansion of the HSS work load, the joint or unified command coordinates the use of all HSS resources. Following the dominant user principle, the commander of the joint or unified command selects the Service or Services responsible for specific HSS. Extensive use of cross-servicing takes advantage of the geographic location of facilities.

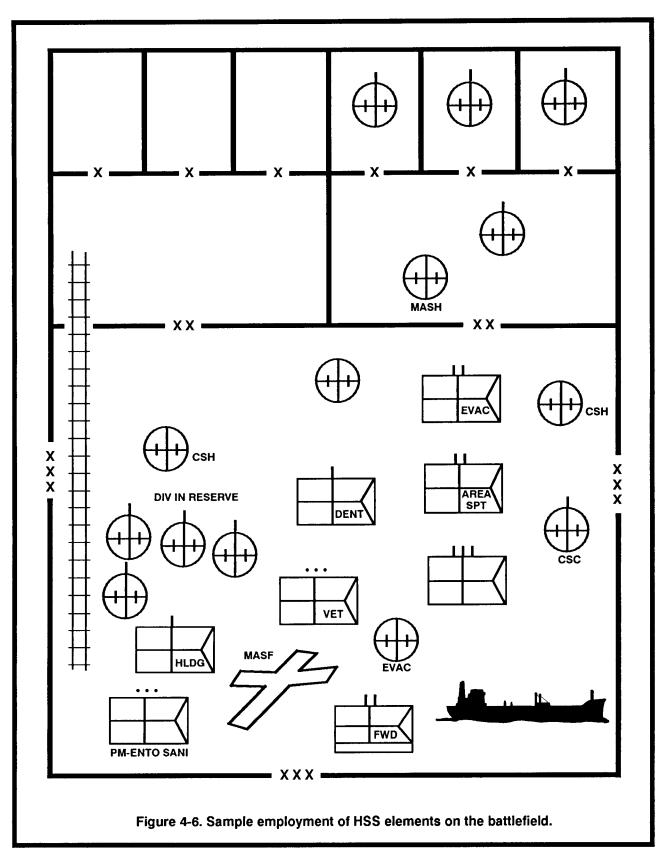
PATIENT EVACUATION AND MEDICAL REGULATING

EVACUATION

Patients are evacuated by means of transport which meets the treatment demands of their wounds, injury, or illness. The medical evacuation battalion (TOE 08446L000) coordinates both air and ground ambulance evacuation assets. Corps air or ground ambulance units evacuate patients from division, separate brigade, and nondivision treatment stations to corps hospitals. In conjunction with the theater evacuation policy, patients are evacuated no further than their medical condition requires. FM 8-10-6 provides doctrinal guidance on medical evacuation in a theater of operations.

Evacuation Policy

The theater intratheater evacuation policy prescribes the maximum number of days for hospitalization within the combat zone. Subject to the approval of the theater commander, the corps establishes intratheater patient evacuation policies within the limits of the theater evacuation policy. To enable corps hospitals to maintain their mobility and capability to accommodate patient surges, the corps establishes a shorter evacuation policy. Patients not expected to RTD within the time prescribed by the evacuation policy are evacuated as soon as their condition and the availability of evacuation means permit. The corps



evacuation policy helps to regulate casualty flow based on the tactical situation, available facilities, and current or anticipated casualty loads.

Unless the soldier's protective equipment is contaminated, NBC protective masks and other protective equipment remain with each patient throughout their period of evacuation and hospitalization in the combat zone. When protective clothing is contaminated, the soldier's protective clothing is cut off at the aid station. The soldier is evacuated in a chemical warfare agent protective patient wrap.

Weapons and ammunition are not normally evacuated with patients. The parent unit retrieves weapons and ammunition from casualties prior to their evacuation through medical channels. S4 personnel make periodic checks at battalion aid stations and the brigade forward support medical company to secure such items.

Treatment and Evacuation of EPWs

EPWs receive medical treatment and evacuation based on their medical condition and the applicable provisions of the Geneva convention. EPWs requiring hospitalization are transferred from the corps holding facility to medical facilities. They are segregated from US and allied patients being treated or evacuated by the same medical elements. As directed by the theater commander, EPWs being medically treated or evacuated should be guarded by other than medical assets. Captured medical supplies can be used in the treatment of EPW patients. For additional information on the medical treatment and evacuation of EPWs, refer to FM 8-10.

Aeromedical Evacuation

Movement by air is the preferred means of evacuation for patients with serious wounds or injuries judged urgent. Corps air ambulance units (TOE 08447L000)

provide aeromedical evacuation and emergency movement of medical personnel, equipment, and supplies and blood products in the combat zone. USAF, supplemented by cargo aircraft, provide tactical air evacuation from the corps area to COMMZ hospitals. Deceased personnel are not transported in air ambulances.

Ground Ambulance Evacuation

When the combat situation, weather, or patient condition makes aeromedical evacuation impractical, the ground ambulance company (TOE 08449L000) evacuates patients from the division rear area to corps medical facilities and airheads. The ground ambulance company also transports medical personnel and supplies. Ground ambulances do not transport deceased personnel.

MEDICAL REGULATING

The medical regulating system controls patient movement to medical facilities that can best provide the required medical care. It determines the where, when, and how of patient evacuation. The regulation process ensures that evacuation continues only as far rearward as the patient's medical condition dictates or the situation requires.

Medical regulating officers at the medical brigade and medical group headquarters provide technical control and supervision over the medical regulating system. They direct the flow of patients within the combat zone. They also coordinate with the joint medical regulating office for movement of patients from the rear combat zone to medical facilities in the COMMZ or CONUS.

The TAMMIS medical regulating subsystem provides rapid assessment and visibility of the evacuation work load. It allows staff officers to determine the appropriate facility and maintain visibility of hospital beds.

HOSPITALIZATION

CORPS HOSPITAL UNITS

The hospital units within the corps include mobile army surgical hospitals (TOE 08763L000) and combat support hospitals (TOE 08705L000).

• Each MASH provides hospitalization and far forward surgical intervention for those nontransportable patients that require stabilization prior to further evacuation. Each MASH is capable of rapid deployment. It is the only hospital capable of operating within the division AO.

 Each CSH provides initial wound/injury surgery and medical treatment of critically injured patients requiring specialized care. It stabilizes them for further evacuation or treatment and RTD.

In addition, a medical holding company (TOE 08458L000) provides 1,200 cots for the convalescence and reconditioning of RTD patients. It is minimally

staffed and equipped and provides basically for selfcare patients who expect to RTD.

Soldiers keep their NBC protective masks near them throughout their hospitalization. Their individual weapons and CTA 50-900 field equipment remain with their unit.

NBC CONCERNS

The destruction effects of nuclear and chemical weapons increase patient work load and place heavy demands on HSS. FM 8-9 describes medical operations in a NBC environment.

Objectives of HSS in an NBC environment include –

- Making optimal use of limited HSS resources in mass-casualty situations.
- Maintaining continued operation of HSS facilities.
- Protecting medical and paramedical personnel from contaminated patients.
- Avoiding the spread of contamination into medical facilities.

Whenever possible, patients are decontaminated prior to evacuation by aircraft or ground ambulances. Decontamination platoons or elements establish decontamination stations near MTFs. Contaminated patients are not admitted to medical facilities. Adequately protected medical personnel render treatment for contaminated patients who require immediate critical advance trauma life support in areas specifically designated for this purpose. FM 8-285 describes medical treatment for chemical casualties. FM 8-10-4 provides more information on patient decontamination.

Authorization of the M51 collective protective shelter system exists only for battalion aid stations and the division clearing station. No collective protection exists for corps hospital facilities. In the event of a NBC attack, corps hospitals evacuate patients to a clean hospital. Decontamination platoons or elements decontaminate the contaminated hospital facility and full operation begins as soon as possible.

REEQUIPPING MEDICAL RETURN TO DUTY SOLDIERS

Reequipping RTD soldiers involves the reissuing of MOPP gear, individual clothing and equipment, and,

on an as needed basis, weapons and ammunition to soldiers upon their release from medical treatment facilities. This reissue involves the minimum amount of items required to protect soldiers from the environment and the threat during transit to the gaining unit. Figure 4-7 depicts the process for reequipping medical RTD soldiers.

Weapons, Ammunition, and Excess Equipment

The Geneva convention prevents MTFs from providing RTDs with weapons and ammunition. Ammunition, individual weapons, and excess equipment belonging to patients evacuated to the rear are disposed of as directed by command SOP

Level I and II MTFs

Within all echelons of a theater, soldiers released from Level I battalion aid stations or Level II MTFs need minimal reequipping. They may only require access to their clothing bag. Uncontaminated protective mask, hood, and carrier remain with the soldier during treatment and evacuation at all levels. MTFs return personal property and effects to these RTD soldiers upon their release. Level I MTFs coordinate with the soldier's assigned unit regarding reequipping and transportation upon discharge. Level II MTFs coordinate this support with the brigade S4 or the unit's logistics representative.

Level III and IV MTFs

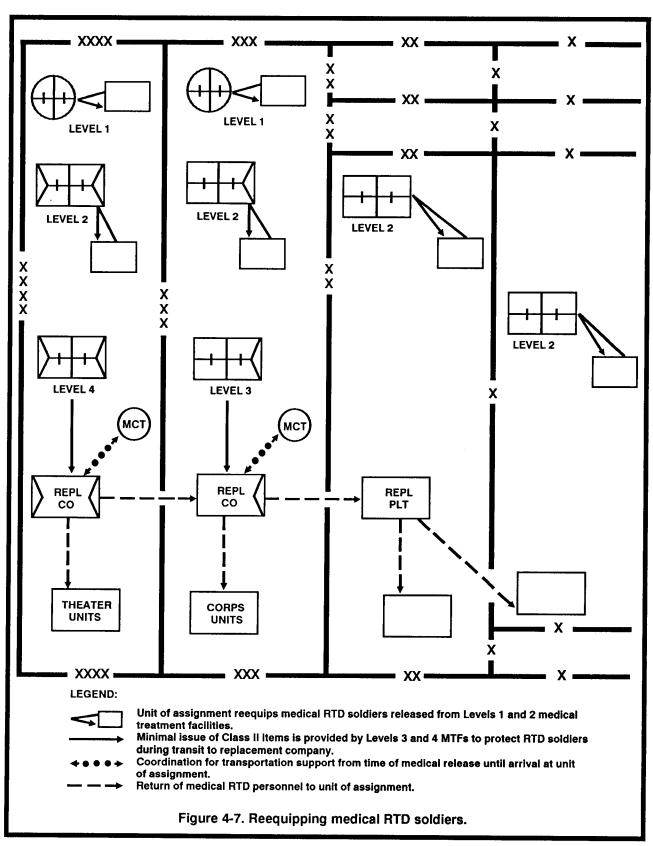
Level III and IV MTFs provide minimal basic uniform items and, if required, MOPP gear to RTD soldiers to protect them during transit to replacement companies. Corps hospitals request the minimal Class II supply items authorized for issue to RTD soldiers from the DS supply company providing area support in their AO. OCIE items that arrive with patients at these MTFs and cannot be reissued are returned to the supply system.

The supporting MCT arranges transport of medical RTD soldiers from the hospitals to the replacement company site for processing.

Replacement Company Reequipping Mission

After discharge from Level III and IV MTFs, RTD soldiers obtain the balance of their clothing and equipment as well as weapon and ammunition from the personnel group's DS replacement companies. FM 12-6 prescribes this reequipping mission.

Replacement companies reequip RTD soldiers using existing manpower, borrowed manpower from replacement



operations, HNS, and contracting. Backup support is provided from the DS supply company providing area support in their AO.

Due to the different roles and tasks of various units, additional items may be required to make RTD soldiers mission capable after their arrival at the gaining unit. The issue of these additional items is the responsibility of the gaining unit.

HOSPITALIZATION OF US, ALLIED, EPW, AND CIVILIAN PERSONNEL

When the allied nation concurs, US Army personnel may be hospitalized in allied military hospitals. If their

condition precludes evacuation to a military hospital, they may be hospitalized in civilian hospitals of allied nations.

Allied military personnel may be hospitalized in US Army hospitals until their condition permits their return to allied forces control.

EPWs are hospitalized and provided medical care in accordance with the provisions of the Geneva convention. Whenever possible, they are segregated from US and allied patients.

Local national civilian patients should not be hospitalized in US Army medical treatment facilities.

HEALTH SERVICE LOGISTICS

Health service logistics support includes -

- Supply of Class VIII.
- Production of oxygen and resuscitative fluids.
- Fabrication of optical items.
- Maintenance of biomedical items.
- Processing, storage, and distribution of blood.

Forward and rear medical logistics battalions (TOES 08485L000 and 08695L000) provide medical supply and medical maintenance support. Blood bank platoons provide blood services support. A medical logistics support detachment may be augmented when troop strength or the number of hospitals supported exceeds the capabilities of the logistics battalions.

CLASS VIII MEDICAL SUPPLY

All units plan, program, order, receive, store, and consume Class VIII supplies in accordance with appropriate regulatory accounting procedures.

Authorization

Units maintain a supply of medical consumables on shelf for immediate local area supply. Commanders add supplemental project stocks. Authorized levels of Class VIII supplies are determined by referring to the appropriate 6545-8-CL supply catalog for the assigned set, kit, or outfit.

Source of Supply

Nondivision units operating in the corps rear area establish an account for Class VIII supplies with the nearest medical logistics battalion supporting element. They requisition and receive supplies from this medical supply activity. Medical units supporting units in reserve also draw medical supplies from the nearest medical logistics battalion.

Nondivision units operating in a division sector maintain a three-to five-day Class VIII supply level. They are normally resupplied by the medical logistics battalion. When nondivision units are attached to a division, they can be resupplied by the division medical supply office, provided such short term arrangements are made prior to deployment. The division medical supply office is resourced to support division units. It is not equipped to handle unprogrammed requirements.

Request/Requisition

Nondivision units submit request for Class VIII supplies through command channels to the MEDLOG battalion. Those nondivision units allowed to requisitioning Class VIII resupply from division medical supply offices or battalion/squadron medical supply offices submit their requirements through command channels to those offices. The MEDLOG battalion forwards requisitions for Class VIII supplies to the TMMMC. The TMMMC submits the requisitions to CONUS for direct shipment to the corps.

Distribution

MEDLOG battalions distribute medical supplies using the supply point distribution method. However, ground ambulances returning to forward areas may assist in transporting medical supplies forward.

Prepackaged Resupply Set

PRSs contain two or three days of consumable medical supplies, to include the combat medic aid bag and

the combat lifesaver bag, to support each of the modular medical assemblages authorized divisional units. The corps MEDLOG battalion builds PRSs from its ASL stocks. It maintains an inventory of PRSs to support divisional requirements.

The DISCOM's division medical supply office coordinates requirements for PRSs with the supporting MEDLOG battalion unit. The division surgeon and division medical supply officer request local adjustment to the PRSs based on special mission requirements, the tactical situation, or extreme environmental conditions.

Direct Exchange

To minimize distribution problems, direct exchange of items such as Litters, blankets, pillows, and splints are used throughout the patient evacuation chain, For example, when a medical evacuation helicopter picks up or delivers patients on litters covered with blankets, it exchanges a like number of litters and blankets with the medical unit involved.

Captured Supplies

Captured medical supplies must not be destroyed. Units evacuate captured medical supplies through medical channels to a MEDLOG battalion. Medical facilities use captured medical supplies to treat EPW.

The disposition of captured medical supplies are governed by the provisions of the Geneva convention.

MEDICAL MAINTENANCE

Nondivision units operating in the corps rear area receive unit level medical maintenance support from the same medical facilities providing medical supply support. Units requisition repair parts for medical equipment through medical supply channels. The medical equipment maintenance platoon of the supporting MEDLOG battalion provides DS medical maintenance.

BLOOD SUPPLY

The corps surgeon provides staff supervision for blood supply and distribution within the corps rear area. Blood collecting and processing normally occurs in CONUS or the COMMZ. However, blood bank platoons augment corps MEDLOG battalions to collect and process blood when sufficient donors exist.

Corps hospitals maintain blood collection and processing equipment to meet emergency requirements to include, if necessary, initial storage. The amount of blood authorized depends on day-to-day usage and anticipated operations. Units supporting forward elements engaged in combat receive priority of issue. MTFs avoid excessive stockpiling of blood.

OTHER HEALTH SERVICES

PREVENTIVE MEDICINE SERVICES

Preventive medicine services reduce the potential for illness and disease. All commanders establish and maintain a comprehensive preventive medicine program. All units organize field sanitation teams as prescribed by AR 40-5 and FM 21-10-1. These teams maintain a prescribed load of supplies.

Preventive medicine services cover -

- Mess sanitation.
- Personal hygiene.
- Prevention of cold and heat injuries.
- Water supply.
- Control of communicable diseases.
- Maintenance of immunizations.
- Occupational health.
- Waste disposal.
- Pest management.

The COSCOM surgeon supervises the execution of preventive medicine services. A wide variety of command information publications on preventive medicine areas may be obtained from the COSCOM PAO.

Preventive medicine sanitation and entomology detachments (TOES 08498L000 and 08499L000) deploy early to define preventive medicine materiel requirements in the AO. A preventive medicine detachment provides delousing of large numbers of prisoners, civilians, or troops. The preventive medicine entomology detachment provides aerial dispersal of pesticides.

Preventive medicine personnel monitor water point operations and unit sanitation activities on an area basis. They investigate and recommend actions to improve –

- Sanitation of food service facilities.
- Troop housing.
- Water supplies.
- Waste disposal.
- Industrial hygiene.

Units send requests for preventive medicine services to the supporting medical group/brigade.

DENTAL SERVICES

Dental services help prevent oral diseases, promote dental health, and provide treatment to eliminate or reduce the effects of dental disease and injury. Dental personnel assigned to dental units, hospitals, and medical companies provide dental support.

The dental battalion (TOE 08476L000) consists of dental service medical companies (TOE 0847L000), dental service detachments (TOE 08479L000), and dental prosthodontics teams (TOE 08588L000). Dental service companies provide dental treatment to troops within their geographic area of responsibility.

During the initial phases of combat, dental elements limit dental services to emergency treatment to relieve pain and the provision of expedient repair of dental prosthetics. Corps dental service support focuses on preventing unnecessary evacuation of soldiers requiring both routine and emergency treatment. Priority of treatment in forward areas is given to combat units, Army aviation units, and CS units. In rear areas, divisions or separate brigades being reconstituted receive priority of treatment. As the situation permits, dental elements perform normal dental services in the corps area on an area basis. During periods of increased hostilities, the COSCOM surgeon can direct that dental officers perform triage and advance trauma management.

COMBAT STRESS CONTROL SERVICES

A combat stress control company (TOE 08476L000) employs in the corps to provide support for a two-or three-division slice. That company consists of combat stress control preventive teams and combat stress control restoration teams (TOE 08468L000). These teams augment area support medical companies and the regeneration task force. They also staff reconditioning centers which provide one-to three-day restoration and seven-day reconditioning treatment of battle fatigue casualties. FMs 8-51, 22-9, and 26-2 provide additional information on stress management.

VETERINARY SERVICE

Veterinary service detachments and platoons (TOEs 08409L000, 08418L000, 08419L000, and 08417L000) contribute to the health of the command by –

- Performing sanitary inspections of potential food sources.
- Assuring food wholesomeness by performing food hygiene, safety, and related food quality assurance inspections.
- Inspecting, monitoring, and testing subsistence and food-producing animals contaminated by, or suspected of being contaminated by, NBC agents.
- Providing services related to the control of animal diseases that are communicable to humans.
- Performing veterinary care for all government owned animals.
- Assisting in the preventive medicine program.
- Participating in civic action programs when authorized.

When directed by the COSCOM surgeon, veterinarians can serve in a medical care and treatment role, augmenting medical treatment staffs during the initial period of hostilities.

Veterinarians inspect subsistence prior to its purchase, entry into the supply system, or issue. They also certify subsistence items or captured rations items as acceptable for consumption before they can be consumed or distributed. Only ice obtained from veterinary approved sources may be used for refrigeration of subsistence or for human consumption.

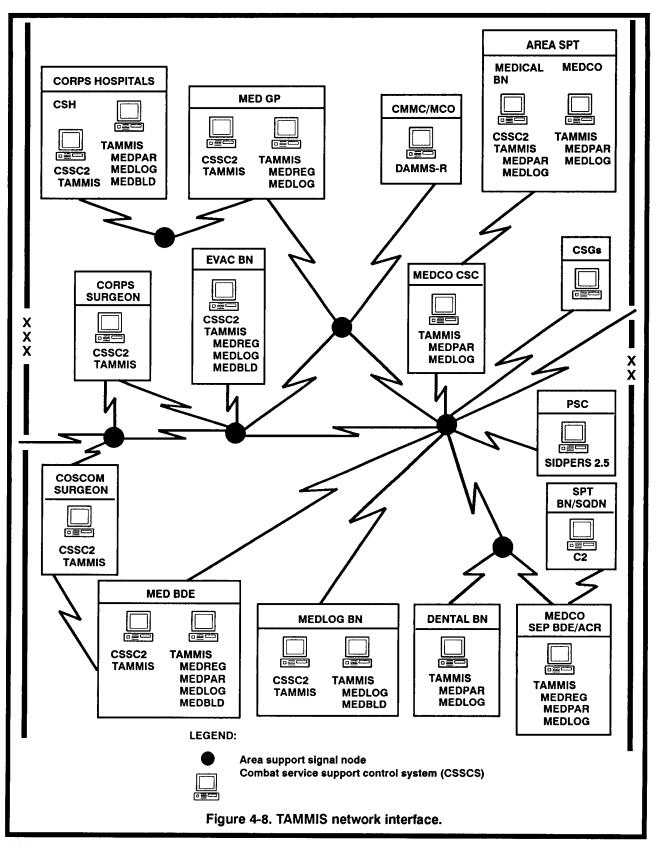
Veterinary personnel inspect, monitor, and test rations or food-producing animals contaminated or suspected of being contaminated by NBC agents prior to their issue or consumption. However, units decontaminate rations or food producing animals contaminated by NBC agents.

THEATER ARMY MEDICAL MANAGEMENT INFORMATION SYSTEM supports the information management reTAMMIS SUBSYSTEMS

TAMMIS supports the information management requirements of medical units during contingency operations and war. It assists medical commanders by providing timely information needed to transport, treat, and track patients at medical facilities.

Figure 4-8 depicts where each of the following four TAMMIS subsystems runs:

MEDREG - Medical Regulating. MEDREG manages patient evacuation by matching evacuation



requirements against resources.

- MEDPAR Medical Patient Account and Reporting. MEDPAR tracks patients, determines the availability of medical resources, and supports personnel strength accounting and casualty reporting systems.
- MEDLOG Medical Logistics. MEDLOG automates the requisitioning of medical materiel (Class VIII) to support medical units.
- MEDBLD Medical Blood (Management).
 MEDBLD projects blood usage, tracks blood inventories, and alerts decision makers to potential shortages of blood products.

Each TAMMIS subsystem has CSS command and control capabilities. They provide status summary reports of medical units, patient evacuation work

load, and critical resources through predetermined reports or information selected by the user/CSS commander.

Medical brigade/group staff and the medical staff assigned to the CSS plans branch use the interface between CSSCS and TAMMIS to plan medical logistics support. When direct electronic communications are not available, users pass information by courier via floppy diskettes, tapes, or hard copy to the required headquarters.

CSSCS INTERFACE

The interface between TAMMIS and CSSCS provides status data on medical units and medical assets in the corps area. CSSCS medical reports provide both overview and detail medical status data for medical staffs in the COSCOM CSS plans branch and troop support branch.

CHAPTER 5

Arming the Corps Force

No conflict lasts long without munitions to arm the weapons of war. The corps force can fight only as long as the COSCOM supplies it with munitions. The high firepower rate of modern weapons places unprecedented demands on the COSCOM's munitions distribution system to provide the right types and quantities of munitions at the decisive time and place. To ensure continuous, responsive distribution support, ammunition supply companies require the habitual support of transportation truck companies.

The COSCOM also arms assault forces with mines and explosive ordnance to breach enemy obstacles. It arms defensive forces with mines and explosives to help delay or stop the enemy along avenues of approach.

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PLANNING MUNITIONS SUPPORT

Arming the corps force represents the most extensive and time-sensitive function of the COSCOM support systems. Because of the dependency of modern warfare on complex weapon systems, effective and timely support is imperative. The COSCOM establishes and maintains a munitions support system which can respond quickly to the demands of the tactical situation. Detailed staff planning helps ensure that COSCOM units supply the right mix and quantities of munitions at the right time and place.

COSCOM CSS PLANS BRANCH

CSS plans branch personnel monitor corps G3 plans and fragmentary orders to assess changes in munitions requirements resulting from changes in the tactical situation and corps commander's intent. They perform the following tasks:

- Coordinate with corps G3 staff officers on balancing requirements against ammunition controls.
- Synchronize support recommendations from the support branches on how to most effectively arm the corps to support corps tactical plans.
- Recommend ways to allocate COSCOM resources to support or weight the main effort.
- Provide the corps G4 recommended policies and related information on controlled items.
- Revise the COSCOM's OPLANs/OPORDs to reprioritize the COSCOM's munitions support,

COSCOM MUNITIONS SUPPORT BRANCH

The munitions support branch exercises staff supervision over Class V support operations. These include supply as well as maintenance operations relating to ammunition, missiles, special weapons, and associated repair parts, special tools, and test equipment.

The munitions support branch chief -

- Develops plans and policies involving munitions supply and maintenance.
- Provides staff input for munitions planning to COSCOM CSS plans branch staff.
- Develops policies concerning surveillance of munitions.
- Maintains a running estimate of munitions requirements.
- Coordinates munitions requirements with corps G3 and G4 staff.
- Coordinates the munitions support portion of the corps slice for out-of-sector support and support to sister Services or allies.
- Establishes ammunition supply levels based on corps directives.
- Establishes and maintains an ammunition surveillance program as prescribed by AR 702-6.

 Recommends ammunition supply and storage site locations to the corps rear CP's CSS cell.

Munitions and missile officers, assigned to the COSCOM's munitions support branch, develop operating procedures and plans to implement Class V supply policies prescribed in ARs 710-1 and 710-2 and SAAS technical manuals. They also –

- Coordinate with CMMC missile munitions division staff on preplanned/preconfigured push packages and trends and problem areas.
- Coordinate with the CMCC on munitions movement and cargo transfer to support surges.
- Provide technical advice and assistance to ammunition officers in subordinate CSGs and ammunition supply units.
- Coordinate with CSG ammunition officers on cross-leveling munitions support personnel and equipment.
- Recommend movement of ASPs and CSAS as the situation dictates.
- Review and update Class V ammunition planning factors to the theater scenario.
- Monitor suspensions of ammunition.
- Recommend adjustments to Class V stockage levels.
- Recommend the slice of Class V stocks to accompany corps forces supporting an ally or sister Service.
- Coordinate the resupply of Class V stocks for attrited units at regeneration sites.

LOGISTICS PREPARATION OF THE BATTLEFIELD

COSCOM munitions support branch and weapon systems support branch personnel coordinate with COSCOM ACofS, G2 and G3 staffs on collecting and assessing data relative to arming the corps force for specific contingency areas or theaters of operations.

During initial planning stages, munitions support branch personnel use IPB products to assess and recommend the number and placement of ammunition units on time-phased deployment lists. IPB threat evaluation products can help munitions support branch personnel estimate the type and quantity of munitions required to support tactical displacements. Munitions support branch personnel use IPB terrain analysis products and threat integration products to plan ways to protect munitions support operations.

IPB products aid munitions support branch personnel in estimating the work load which captured munitions place on the force structure. Staff estimates need to include the impact of the receipt, storage, safeguarding control, and movement of captured ammunition.

REQUIRED SUPPLY RATE

The RSR and CSR impact on the allocation and supply of ammunition. The RSR refers to the quantity of ammunition a combat commander estimates is needed to support tactical operations for a specified time without ammunition expenditure restrictions. The RSR changes based on the type of operation, the overall objective, enemy capability, and revised ammunition forecasts.

Each S3 develops an RSR estimate, in coordination with S4 and S2 staffs. FM 101-10-1/2 provides gross planning factors for ammunition consumption estimates when enemy assessments and actual use factors have not been developed RSR reports list the rounds per weapon per day or a bulk allotment per day or per mission. The S3 submits the RSR through command channels to the next higher headquarters.

At each level of command, S3 stall officers review, consolidate, and forward their subordinate units' RSR to the next higher level operations staff officer. Division and separate brigade headquarters pass RSR data through S3 channels to the corps G3. He passes the consolidated corps RSR to the corps G4. The corps G4 then coordinates with the COSCOM support operations officer to assess whether munitions stocks can support requirements. The CMMC determines current stock status and restrictions on availability. COSCOM support operations staff prepares a supportability assessment for the corps G4. The corps G4 then recommends munitions distribution to support the G3's plans for current and future operations.

CONTROLLED SUPPLY RATE

The CSR is the amount of ammunition that can be allocated over a specific time period It depends on the availability of ammunition and the ability to move the ammunition as required, within the required time frame.

The corps commander establishes the CSR for corps major subordinate commands. He approves the CSR recommended by the corps G3 following discussions with the corps G4. The corps G3 recommends the CSR for chemical munitions after coordinating with the corps chemical officer and FSCOORD.

Combat commanders publish their CSR in OPORDs, service support annexes, fire support annexes, or fragmentary orders. CSRs are expressed as the number of rounds per weapon per day or rounds per specific operation, mission, or period of time. The CSR limits the amount of ammunition that units are authorized to request.

At each level, G3s/S3s work with G4s/S4s to better allocate ammunition assets according to priorities. G4s/S4s ensure that units' requirements do not exceed the CSR. The DAOs and CMMC enforce the CSR. The COSCOM support operations officer establishes procedures through the CMMC to monitor that units are following the CSR.

NBC CONSIDERATIONS Chemical ASPs

Chemical ammunition supply points represent high-value targets. When possible, these munitions are stored in dispersed sites and kept as mobile as circumstances permit.

Contamination Avoidance Measures

CSAs, ASPs, and ATPs employ contamination

avoidance measures outlined in FMs 3-3 and 9-38. Smoke coverage helps reduce the flash and thermal effects of nuclear detonation. Protective overwrap reduces the effects of radiological fallout and chemical agents. It also facilitates decontamination.

Contaminated Stocks

Contaminated stocks are segregated from clean stocks until they can be fully decontaminated. Contamination procedures are in FMs 3-5 and 3-100. Weathering can often reduce contamination levels.

The CMMC releases contaminated stocks only as a last resort. The senior tactical commander must make the decision to use contaminated stocks. His staff evaluates each item criticality, type and extent of contamination and resources available for decontamination. The overriding considerations are the risks inherent to the receiving unit. To provide a decisive tactical advantage, contaminated stocks could be issued to similarly contaminated units.

Conventional ammunition units, the CMCC, supporting MCT and MRTs, area RAOC, and supported units coordinate the transportation of contaminated stocks. The CMCC specifies the route for transporting contaminated stocks.

COSCOM MUNITIONS SUPPORT ORGANIZATION

Munitions directly influence the success of tactical operations. The COSCOM and subordinate CSGs employ ammunition supply units to best support the operational plans of tactical commanders. COSCOMs tailor munitions resources, realign priorities, and synchronize support assets to meet changing tactical situations. Tactical commanders should plan their operations and commit their forces only after a full awareness of the support capabilities of the COSCOM's munitions support structure.

CONVENTIONAL AMMUNITION SUPPORT ORGANIZATION

The COSCOM's ammunition support organization provides for the replenishment and delivery of ammunition to users. Refer to Figure 5-1. Based on factors of METT-T, the COSCOM and CMMC shift the flow of Class V or redistribute Class V stocks from less affected areas to support high priority operations.

Ordnance Companies, Ammunition, DS (MOADS or MOADS/PLS)

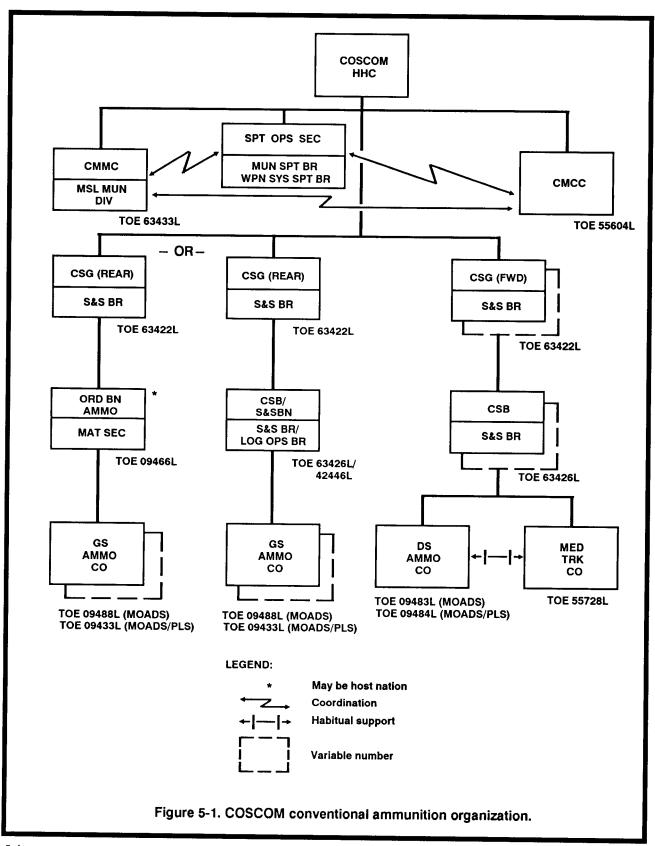
Whether organized under TOE 09483L000/09484L000, each company can establish three ASPS and an ATP in

each division rear area to support combat units and FSB ATPs. FMs 9-6 and 9-38 describe unit operations. The ASPS provide continuous resupply to the ATPs. Stockage levels at the ASPS vary based on tactical plans, availability y of ammunition, and vulnerability of LOCs to interdictions. Stockage needs to cover surge and emergency requirements.

One company is allocated per division. The COSCOM commander attaches a DS conventional ammunition company to each forward CSG. The forward CSB's headquarters provides the command and control element for the DS ammunition supply company.

Ordnance Companies, Ammunition, GS (MOADS or MOADS/PLS)

Organized under TOE 09488L000/09433L000, GS ammunition supply companies establish a CSA in the corps rear area and one behind each committed division. Allocation depends upon METT-T and the size of the corps' stockage objective. CSAs provide corpswide ammunition support. They serve as the primary source of high-tonnage ammunition for the division.



Based on divisional forecasted needs, CSA personnel configure CCLs and ship ammunition to ASPs and ATPs on the transportation battalion's medium truck company's assets. CSAs also provide DS area support to units operating in the rear of the corps rear area as well as support for reconstitution operations. FMs 9-6 and 9-38 provide more detail on mission operations.

In a mature theater, GS ammunition supply companies are attached to an ammunition battalion under the rear CSG. However, depending upon theater buildup and implementation of the TPFDL, a GS ammunition supply company could also be attached to the rear CSG's CSB or S&S battalion. In contingency operations or to shorten the distance between CSAs and ASPs/ATPs, the COSCOM commander can attach a GS ammunition supply company to the forward CSG's CSB to operate a CSA behind each division.

HOST-NATION SUPPORT ORGANIZATION

Support agreements identify dedicated sources of HNS. During joint operations, a HNS organization can augment the COSCOM's conventional ammunition support organization. National agreements define the interaction between HNs and US CLTs. The concept of obligatory cooperation is initiated after mobilization of WHNS units. Depending on the support agreements for the theater of operations, HNs could provide ammunition supply units/battalion to augment conventional GS ammunition operations.

US Ammunition Cellular Logistics Teams

Depending upon the theater scenario and national agreements, HNS agreements provide for US ammunition CLTs to collocate with the WHNS ammunition battalion headquarters and ammunition supply companies. These CLTs control US ammunition in the custody of WHNS ammunition supply units.

These CLTs are assigned to the COSCOM and attached to a CSG. They provide an ammunition accountability interface between the CMMC, US ammunition supply system, and WHNS ammunition supply companies. The CMMC tasks the WHNS ammunition supply battalion through the CLTs. Taskings flow from the CMMC via SAAS-3 to SAAS-4 used by the CLT at the WHNS ammunition supply company. The WHNS ammunition supply battalion reports organic capability to its higher headquarters to ensure work load capability is not exceeded by MRO taskings.

HHD, Ordnance Battalion, Ammunition, WHNS (TOE 09574LA00). This ammunition control detachment provides C2 and staff planning for up to nine CLTs. HHD personnel provide technical direction over the mission operations of these elements. They collocate with the WHNS battalion headquarters, serving as the battalion logistics operations section. They consoldiate and forward reports from the CLTs at the HN companies to the CMMC.

Ordnance Companies, Ammunition, WHNS (TOE 09574LBOO). A CLT can be allocated per WHNS ammunition supply company. These CLTs develop and maintain surveillance data on US-owned ammunition stocks issued, received, and stored by the WHNS ammunition supply unit. Personnel operate a stock control section at each WHNS ammunition supply company. They –

- Coordinate ammunition resupply, receipt, issue, and rewarehousing actions with the HN ammunition supply unit.
- Convert SAAS data into HN formats (short tons to metric tons and DODAC to interoperability codes).
- Perform quality assurance/quality control inspections on ammunition stocks stored by the HN unit.
- Coordinate maintenance support for US equipment operated by the HN unit.

Accounting Team, WHNS (TOE 09574 LC00). Depending upon the WHNS structure and operation, up to two of these teams may be attached to a WHNS ammunition company. They perform the following functions:

- Maintain surveillance, interchangeability, and substitution data on ammunition stocks.
- Perform stock accountability and stock status reporting of US owned ammunition stocks issued, received, and stored by WHNS ammunition supply units.

CHEMICAL AMMUNITION SUPPORT ORGANIZATION

Conventional DS/GS ammunition units may perform chemical munitions support missions. Their ASPs and CSAs have the capability to receive, store, assemble, and issue binary chemical munitions.

The GS conventional ammunition company's CSA receives unassembled binary chemical munitions from

the port. Normally, CSA personnel ship unassembled binary chemical munitions to the ASPs. However, to speed retaliatory fires, the CSA can assemble and ship the munitions to ASPs or ATPs for issue.

DS conventional ammunition company ASPs receive unassembled binary chemical munitions either from the CSA or directly from the port. They store the munitions as nonlethal component canisters. Upon receipt of properly authenticated release orders, ASPs assemble the components and ship the assembled chemical munitions forward to the ATPs for issue to firing units.

SAMPLE BATTLEFIELD EMPLOYMENT

Figure 5-2 depicts how a COSCOM might employ conventional ammunition elements. Employment follows MOADS doctrine and is enhanced with the availability of PLS cargo trucks.

Each FSB forward supply company operates an ATP in each brigade area. These FSB ATPs support their combat brigades and other units that may be operating in the brigade area. The DAO specifies which units are supported by ATPs, to include the ATP run by the nondivision ammunition company. The forward CSG's LO arranges with the DAO for corps elements in the brigade area to obtain their ammunition from the ATPs.

The COSCOM attached a DS ammunition company to the CSB in the division rear area. Under MOADS, each of the DS ammunition companies can operate –

- An ATP which supports units operating in the division area. It provides high-volume, high-tonnage items used primarily by corps artillery and aviation units. The DAO provides mission guidance and shipment priorities to this ATP through his representative located at the ATP.
- Three ASPs which prepare ammunition for

ground or aerial transport to the ATPs and units in the division rear area. Each ASP may require 5 to 6 kilometers square or larger. ASPs receive their mission work loads and priorities of issue from the CMMC. The COSCOM support operations officer sets ASP stockage objective based upon —

- Corps tactical plans and projected battle intensity.
- □ Types of units supported.
- Availability of ammunition and LOC vulnerabilities.
- ☐ Threat disruption of resupply operations.

In this example, force structure allowed the corps to assign five GS conventional ammunition companies to the COSCOM. The COSCOM allocated a GS ammunition company to operate a CSA in each of the CSG's AO. It attached a GS ammunition company to a CSB within each forward CSG. These CSAs prepare ammunition for shipment to the ASPs and ATPs. They require approximately 40 square kilometers each. Habitual transportation support is provided by the CSB's medium truck company.

The COSCOM attached the remaining GS ammunition units to the rear CSG's ammunition battalion. The CSA in the corps rear area provides the initial storage area for ammunition stocks from a theater storage area. It prepares ammunition for shipment to the ASPS and ATPs. Based on projected ammunition support requirements, the COSCOM allocated three medium PLS truck companies (TOE55728L300), assigned to the rear CSG's transportation battalion, to support ammunition distribution from the CSA to the ASPs and ATPs in the division area. This CSA provides the surge reserve which enables the corps commander to weight the battle. It also provides area support for units in the corps rear area.

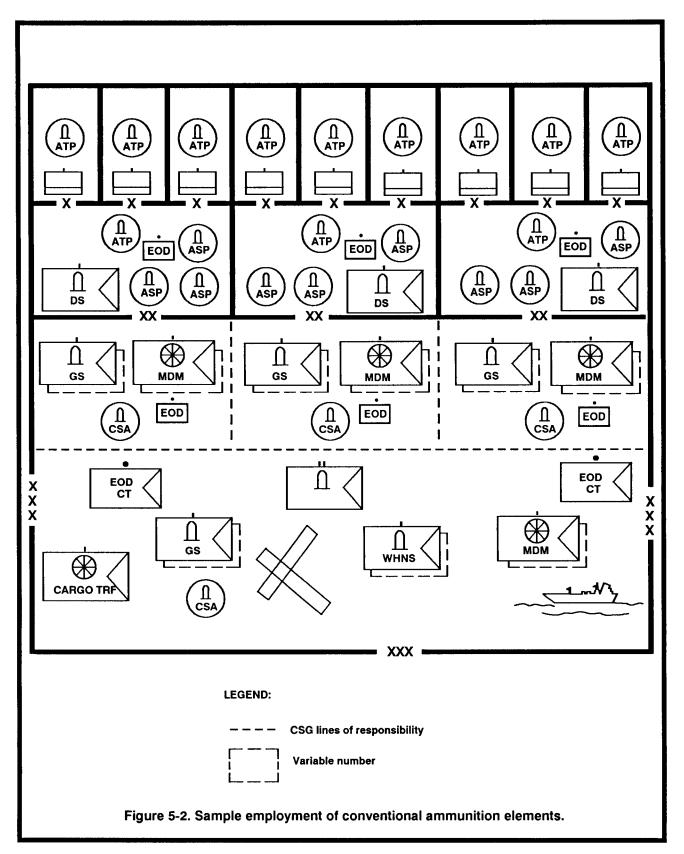
MUNITIONS DISTRIBUTION SYSTEM

To support generation of combat power by maneuver units, the COSCOM designs its munitions distribution system to provide the right types and quantities of munitions at the decisive time and place. Heavy threat activity in the corps rear area could place unprecedented demands on that distribution system. Ammunition supply units push high tonnages of ammunition forward while at the same time maintaining

minimum essential stocks to support future combat operations.

HABITUAL SUPPORT

To ensure continuous, responsive munitions support, the COSCOM allocates and assigns medium truck companies to CSGs to provide habitual transportation support to ammunition supply companies. The COSCOM/CSG



attaches a medium truck company/companies to those CSBs with a GS ammunition supply company. The truck unit supports routine, recurring daily movement of ammunition from the CSA to ASPs or ATPs. Trailer transfer points or staging points for convoys of throughput vehicles set up at each CSA.

Because the distribution of ammunition from CSAs to ASPs or ATPs must occur on a routine basis, the supporting MCT preassigns a block of TMRs committing the trucks. Close coordination needs to be maintained between the ammunition storage site, supporting medium truck unit, and tasking CSG/CSB. The CSG/CSB transportation branch tasks the truck unit to move the munitions. The truck company requests convoy clearance from the MCT and picks up shipments at the CSA.

When higher priorities occur, the CMCC, through its MCTs, recommits truck assets. The MCT then rescinds its TMRs and commits the CSB's truck assets to higher priority missions. Refer to Figure 8-3.

AMMUNITION REQUIREMENTS

A heavy division expends an estimated 3,500 tons per day. The conventional ammunition support system depends on continuous fill and refill. Combat and CS units submit ammunition requirements. The corps commander establishes CSRs based on ammunition availability and transportation capability. To assure that normal supplies begin arriving prior to termination of preplanned resupply, CMMC commodity managers need to make allowances for order-ship time.

Requirements Flow

In the division area S3s and S4s consolidate ammunition requirements and pass them through their higher headquarters to the DAO. The DAO consolidates these requirements and passes them to the CMMC. He directs the units to pickup ammunition from an ATP or ASP.

In the corps rear area, nondivision units pass their requirements through their higher headquarters to the CMMC. The CMMC consolidates requirements from the divisions and nondivision units. The CMMC requests replenishment stocks either through the TAMMC or directly from a CONUS NICP. The CMMC directs shipments from CSAs and ASPs to meet user requirements.

Status Reports

CSAs, ASPs, and ATPs use daily transaction reports to provide ammunition status to the CMMC. The DAO needs to receive daily status reports from all ATPs. Information copies of status reports flow through the CSB support operations section or ammunition battalion to the CSG and COSCOM support operations section. These reports include data on ammunition issues, receipts, condition code changes, and losses. Critical ammunition status is reported in the Class V asset report. The CMMC prepares an ammunition status report to inform the COSCOM support operations officer and corps G4 of the current ammunition stockage posture.

AMMUNITION DISTRIBUTION

The TAACOM MMC transmits a copy of the manifest or manifest data to the CMMC prior to shipment arrival. This allows the CMMC time to review stock status and determine if a change of consignee is required. Priority of resupply is to ASPs identified for buildup to support tactical plans.

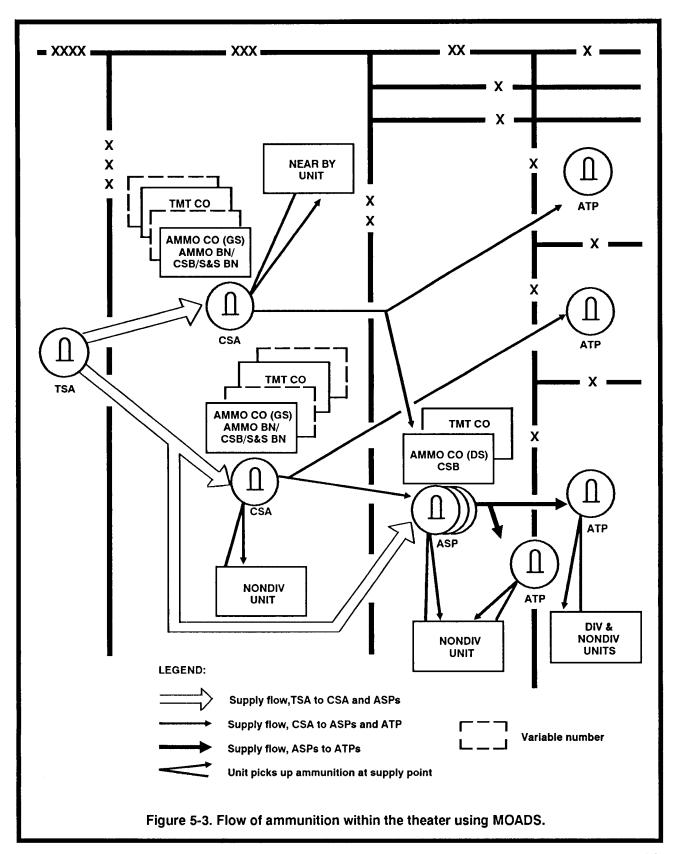
The CMMC notifies the CMCC after receiving notice of incoming shipment. The CMMC informs the CMCC of type, compatibility, weight, cube, quantity, and destinations of the shipment. The CMCC/MCT then coordinates movements.

Figure 5-3 depicts conventional ammunition resupply. Ammunition is normally shipped via sea transport and moved through freed ports or LOTS to a TSA in the COMMZ. From that storage area, theater trucks move ammunition shipped in DODIC loads to CSAs and ASPs.

CSAs receive an estimated 50 percent of replenishment ammunition from a TSA and 50 percent from the point of entry in the theater. The CMMC releases stocks from CSAs to replenish the corps ASPs/ATPs and FSB ATPs. Under MOADS, ASPs receive an estimated 50 percent of their replenishment ammunition from the CSA, 30 percent from the TSA, and 20 percent from the port of debarkation. Once the PLS is fielded, ASPs may receive all of their stocks from the CSAs.

CSAs and ASPs configure ammunition into CCLs for shipment to ATPs. Replenishment shipments to ATPs flow from the CSA, with backup supply provided by a designated ASP. To reduce handling time, the CSA ships CCLs to the ATPs, bypassing the ASPs whenever possible. ATPs receive an estimated 75 percent of the division's requirements from the CSAs and 25 percent from the ASPs.

The ammunition distribution system is a supply point distribution system. This means that units use their organic vehicles, with possible onboard MHE, to pick up ammunition stocks to replenish their basic load. To reduce the travel distances of using unit vehicles, the



CSG OPORD directs that certain customer units pick up their ammunition stocks from a nearby ASP or CSA in their support area.

Corps aviation units provide emergency rapid resupply of low density, high value aviation Class V to an ATP in the aviation brigade's rear. As required, supporting ASPs and CSAs provide a sling-out pad for aerial resupply.

CHEMICAL AMMUNITION RELEASE

Chemical ammunition can be released for use only upon approval of the corps commander. The corps chemical officer transmits chemical employment approval

through command channels. A chemical weapons implementing instructions message provides logistics information for the COSCOM. It provides the order to execute forward deployment of chemical munitions or to transfer chemical munitions to allied forces. To speed retaliatory firings, aircraft deliver initial issues of chemical ammunition to artillery units after a release directive.

Binary chemical munitions are distributed through conventional ammunition channels. As required, escorted convoys from the TSA in the COMMZ resupply the chemical ASP.

AMMUNITION HANDLING

Improved ammunition handling means reduce handling, conserve transportation, speed ammunition transfer operations, and streamline the ammunition distribution system.

COMBAT CONFIGURED LOADS

CCLs consist of preplanned packages of high-density ammunition tailored to support a type unit, a task force, or weapon systems. CCLs facilitate loading mission support vehicles with a minimum breakdown of ammunition. Instead of preparing unique mixed loads for each DODIC requested, DS/GS ammunition units configure and load complete rounds of CCLs for shipment when directed by the CMMC. CSAs construct CCLs for shipment to ATPs. As time permits, ASPs may also configure CCLs.

CCLs simplify ammunition resupply planning and coordination between the DAO and CMMC. The DAO reviews proposed CCL configurations submitted by S4s. He submits a consolidated division CCL request to the corps G4. The corps G4 coordinates with CMMC munitions managers in developing a corps CCL set of standard loads to support corps maneuver units. Corps staffs should define 15 to 20 standard CCLs.

CCL sets also help speed transmission of ammunition resupply requirements. Instead of ordering ammunition by each single DODIC, the DAO requests CCLs by their identifier. The DAO coordinates with the CMMC to ensure that CCLs are distributed to the right ATP at the right time.

MOADS PALLETIZED LOAD SYSTEM

MOADS uses PLS self-loading trucks and flatracks to enhance ammunition distribution and speed ammunition transfers at ASPs and ATPs. Units designated to receive PLS vehicles include corps transportation units, DS and GS ammunition units, and self-propelled artillery units. Units not authorized PLS vehicles require unit vehicles with onboard MHE to self-transload ammunition. Ammunition units and ATPs must retain personnel and MHE to transload ammunition to non-PLS units.

Using PLS vehicles results in the following changes in ammunition distribution throughout the theater:

- The TSA stores single-DODIC ammunition on PLS flatracks. It ships only to the CSAs, not to the ASPs. Since theater truck units do not have PLS vehicles, line-haul trailers or rail flatcars transport PLS flatracks to the CSAs.
- CSAs ship 100 percent of ASP requirements on single-DODIC loaded PLS flatracks. Based on division forecasts and updated changes, CSAs construct and ship CCLs to the ATPs. Corps PLS vehicles move ammunition shipped forward from CSAs on PLS flatracks.
- ATPs receive 75 percent of their requirements as combat configured loaded flatracks transported by PLS vehicles from the supporting CSA. An ASP provides the remaining 25 percent of ATP requirements.

MINES AND EXPLOSIVE ORDNANCE

Mines and explosive demolitions help delay, disrupt, or channel enemy movement and halt or slow his offensive

or counterattack. They help stop enemy advances and enable offensive and counterattacking forces to maneuver.

During the offense, maneuver units breach minefield and obstacles to regain the full use of routes and terrain. To counter enemy movement, defending forces emplace obstacles quickly. They need to be kept supplied with ground-delivered scatterable mines, cratering devices, and hasty bridge demolition materials.

Threat forces employ mines and obstacles in depth. Enemy artillery or air strikes on bridges, airfields, roads, and urban areas also create obstacles to maneuver. Maneuver forces maintain momentum by conducting hasty breaches using available countermine assets. Mines and explosives provide a way to quickly breach wire obstacles, destroy log obstacles, and clear aside debris to reopen routes.

Deliberate breaches require combat engineer support and mines or explosives as well as organic engineer equipment. Engineers use mines and obstacles in countermobility operations, to include closing the most probable avenues of approach, destroying bridges, and creating obstacles at critical areas along the flanks of advancing forces. Engineers coordinate breaching materiel requirements with the CMMC.

EXPLOSIVE ORDNANCE DISPOSAL SUPPORT

The increase in terrorists' threats, threat munitions, and new and unusual unexploded ordnance devices stresses the capability of EOD support resources. The EOD support structure consists of an EOD control team and EOD detachments. FMs 9-6 and 9-15 provide more information on these elements and their employment.

EOD Control Team

The EOD control team (TOE 09527LA) provides centralized command and control of EOD operations and functions in the corps area. Assigned to the corps headquarters on the basis of one per corps, the team receives its directives from the corps rear CP. The EOD control team can coordinate a maximum

of 500 routine incident reports per day from its 3 to 10 subordinate EOD detachments and augmentation EOD response teams.

S3s request EOD support or report EOD incidents through the area RAOC. After coordination with the corps G3, EOD control team personnel prioritize the reports and coordinate the render-safe operations of subordinate detachments and augmented response teams. They also provide technical expertise in dealing with improvised explosive devices.

EOD Detachments

EOD detachments (TOE 09527LB00) provide render safe and disposal EOD service on an area basis. They neutralize hazards resulting from domestic or foreign ordnance or improvised explosive devices (conventional, nuclear or nonnuclear, chemical, or biological). EOD detachments assist the area RAOC with damage control service through threat ordnance neutralization. Each detachment can respond to up to 50 routine incidents per day, averaging no more than 2 hours.

Based on the projected number of EOD incidents, up to ten detachments might be allocated to the corps. They are attached to fixed strength units or head-quarters based on the tactical situation in the area served. Several detachments locate near the area RAOC. These detachments receive rations, quarters, and logistics support from the CSG HHC providing life support to the RAOC. Though not assigned perimeter defense roles, these EOD detachments should be included in the supporting CSG HHC's base defense plan.

The area RAOC coordinates support required by the EOD detachment. This includes securing the incident area, providing a secure disposal or storage area, and coordinating any needed air transportation.

MANAGING MUNITIONS SUPPORT OPERATIONS

Munitions management focuses on the requirement to supply large quantities of diverse types of munitions to widely dispersed units often moving every few days. The CMMC manages the distribution of munitions, to include chemical ammunition. The TAMMC provides centralized control over the distribution of munitions between corps.

COSCOM MUNITIONS SUPPORT BRANCH

The COSCOM munitions support branch provides technical staff control and supervision through the COSCOM support operations officer to the CMMC's missile-munitions division office. This office reports materiel problem areas to the COSCOM munitions support branch. The COSCOM support operations

officer recommends Class V distribution priorities and meets with the corps G3 on problems which significantly impact on support of tactical operations.

Munitions officers and their staff recommend ways to offset shortfalls in the COSCOM's ability to arm the corps force. Some suggestions are listed on Table 5-1. They perform the following tasks:

- Review the corps directed CSR and forward distribution recommendations to the corps G4 and G3 based on ammunition status.
- Assess recommended locations for CSAs and ASPS in relation to the transportation network.
- Monitor CSSCS reports on the supply status of Class V items and assess the impact of critical theater-wide shortages and theater suspensions.
- Review SAAS output reports of assets in transit between storage points to ensure timely supply support to customer units.
- Monitor stockage and distribution of munitions, missiles, special weapons, and associated test equipment.
- Evaluate and analyze data from the CMMC for trends and potential support problem areas.
- Recommend ways to resolve munitions support problems to the COSCOM support operations officer.
- Coordinate the cross-leveling of Class V resources with the CMMC and CSGs.
- Help resolve corpswide distribution problems by recommending actions such as relocating ASPS or operating an ammunition supply company from two separate locations.
- Recommend movement of CSAs and ASPs as the situation dictates.
- Provide advice on the adequate dispersal of munitions to prevent or reduce losses by enemy action or accident.
- Monitor munitions malfunctions throughout the COSCOM area of responsibility.
- Develop procedures for the receipt, storage, and maintenance of munitions; the renovation of restorable rounds; and the destruction of condemned stocks.

 Monitor movement of chemical or contaminated munitions through the COSCOM AO in coordination with COSCOM transportation support branch staff.

CMMC MANAGEMENT

The CMMC provides Class V management and control. It manages GS level stocks in COSCOM subordinate units. It reviews and analyzes demands and computes corps requirements for ammunition. It also monitors the flow of munitions into and within the corps in order to maintain visibility of the ability of COSCOM units to receive stocks.

CMMC MISSILE-MUNITIONS DIVISION OFFICE

The CMMC missile-munitions division office performs integrated materiel management of missiles and munitions and systems unique ancillary equipment, including end items, components, and repair parts. Supported materiel includes –

- Rockets.
- Guided, ballistic, and target missiles.
- Missile tire coordination equipment.
- Related special purpose and multisystem test equipment.

This division consolidates and processes requirements for missile-munitions. It manages day-to-day missile and munitions logistics assets of the corps. It programs maintenance and cross-levels missile maintenance resources. The division chief refers missile-munitions materiel problems that deviate from the routine to the COSCOM support operations officer/munitions support branch chief.

To permit intense management of munitions materiel, the division is divided into the following three functional branches.

Missile-Munitions Equipment Supply Branch

This CMMC branch manages the day-to-day supply actions for missile and munitions equipment. Branch personnel process and control documents sent to or received from storage sites. Their responsibilities include —

- Maintaining stock record accountability for Class V and related Class VII materiel within the corps.
- Implementing policies outlined in ARs 710-1 and

Table 5-1. Ways to offset shortfalls.

AMMUNITION SHORTFALLS

- Substitute with like DODICs.
- Cross-level between ASPs/CSAs.
- Reduce basic loads.

DISTRIBUTION

- Preposition Class V supplies forward following a risk assessment.
- Divert transportation assets from less critical missions.
- Use assets in supported units.
- Increase throughput.
- Revise movement priorities.
- Increase the use of rail and inland waterways.
- Request HNS.

MHE SHORTFALLS

- Cross-level assets.
- Task units not fully occupied to provide labor.
- Revise MHE maintenance priorities.
- Contract HNS.

710-2 and SAAS technical manuals for operation of the stock record account.

- Monitoring requisition objectives created by SAAS.
- Processing requisitions for Class VII TOE missile equipment shortages and taking follow-up actions, as required.
- Providing assistance to the equipment authorization branch, service support division, on cross-leveling missile-munitions materiel already in the corps area.
- Establishing mandatory stockage levels for missilemunitions items not automatically stocked, stored, and issued through SAAS software programs.
- Monitoring SAAS output to ensure timely support to customer units.

- Reviewing stock status reports consolidated from ammunition storage locations and using them to compute authorized levels.
- Monitoring the stock status of ammunition on hand or being throughput from the corps rear area.
- Coordinating with NICPs to fill missile-munitions requirements.
- Coordinating with the COSCOM munitions support branch on handling corpswide distribution problems.
- Redirecting munitions en route as directed by the COSCOM support operations officer when higher corps priority missions dictate.

Missile-Munitions Parts Supply Branch

This CMMC branch manages the day-to-day supply

of repair parts for missile and munitions equipment. Branch personnel implement the policies and plans of the COSCOM support operations officer/munitions support branch chief. Branch personnel responsibilities include –

- Maintaining Class IX ASLs of missile and munitions equipment repair parts.
- Recommending cross-leveling of missile and munitions equipment repair parts.
- Providing input to SAMS to generate shipping instructions to missile support units, missile maintenance units, and ammunition supply units.
- Reviewing output from SAMS to determine trends in operational readiness.
- Processing requisitions on a daily basis and initiating follow-up actions on missile-munitions repair parts.
- Resolving corpswide distribution problems.
- Laterally transferring missile-munitions parts to meet urgent demands.
- Directing redistribution of stocks from activities that reflect an excess of missile-munitions parts.

Missile-Munitions Maintenance Branch

This CMMC branch manages the maintenance system in support of missile-munitions equipment in the corps. Branch personnel implement the policies and plans of the COSCOM support operations officer and munitions support branch chief. Their responsibilities include –

- Coordinating with the missile-munitions supply and repair parts branches.
- Evaluating SAMS output.
- Transmitting instructions to missile support units, missile maintenance units, and ammunition supply units on evacuation of unserviceable equipment requiring higher level maintenance.
- Transmitting instructions to units on the evacuation of unserviceable materiel and scrap.
- Transmitting repair priority data to missile support

- units, missile maintenance units, and ammunition supply units.
- Coordinating with the parts supply branch on repair parts requirements for maintenance of items in short supply.
- Expediting maintenance when the estimated delivery date proves unsatisfactory.
- Coordinating requirements for controlled cannibalization or parts fabrication.

CSSCS CLASS V REPORTS

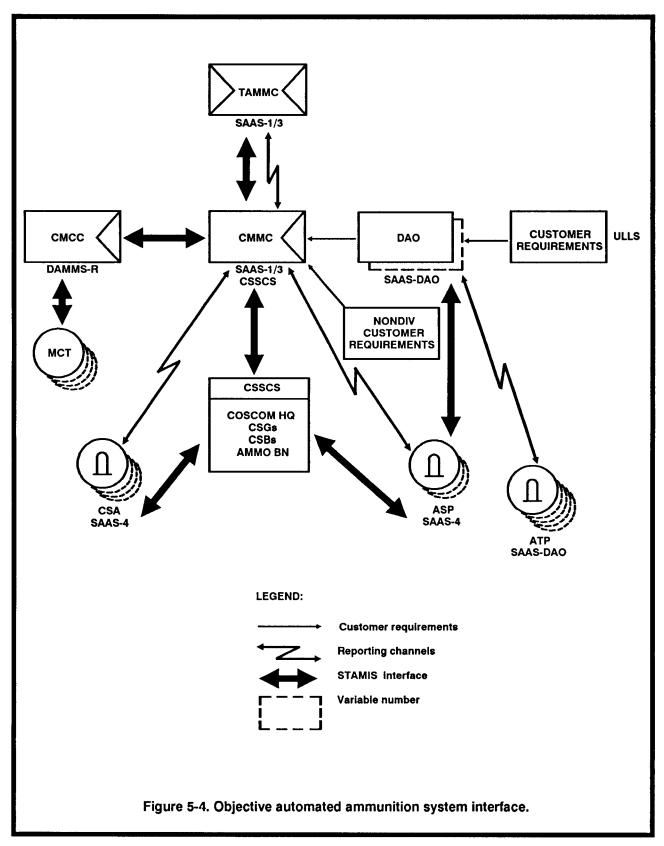
CSSCS tracks those munitions items which appear on the CSSCS tracked items list. As a result of its interface with SAAS, CSSCS provides status displays of Class V assets within the corps area. Ammunition stockage data flows from CSAs and ASPs to the battalion, group, and COSCOM support operations section and the CMMC. Ammunition asset displays report assets for the force. Displays also list assets located in supply points and all the DODAACs or weapon categories on hand in subordinate units.

COSCOM munitions support branch officers use CSSCS force level displays to assess the current or projected availability of ammunition assets for the force. They assess the unique situation at a particular ammunition supply unit or the status at a particular CSA, ASP, or ATP. This allows them to better tailor stockage levels to support requirements.

The COSCOM support operations officer uses CSSCS force level displays to recommend adjustments to distribution plans, allowing additional supply of ammunition to committed units.

STANDARD ARMY AMMUNITION SYSTEM LEVEL 1/3

SAAS 1/3 provides CMMC munitions commodity managers stock status and asset visibitity over ClassV stocks. They use SAAS 1/3 to perform stock control, generate materiel release orders, and redirect ammunition stocks intransit based on the tactical situation and critical need. Figure 5-4 illustrates the interface of SAAS 1/3 at the CMMC with SAAS 4 run on TACCS at the CSAs and ASPs.



CHAPTER 6

Fueling the Corps Force

The corps force can move only as long as vehicles and aircaft receive fuel. While METT-T factors affect daily fuel consumption, the COSCOM may need to supply up to 600,000-gallons of fuel per day in support of a heavy division and its supporting corps units. Nondivision elements in the division sector may require an additional 80,000-gallons each day. COSCOM petroleum supply units and DS supply units need to stock sufficient fuel throughout dispersed Class III points. In order that fuel not become a war stopper, the supporting transportation distribution system needs to provide rapid distribution of fuel.

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PLANNING FUEL SUPPORT

To support the movement and momentum of initial clashes, the COSCOM pushes fuel forward and deep from the outset of battle. COSCOM petroleum support branch staff officers preplan bulk fuel resupply through D +10. Plans need to include the uninterrupted flow of fuel to joint or combined operational forces. The COSCOM support operations officer ensures that the corps' Class III bulk distribution plan agrees with the theater army inland distribution plan for bulk fuel.

CSS PLANS BRANCH

CSS plans branch personnel, assigned to the COSCOM support operations section, ensure that fuel support annexes conform with OPLANs. They coordinate with petroleum support branch personnel in preplanning ways in which to redistribute or shift the flow of bulk fuel to support a main thrust. They coordinate with staff assigned to the other branches of the support operations section in determining the best way to synchronize resources. They prepare the support operations estimate and annex to COSCOM OPLANs/OPORDs. In planning fuel support, they need to consider the –

- Mission, size, and composition of the force to be supported.
- Corps commander's intent.
- Battlefield terrain.
- Fuel distribution resources available.
- Amount and type of fuel to be distributed (requirements of the force).

- Fuel distribution system or method (transportation mode).
- Petroleum supply or DS supply units required to operate the system.
- Special seasonal requirements, such as antifreeze, fuel additives, and oil weight.

PETROLEUM SUPPORT BRANCH

Petroleum support branch personnel, assigned to the COSCOM support operations section, oversee petroleum support planning. They develop plans and policies for petroleum management by CMMC petroleum/water division staff. They develop plans, policies, and procedures involving the receipt, storage, and distribution of bulk fuels. They also –

- Assess petroleum requirements and consumption factors and recommend changes to storage requirements and delivery schedules.
- Make recommendations for the troop basis and modification of petroleum supply unit MTOEs.
- Provide input to the force design/plans branch for petroleum support of contingency operations.
- Project fuel requirements by type of fuel based on the quantity of fuel-consuming equipment and vehicles.
- Coordinate with CMMC petroleum/water division staff on criteria and processing procedures for emergency requirements.
- Establish policies on quality surveillance.

- Establish procedures for collecting and reporting petroleum management information.
- Coordinate with the transportation support branch, CMMC, and CMCC to identify Class III movement requirements as part of movement programming.

Time, space, distance, terrain, existing resources, scope of requirements, and operating environment also need to be considered. More specifically, petroleum support branch personnel need to consider the –

- Number and types of fuel-consuming equipment and vehicles that use MOGAS, diesel, and aviation fuel.
- Availability and capability of subordinate units to provide the required support.
- Number and location of Class III points, to include throughput distribution.
- Distribution means (tank and pump unit, pipeline equipment, hoseline, rail, barge, or tank truck).
- Type of terrain and distance between units.

LOGISTICS PREPARATION OF THE BATTLEFIELD

COSCOM petroleum support branch personnel coordinate with COSCOM ACofS, G2 and G3 staff on collecting and assessing data which impact on planning fuel support operations. They identify priority intelligence requirements.

During initial planning stages, knowledge of the AO and threat capabilities helps petroleum officers project petroleum requirements and plan efficient fuel support operations. Petroleum support branch personnel can find the following information from IPB products:

- Types of industrial fuel resources in the rear area.
- Area port facilities and discharge capacities.
- Bulk fuel storage and pipeline locations.
- Highway and rail networks and capacities (verified by the transportation support branch or CMCC).
- Threat weapon systems ranges.
- Location of threat fuel resources.
- Threat air and ground named areas of interests.

Petroleum officers use IPB battlefield area evaluation

products on the operations area and friendly and enemy forces to recommend the number and placement of DS supply units and petroleum supply units on time phased deployment lists. IPB products on enemy capabilities, composition, weaponry, and how the enemy might fight help petroleum officers preplan the type and quantity of bulk fuels and packaged products required to support initial operations. They also help them plan ways to protect Class III points and distribution systems.

CSSCS REPORTS

Petroleum support branch personnel plan fuel support for operations 48 to 72 hours in the future. CSSCS software provides Class III asset status displays on bulk and packaged Class III within the corps area. CSSCS status reports list the quantity or days of supply available in Class III supply points and individual units. CSSCS tracks MOGAS, DF, and aviation fuel assets. It reports on other petroleum assets only if they appear on the CSSCS tracked items list. Class III packaged asset data flows into CSSCS through its interface with SARSS-1.

Petroleum support branch personnel use CSSCS force echelon display forms to assess the current and projected availability of Class III assets for the corps force. They use asset displays to evaluate Class III storage and distribution requirements against capabilities of units to support shifts in tactical operations. They can view a display of a particular unit to assess unique situations. CSG petroleum personnel use supply point displays to view unique situations at a particular supply point. Based on projected asset information from Class III points, they coordinate with the MCT for extra transport capability.

FUEL CONSUMPTION FACTORS

COSCOM petroleum officers use fuel consumption factors in FM 101-10-1/2 and SB 710-2 to develop plans for supporting corps forces. For NATO operations, STANAG 2115 provides factor percentages used to adjust fuel consumption estimates to the type of combat, terrain, and climate expected in the AO. Petroleum staff officers use fuel consumption factors to help determine the number and type of fuel distribution equipment needed.

FUEL FORECASTS

The COSCOM pushes bulk fuel forward in response to forecasted requirements. Forecasts vary, depending upon the probable level of activity. S4 personnel forecast requirements based on ullage and fuel consumption data for periods of similar level activity and operations.

The COSCOM support operations officer, in coordination with the CMMC's petroleum and water division staff, modifies fuel forecasts based upon GS stock status, corps commander priorities of support, and the tactical situation. The CMMC petroleum and water division keeps the support operations officer informed of forecasted work loads.

NBC PLANNING CONSIDERATIONS

Supported units set up in great depth and across wide fronts. Requirements for increased dispersion of forces, increased movement of maneuver units, and stock losses result in increased fuel requirements. To ensure availability of adequate fuel support, the bulk fuel supply system needs some redundancy. Bulk fuel storage sites must be dispersed and camouflaged to avoid presenting a lucrative target.

Effects from NBC Attacks

Flying debris may puncture collapsible bags at Class III

points. The pressure created by a blast can destroy fabric tanks. Heat resulting from a nuclear explosion causes secondary explosions on contact with vapors or flammable surfaces. Induced radiation from a nuclear explosion causes induced radiation in fuel system supply point equipment.

Impact on Throughput Distribution

Resumption of throughput shipments depends upon the disruption of road networks and combat losses of tanker trucks. Whenever possible, resupply needs to occur at night, using rendevous techniques.

Petroleum support branch personnel and CSS plans branch personnel need to plan for interruptions in LOCs and combat loss of petroleum tankers. The COSCOM compensates for these interruptions and combat losses through tankers held in reserve for automatic resupply or throughput of bulk fuels from TA.

COSCOM FUEL ORGANIZATION

The COSCOM's fuel organization depends upon the type and level of conflict, type and size of supported forces and their missions, existence of HN petroleum assets, and estimated length of the operation. It also depends upon the corps reserve policy, availability of bulk fuels in underdeveloped theaters, and the requirement for petroleum quality surveillance. Allocation of habitually supporting medium truck companies (petroleum) depends on the corps commander's priorities, road conditions, and throughput distances.

FUEL SUPPORT ORGANIZATION

Figure 6-1 depicts the COSCOM's bulk fuel organization. The organization provides both DS level fuel support to nondivision units on an area basis and corpswide GS level bulk fuel support of the corps' divisions, separate brigades, and ACRs. The fuel organization consists of –

- Quartermaster supply companies, DS.
- Petroleum supply company, GS.
- Medium truck companies (petroleum).
- Petroleum product laboratory (mobile).
- Petroleum supply cellular logistics team, if applicable.
- Petroleum pipeline and terminal operating company, if attached from EAC.

Quartermaster Supply Companies, DS

The COSCOM assigns DS supply companies (TOE 42447L000) to CSGs to provide DS level bulk fuel and packaged products to nondivision units. These companies provide mobile falling station support for units in the area. They establish refuel-on-the-move sites for convoys passing through their area of responsibility or set up fuel stations at assembly areas for assault vehicles.

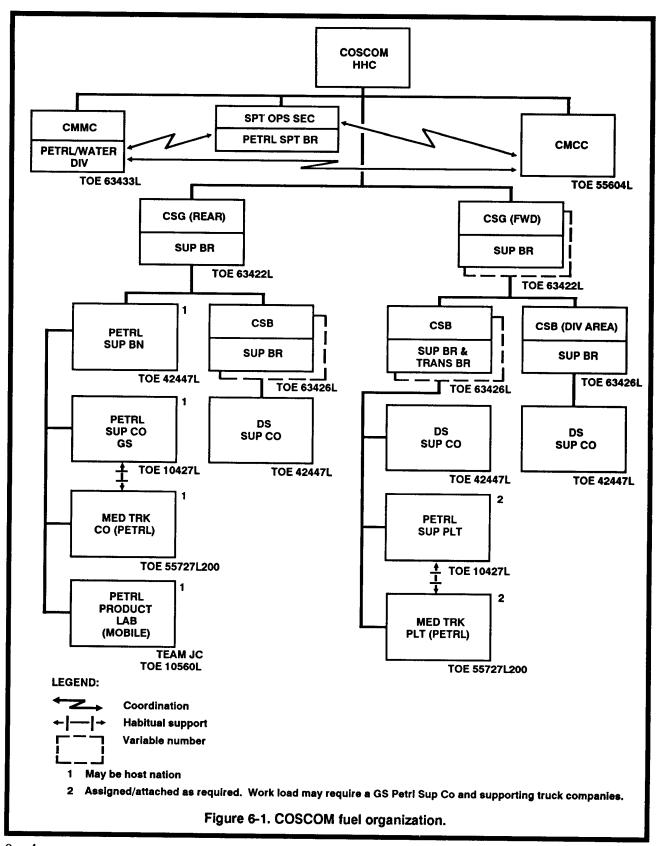
Forward CSGs normally employ a DS supply company in the division area to provide support to nondivision units operating in the division sector. The DS supply company may also provide reinforcing support to FSBs and MSB to enable them to provide support to corps forces employing in the brigade or division area.

Petroleum Supply Company, GS

Petroleum supply companies, GS, provide corpstide GS level bulk fuel support to nondivision DS supply companies, DISCOM MSBs/FSBs, separate brigade support battalions, and ACR support squadrons. These companies also maintain a prescribed portion of the corps' petroleum reserve. Normally, a petroleum supply company cannot support more than one division slice of the corps. However, the size of the corps reserve affects actual allocation.

Medium Truck Companies (Petroleum)

These companies (TOE 55728L200) transport bulk



fuel in organic tankers from a GS petroleum supply company to DS supply companies. They throughput bulk fuel to the MSB's main Class III point in the DSA and FSB's forward Class III point in the BSA.

Petroleum Product Laboratory (Mobile)

Depending upon petroleum testing requirements and the intended use and criticality of fuel, the COSCOM attaches this team (TOE 1056OLJC) to the rear CSG's petroleum supply battalion. The team tests petroleum samples and provides technical assistance on sampling fuels.

Petroleum Supply Cellular Logistics Team

Depending upon the theater of operation and national agreements, the COSCOM could attach this team (TOE 10560LS00) to a subordinate CSG. This CLT provides the liaison and interface between a WHNS petroleum supply battalion and the US petroleum distribution system. The CMMC forwards taskings to the WHNS petroleum supply battalion through this CLT.

The basis of allocation is one petroleum supply CLT per HN petroleum supply battalion. Though attached to a CSG HHC, it collocates with the HNS petroleum supply battalion. A quality surveillance specialists collocates with each WHNS petroleum supply company.

The WHNS petroleum supply battalion provides bulk petroleum storage and transportation in support of US forces within the corps rear area. WHNS petroleum supply companies can establish and operate a Class III supply point and bulk transfer sites.

The CLT coordinates the petroleum supply support provided by WHNS petroleum supply companies to US military units. It passes resupply data and prioritization from the CMMC to the WHNS petroleum battalion. Team personnel –

- Coordinate mission taskings and work load requirements received from the CMMC with the WHNS petroleum supply battalion.
- Coordinate the issue and shipment of petroleum products between HN petroleum supply companies and supported US units.
- Provide technical and procedural guidance to the HN petroleum supply battalion based on US quality control standards for storing, issuing, and transporting petroleum products.
- Forward petroleum forecasts from the WHNS petroleum supply battalion to the CMMC.

- Maintain petroleum stock visibility and provide status reports to the CMMC.
- Provide quality surveillance at HN petroleum supply companies.
- Provide interpretation services for US personnel visiting HN petroleum supply unit sites.

Pipeline and Terminal Operating Company

To support an independent corps, the TA commander can assign a pipeline and terminal operating company (TOE 10407L) to the COSCOM. The company can operate a tactical marine terminal, loading facilities, and fuel distribution pipelines.

SAMPLE BATTLEFIELD EMPLOYMENT

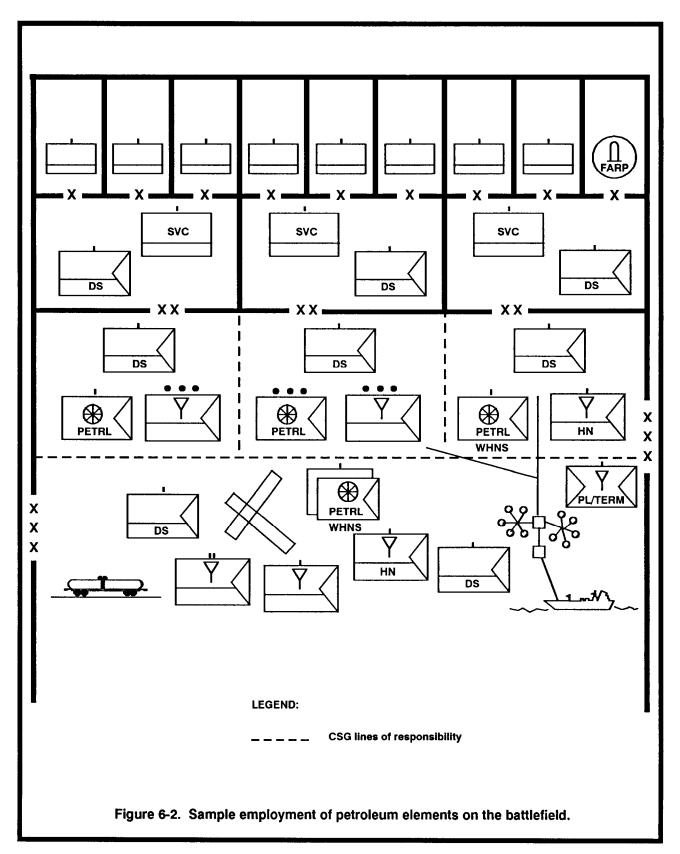
Figure 6-2 depicts how a COSCOM might employ its petroleum assets in support of a sample corps force.

At the direct support level, this COSCOM allocated a nondivision DS supply company to each CSG. Each company provides bulk fuel on an area support basis to supported nondivision units. As shown on Figure 6-2, a corps Class III supply point sets up near the division boundary. The supply point provides area support to nondivision forces in both the division sector and the forward CSG's AO behind the division boundary. It provides reinforcing or augmenting support to FSB/MSB Class III points to enable them to support corps forces in the brigade or division area.

In this example, the corps allocated two GS petroleum supply companies to the COSCOM. Faced with moderate rate of combat, the COSCOM's petroleum officer estimated that the committed heavy division required 500,000-gallons per day. At TOE Level 1, each petroleum supply platoon can receive, store, and issue over 600,000-gallons of bulk fuel per day.

Since a petroleum supply company consists of two petroleum supply platoons, the COSCOM allocated a platoon to each of its forward CSGs. The forward CSGs attached the petroleum supply platoon and supporting medium truck platoon (petroleum) to a subordinate CSB employed in the forward portion of the corps area. The COSCOM attached the other petroleum supply company and supporting medium truck companies (petroleum) to the rear CSG's petroleum supply battalion.

To move bulk fuels forward, the COSCOM allocated a medium truck company (petroleum) to each of its



CSGs. These companies were further attached to a subordinate CSB or petroleum supply battalion. At TOE Level 1, with 75 percent availability of its authorized 5,000-gallon petroleum tankers, each medium truck company (petroleum) can transport approximately 450,000-gallons of fuel per day in two lifts.

The medium truck companies (petroleum) haul bulk fuel from the GS petroleum supply platoon/company to the MSB's main Class III supply point in the DSA.

Based on METT-T and the tactical situation, they also haul fuel to the FSB's forward Class III points in the BSA.

Depending upon the existence of rail, the 7.5-10 mile assault hoseline authorized each of the petroleum supply companies may be used to move fuel from railheads to Class III supply points or from collapsible storage tanks to rail cars. The hoseline could also be used to move fuel to an airfield.

COSCOM FUEL DISTRIBUTION SYSTEMS

The fuel distribution system is an automatic resupply system based on fuel forecasts and status reports. It relies on the routine rapid push of bulk fuel, with distribution both lateral and forward.

HABITUAL SUPPORT REQUIREMENT

Bulk fuel distribution relies upon the habitual support relationship between GS petroleum supply companies and medium truck companies (petroleum). Assigning a petroleum supply platoon and an habitually supporting truck company to each forward CSG enables the CSGs to control the fuel distribution system, supporting daily operational requirements for bulk fuel in its area of responsibility.

When priorities warrant or maintenance and battle losses leave the petroleum supply units with insufficient truck tractor support, the COSCOM support operations officer directs that the CMCC reallocate tractors to petroleum supply units.

BULK FUEL DISTRIBUTION SYSTEM

Figure 6-3 depicts the bulk fuel distribution system. Requirements flow from DMMCs, BMMCs, RMMCs, and Class III supply points. S4s forecast requirements for the next 72-hour period. They base their forecasts on projected consumption data for the probable level of activity. The frequency of submitting forecasts varies, depending upon the intensity of operations.

CMMC petroleum/water division personnel compare bulk requirements against quantities available for issue. The COSCOM support operations officer directs that the CMMC adjust forecasted requirements based on his knowledge of corps issue priorities and tactical support requirements. As appropriate, the CMMC submits consolidated requirements to the TAMMC or JPO.

The theater army petroleum group ships bulk fuel, either by pipeline or bulk carriers, to the furthest points practicable in the corps. Medium truck companies

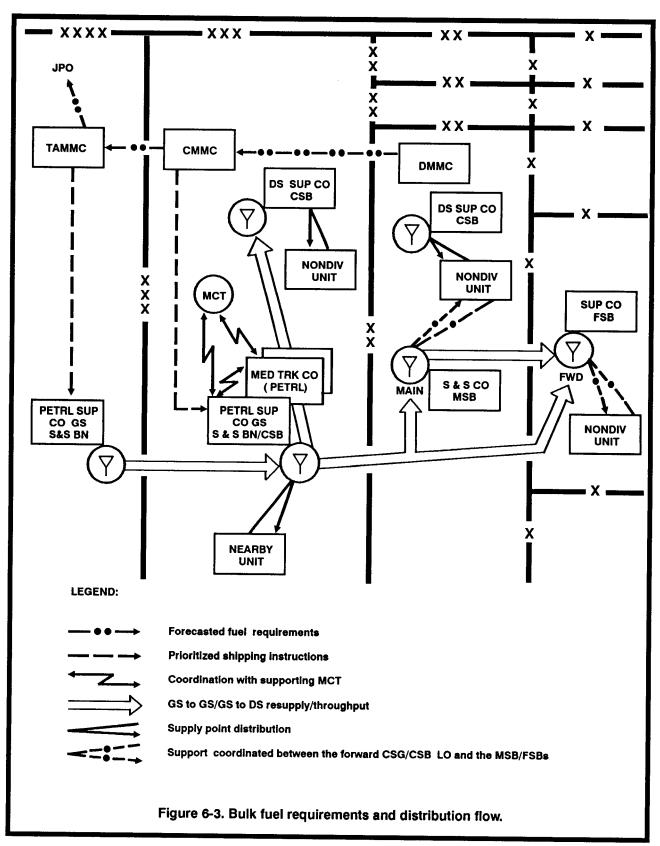
(petroleum) transport fuel from tankage in the corps rear area to Class III supply points operated by petroleum supply companies and nondivision DS supply companies. The most responsive method of support is to throughput fuel from the petroleum supply company to the FSB's forward Class III supply point. To meet unexpected requirements, the CMMC diverts or reroutes fuel being transported from COMMZ stocks.

For the using unit, bulk fuel is distributed by supply point distribution. This means that supported units drive organic tank vehicles to their supporting DS level Class III supply point. However, if the using unit operates nearer the GS petroleum supply company, the COSCOM OPORD directs that the unit obtain fuel from the petroleum supply company.

Army aviation assets sling in 500-gallon drums to refuel helicopters close to the FLOT. This allows helicopters to stay on station longer in support of forward troops. An airdrop supply company prepares loads for delivery by fixed wing aircraft. As required, DS supply company personnel rig 55 and 500-gallon drums for helicopter external sling load.

For example, to support a cut-off M-1 tank company of 15 tanks by giving each a minimum of 300-gallons of fuel requires at least nine 500-gallon drums, delivered by at least two CH-47Ds. The tank company needs pumps, hoses, and fittings to get the fuel out of the drums. The planning and amount of equipment involved, plus the scarcity of available aircraft, make this type of support to ground vehicles strictly emergency type support.

When ground LOCs are not secure or available, or when the enemy or tactical situation cuts the unit off from normal resupply, emergency aerial resupply may be the only way to support operations. However, the Air Force only has a limited number of C-130s on hand which might be used to airdrop 500-gallon drums



for quick turnaround. Even to support on an emergency basis requires extensive planning and coordination with the CMCC. Refer to FMs 55-10 and 100-27.

SINGLE BATTLEFIELD FUEL

In an effort to standardize fuels, DOD directed that overseas theaters convert to a single fuel with ground/air applications. The single fuel will replace JP-4 diesel fuel; and eventually, MOGAS. USAREUR uses JP-8. SOUTHCOM uses JP-5. CONUS units continue to use JP-4 and DF along with MOGAS.

Units deploying to overseas theaters need to coordinate with the overseas command to determine the fuel of choice in that AO. They might need to convert and redesignate organic DF ground equipment to agree with the fuel in use in the overseas theater. A change in fuel type results in an increase in filter consumption. Minor modifications may be needed to maximize the advantages of using JP-8 as the single fuel forward.

AVIATION FUEL DISTRIBUTION SYSTEM

Figure 6-4 depicts the distribution flow of aviation fuel. Aviation battalion S4s forecast requirements based on the expected duration of helicopter missions.

The petroleum supply company and its supporting medium truck company (petroleum) provide routine resupply of JP fuel forward to the aviation brigade organization. Approximately 95 percent of corps aviation brigade attack helicopters operate from the division area. Corps medium truck companies (petroleum) transport fuel to the attack/assault helicopter battalion combat trains. They also deliver fuel to the division

airfield site, where medical evacuation helicopters normally refuel.

Corps aviation units use organic vehicles to pickup JP-4/JP-8 from the aviation brigade supply point. In an emergency, they obtain fuel from the MSB's main Class III point. The main Class III point maintains a small reserve supply of aviation fuel for emergencies or to position at forward fuel points.

PACKAGED PRODUCTS DISTRIBUTION SYSTEM

Requirements for packaged products depend on the number and type of equipment supported, climate conditions, and terrain. COSCOM petroleum support branch staff officers use SB 710-2 to determine requirements data for packaged products consumption during intense and sustained combat.

Units request packaged products in the same manner as they request Class II, IV, and VII supplies. They submit requests to their supporting DS supply company. If the requirement exceeds the available quantity, the DS supply company forwards a requisition to the CMMC. The CMMC then cuts an MRO directing the general supply company to issue packaged products to the DS supply company.

With the exception of fog oil, packaged products are distributed by supply point distribution. This means that units drive to their supporting DS supply company site to pickup packaged products. In contrast, corps trucks transport fog oil from the GS petroleum supply company to corps chemical units, bypassing the DS level.

MANAGING FUEL SUPPORT OPERATIONS

The COSCOM support operations officer is responsible for centralized control of bulk petroleum allocation and distribution within the corps. He determines allocation according to priorities set by the corps G3. The CMMC's petroleum and water division implements these priorities.

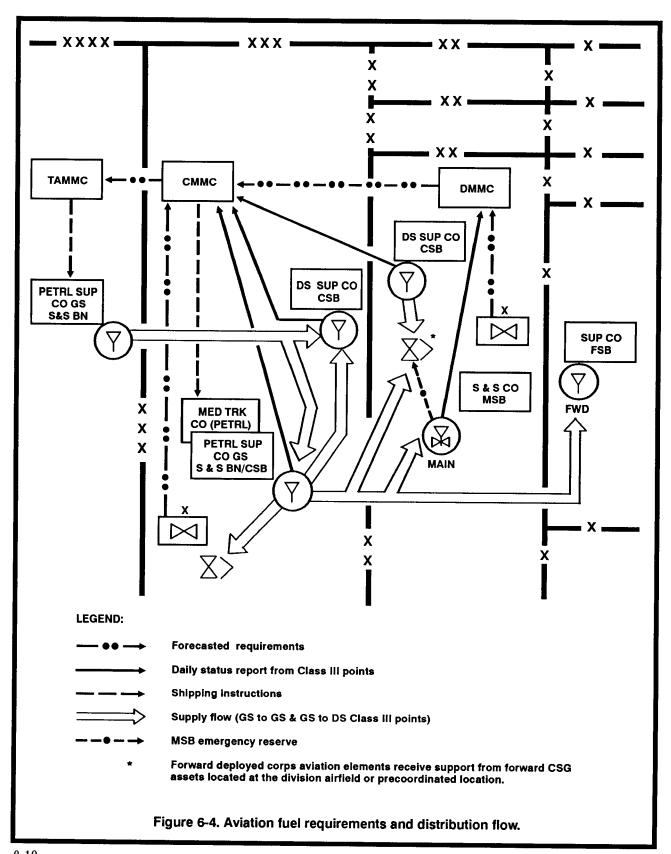
PETROLEUM SUPPORT BRANCH

COSCOM petroleum support branch personnel establish stockage requirements and distribution priorities. They keep the COSCOM support operations officer and CMMC petroleum and water division personnel informed of changes in petroleum stocks and distribution capabilities. Branch personnel compare petroleum requirements to capabilities and make recommendations on use of petroleum resources. They

establish the frequency for submitting petroleum forecasts. They also establish procedures and standards for petroleum inspections. As required, they provide guidance on containment and cleanup of spills or leaks.

CMMC PETROLEUM AND WATER DIVSION

The CMMC's petroleum and water division performs integrated materiel management for bulk and packaged petroleum fuels, packaged petroleum products, containers and accessories, coal, and water. It consolidates requirements and performs centralized control of bulk petroleum distribution to the corps force. It reports distribution problems that deviate from the routine to the COSCOM petroleum support branch chief/COSCOM support operations officer.



The CMMC petroleum branch manages the supply of petroleum fuels and products to the corps force. Branch personnel –

- Receive and coordinate requirements from DMMCs, BMMCs, RMMCs, and nondivision units.
- Consolidate requirements and submit totals to the TAMMC.
- Coordinate with the CMCC.
- Direct the issue of bulk petroleum stocks.
- Provide prioritized shipping instructions to the petroleum supply battalion and CSBs.
- Coordinate with the TAMMC (JPO for contingency corps) to meet unexpected requirements

for bulk petroleum.

Exercise surveillance over the availability and condition of petroleum handling and distribution support equipment.

FUEL ALLOCATION

When demands exceed availability, the TA commander establishes an allocation system. The COSCOM support operations officer receives allocation instructions from the corps G4. The CMMC's petroleum and water division implements those instructions.

SHORTFALLS

As appropriate, COSCOM petroleum support branch personnel recommend the steps in Table 6-1 to offset shortfalls in COSCOM fuel support capability.

Table 6-1. Ways to offset shortfalls.

EQUIPMENT SHORTFALLS

- Cross-level equipment (tankers, collapsible tanks, 350 GPM pumps, tank and pump units, or assault hoselines).
- Revise maintenance priorities on fuel support equipment.
- Request support from TA or HN.

DISTRIBUTION SHORTFALLS

- Preposition fuel forward following a risk assessment.
- Distribute fuel in 55-gallon drums.
- Restrict unit distribution temporarily.
- Increase throughput.
- Implement fuel allocations.
- Change tankers from one fuel to another.
- Use assault hoseline or pipeline.
- Seek assistance from supported units.
- Request HNS.

STORAGE SHORTFALLS

- Keep equipment tanks full.
- Change containers from one fuel to another.
- Contract for HNS.
- Request use of HN fixed facilities

CHAPTER 7

Fixing the Corps Force

The COSCOM's maintenance system is a corps combat multiplier. It ensures that the corps force remains operationally ready by repairing and returning weapon systems and equipment to battle as soon as possible. Maintenance restores operational forces to a state of materiel readiness. It enables them to support the tempo of operations.

COSCOM DS maintenance units repair and return damaged or disabled equipment to using units. Whenever possible, they send MSTs forward into the division sector to perform on-site repair of damaged or inoperable equipment.

The maintenance system is supplemented by a Class VII system which provides replacement items to offset battle loss of critical equipment. When weapon systems or other major end items are

destroyed, the COSCOM's heavy materiel supply unit provides a battle loss replacement.

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PLANNING MAINTENANCE SUPPORT

COSCOM maintenance operations return the maximum number of weapon systems and critical items to the battlefield. Maintenance ensures the combat readiness of supported units.

COSCOM maintenance support branch personnel project maintenance work loads for future operations. They organize, coordinate, and control COSCOM maintenance resources to ensure timely support.

COSCOM CSS PLANS BRANCH

CSS plans branch personnel assigned to the COSCOM's support operations section prepare support operations estimates and external mission support portions of corps service support orders and COSCOM OPLANs/OPORDs. Using LPB products, they plan how COSCOM maintenance units support corps forces in accordance with the corps commander's intent and priorities. Based on coordination with corps G3 staff, they plan how to best synchronize maintenance support with tactical requirements. They update plans based on estimates and recommendations from COSCOM maintenance and weapon systems support branch staff. As required, they plan how to adjust maintenance work loads and allocate maintenance resources to support regeneration.

COSCOM MAINTENANCE SUPPORT BRANCH

The COSCOM support operation salon's maintenance

support branch establishes maintenance support policies, plans, and procedures for the external maintenance support provided by subordinate maintenance units. This includes development of plans and procedures to meet Class IX repair parts requirements.

Maintenance Support Branch Chief

The maintenance support branch chief serves as the maintenance staff advisor to the COSCOM support operations officer. He exercises staff supervision over COSCOM maintenance support operations. The maintenance support branch chief –

- Establishes maintenance support policies, plans, and procedures for external maintenance support.
- Provides recommendations on maintenance unit allocations and priorities to the weapon systems support branch chief/COSCOM support operations officer.
- Provides policy and procedural guidance to CMMC maintenance related commodity divisions.
- Provides advice to COSCOM ACofS, G3 force design staff on maintenance unit troop listings.
- Establishes maintenance data collection and staff analysis procedures.

Maintenance Support Branch Staff

To support the corps force, maintenance support branch personnel need to know maintenance requirements, the type of equipment requiring repair, and the current capability of COSCOM maintenance units. They recommend how to tailor the COSCOM's maintenance organization to offset deficiencies. They use CSSCS maintenance reports to monitor projected maintenance of critical equipment.

Maintenance support branch personnel perform the deployment planning tasks listed on Table 7-1. Other staff areas of responsibility include –

- Developing maintenance portions of service support plans and orders.
- Recommending maintenance priorities.
- Establishing repair time guidelines.
- Developing the evacuation policy.

Table 7-1. Maintenance support branch personnel deployment planning.

PREDEPLOYMENT

- Provide input to the maintenance portions of corps service support plans and orders to reflect the COSCOM's maintenance support mission.
- Recommend serviceability standards for repairs.
- Compile force equipment density data, including substitute items using supported unit MTOEs.
- Determine the organizational requirements for maintenance units, based upon the variety and density of materiel with which the force is equipped.
- Monitor the equipment readiness status of subordinate units selected to deploy.
- Monitor the availability of replacement items in subordinate maintenance units.
- Assess the maintenance work load requirements of units to be supported.
- Develop priorities for maintenance repairs.
- Establish maintenance support priorities.
- Determine special equipment required for maintenance, to include calibration.
- Coordinate the transfer of support of subordinate COSCOM maintenance units not included in the initial deployment.

DEPLOYMENT

- Provide technical advice and assistance to subordinate deploying maintenance units.
- Establish a deployment activity address directory for all deploying maintenance units.
- Bring all deploying maintenance units up to full authorization of equipment and supplies.
- Coordinate with CSS plans branch staff and supporting engineer units on real estate and facility requirements for COSCOM maintenance units.

STAGING

- Coordinate the processing of incoming COSCOM maintenance units.
- Monitor receipt of maintenance unit ASL.

- Assessing repair parts stockage requirements (ASL range and depth).
- Establishing maintenance procedures.
- Developing the COSCOM's policy on cannibalization and controlled exchange.
- Developing a salvage policy.

Branch personnel continually coordinate with COSCOM weapon systems support branch personnel on the maintenance status of weapon systems and mission critical items. They also coordinate with COSCOM transportation support branch personnel on the recovery and evacuation of unserviceable items to maintenance collection points. Branch personnel continually coordinate with their staff counterparts in the CMMC relative to maintenance work loads, repair time limits, and repair priorities.

COSCOM WEAPON SYSTEMS SUPPORT BRANCH

Weapon systems support branch personnel assigned to the support operations section coordinate with maintenance support branch personnel relative to maintenance priorities. They ensure that mission critical items are maintained to meet future as well as current operational requirements. They develop procedures to interface requirements with NICPs for replacement weapon systems. The weapon systems support branch chief monitors the readiness status of command controlled items. He recommends allocations and criteria for controlled items.

LOGISTICS PREPARATION OF THE BATTLEFIELD

COSCOM maintenance support branch personnel ensure that COSCOM ACofS, G2 and G3 staff officers are aware of maintenance priority intelligence requirements. They coordinate with ACofS, G2 and G3 staff relative to IPB products which impact on planning, execution, and protection of maintenance support operations.

Maintenance support branch personnel can obtain data on the following areas from IPB products described in FM 34-130:

- Industrial capacity and resources in the corps rear area.
- Locations of warehouses and industrial parks.
- Sources of electrical power.

- Concealment or cover noted on ground observation overlays.
- Data on building heights in urban areas.
- Built-up areas and congestion area overlay.

Maintenance support branch personnel use IPB battlefield area evaluation products which describe the AO and friendly forces to assess maintenance work loads and recommend the number and placement of DS maintenance units on time phased deployment lists. They use IPB threat evaluation and doctrine products and threat integration products to help plan how to employ and protect maintenance organizations.

COMMAND DETERMINATION

Before or early in the conflict the corps commander determines the priority and level of repair. Only equipment that can become combat serviceable with minimum manpower expenditure should be repaired. Items that cannot be repaired under the established corps criteria are reported for later recovery or destroyed, if necessary. The COSCOM commander/COSCOM support operations officer grants wide discretionary authority to DS maintenance units to repair, evacuate, cannibalize, or destroy unserviceable equipment.

NBC PLANNING CONSIDERATIONS

Anticipated losses during the early phase of a nuclear conflict tax maintenance elements. Maintenance requirements appear so rapidly and in such quantity that a backlog develops. Fallout and neutron-induced gamma activity further impede maintenance support.

The most significant implications for equipment recovery, evacuation, and repair result from the large number of items that incur moderate and severe damage. NBC operations directly impact inspection, classification, recovery, evacuation, repair, and replacement operations. Indirect impact occurs in areas such as repair parts supply, cannibalization, and site relocation.

Impact on Initial Inspection and Retrieval

The initial inspection and retrieval of damaged equipment present special problems. COSCOM maintenance management officers modify classification criteria, procedures, and responsibilities for inspection and classification of nuclear damage.

If supported units cannot survey and report the location of damaged equipment, initial classification data may be limited to air reconnaissance reports or estimates on yield and probable radius of damage.

Impact on Recovery and Evacuation

Nuclear warfare can cause high personnel losses in units, but leave equipment relatively intact. A significant quantity of combat-essential equipment with only light damage might be recovered. When the threat employs enhanced radiation weapons, combat-essential equipment can become highly radioactive due to neutron activity. Unit personnel perform radioactive surveys on equipment to ensure personnel safety during recovery operations.

The unit commander is responsible for the recovery of equipment. Combat units may be able to recover only the most critical and most accessible items. They may need to leave noncritical or low-priority items, inaccessible lightly damaged items, or moderately and severely damaged items for other elements to recover.

Ground combat operations might permit major recovery tasks to commence soon after an attack. To avoid interference with tactical operations, the CMCC coordinates all evacuation operations with the corps rear CP and sector RAOCs. To preclude their capture, some unrecovered critical items may need to be destroyed.

Impact on DS Repair

The tactical nuclear environment causes DS maintenance units to reduce normal maintenance support. Personnel losses may be so severe in some units that expedited repair of the items in those units are unnecessary.

To avoid major backlogs of moderately damaged equipment at DS maintenance units, the COSCOM support operations officer/maintenance support branch chief establishes special maintenance controls. Controls include deferral of routine maintenance support. COSCOM repair priorities can help reduce the work load. The support operations officer grants nondivision DS maintenance units wide discretionary authority to respond to the requirements of supported units.

Impact on Repair Parts Supply

The range and quantity of repair parts in combat PLLs and ASLs cannot satisfy the requirements of large numbers of reparable equipment suddenly entering the maintenance system. Repair parts stockage at DS level maintenance units are rapidly depleted.

The COSCOM support operations officer arranges for immediate shipment of repair parts support packages to DS maintenance units. These packages support specified makes and models of equipment so that units moving from one area to another can draw the proper packages.

DS maintenance units need to order necessary repair parts support packages in advance of their needs. For example, they should anticipate extensive damage to optics and antennas. Use of repair parts support packages computed in anticipation of extensive damage enables DS maintenance units to keep up with repair of critically needed items.

Cannibalization

Severely damaged items become candidates for cannibalization. However, the COSCOM cannot establish centralized control over cannibalization, recovery, or evacuation of severely damaged equipment until the tactical situation stabilizes. Personnel at maintenance collection points provide control measures.

Aviation Maintenance

To avoid presenting a lucrative target, aircraft awaiting repairs need to be dispersed. Only a minimum number of damaged aircraft should remain at AVIM unit sites.

Missile Maintenance

Missile systems' component losses are primarily a supply replacement concern, not a missile maintenance concern. Missile maintenance units focus on routine maintenance, particularly the calibration of equipment.

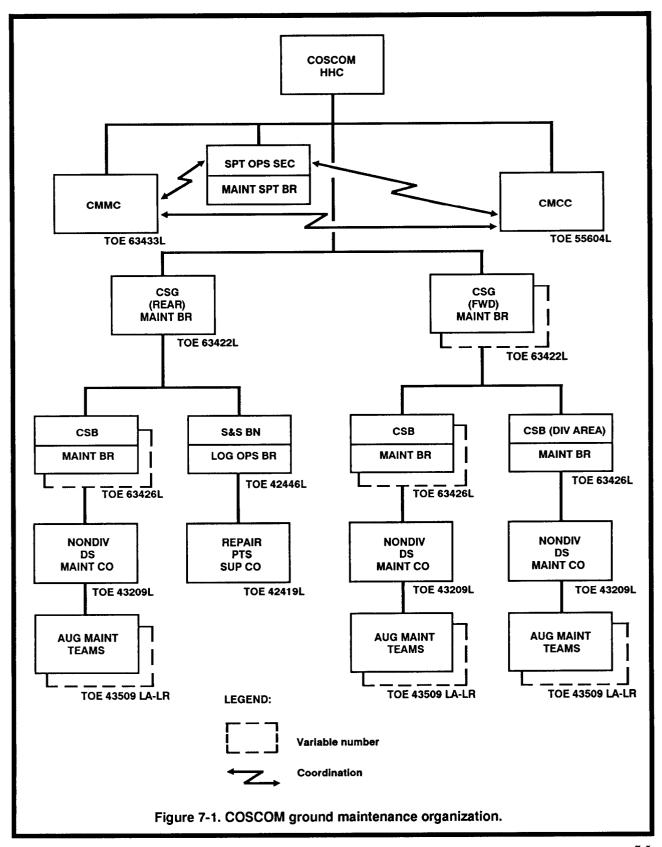
COSCOM MAINTENANCE AND REPLACEMENT ORGANIZATIONS

The COSCOM tailors its DS maintenance organization to perform rapid repair and return to the user. The primary focus is on repairing and returning weapon systems to the battlefield as quickly as possible. The COSCOM uses its Class VII supply system to provide battle loss replacements to those units that can most influence the corps battle.

GROUND MAINTENANCE SUPPORT ORGANIZATION

Figure 7-1 depicts the COSCOM's ground maintenance organization and responsible staff elements. It consists of –

• Nondivision DS maintenance units.



- Mobile maintenance teams.
- Repair teams (MSTs).
- TMDE support teams.
- LID maintenance support team, if applicable.
- Repair parts supply company.

Nondivision DS Maintenance Units

Nondivision DS maintenance units (TOE 43209L000) support on an area basis. They provide DS maintenance and repair parts to nondivision units employed in or passing through their assigned area of support. FM 43-11 describes nondivision DS maintenance unit operations.

The COSCOM OPLAN/OPORD designates select DS maintenance units to perform reinforcing maintenance in support of division maintenance units. Reinforcing support from the DS maintenance unit(s) attached to the CSB in the division area enables FSBs/MSB to provide support to corps forces employing in the brigade or division area.

Mobile Maintenance Teams

Each nondivision DS maintenance unit can provide four organic mobile maintenance teams. The teams perform on-site malfunction diagnosis, limited maintenance, and battle damage assessment.

Repair Teams (MSTs)

Repair teams (TOE 43509LA-LR) provide specialized maintenance on low-density equipment. The COSCOM/CSG attaches MSTs to DS maintenance units based on type of equipment to be repaired. They attach MSTs to a CSB regenerating attrited units in the corps rear area. When the COSCOM designates a DS maintenance unit to provide pass back maintenance to a division, it augments that unit with the appropriate MSTs to perform the additional maintenance work load. MSTs accompany a corps force when it moves to a new corps area or is assigned to support an ally or sister Service.

TMDE Support Teams

DS maintenance units and AVIM units perform unit maintenance on organic TMDE. They also provide TMDE support for special purpose TMDE of supported units.

The area calibration repair center provides general purpose TMDE and special purpose TMDE repair support for the corps area. That center may attach an area TMDE support team to CSGs to provide support to units within or passing through the CSG's AO. It might attach

an area TMDE support team to a division task force to support nondivision units employed in the division sector. The center issues repair parts to DS maintenance units in response to MROs provided by the CMMC.

LID Maintenance Support Team

The corps attaches a LID Maintenance Support Team (TOE 43509LP00) to a nondivision DS maintenance company to provide a LID with additional DS maintenance capability. This team provides a capability to perform an estimated 20 percent of the LID ground maintenance work load.

Repair Parts Supply Company

The repair parts supply company (TOE 42419L000) provides general support repair parts supply to non-division maintenance units and division maintenance units. It does not provide repair parts for aircraft, missile, and airdrop items; for medical and Class V supplies; or for cryptographic and topographic materiel.

GROUND MAINTENANCE EMPLOYMENT

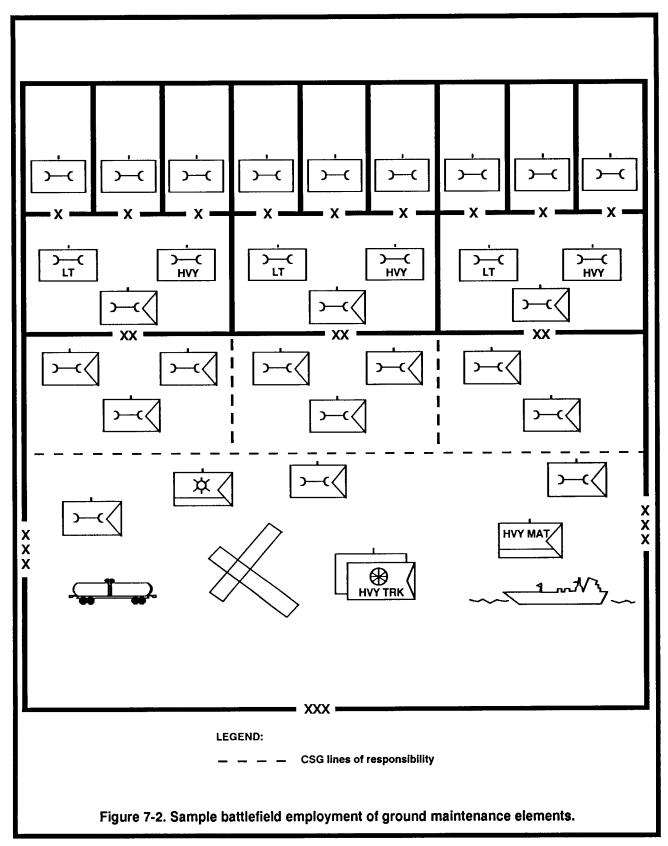
Figure 7-2 depicts a sample employment of ground and automotive maintenance elements on a battlefield. In this example, the COSCOM's maintenance management officers estimated a maintenance work load requirement for three nondivision DS maintenance companies per division sector. The forward CSG attached a DS maintenance unit and MSTs to its CSB in the division area to support nondivision forces in the division sector. Selected DS maintenance units provide reinforcing maintenance support to the MSB's light and heavy maintenance companies and the FSB's maintenance company. The remaining DS maintenance units with MSTs provide DS maintenance on an area support basis to nondivision units in the corps rear area.

All DS maintenance companies provide repair parts to customer units to perform unit level repair. The GS repair parts supply company provides repair parts to the DS maintenance companies.

Corps trucks move Class IX and maintenance related Class II ALOC items from the airfield to ALOC designated units. They move Class VII replacement items from the heavy materiel supply unit to DS supply units or regeneration sites.

AVIATION INTERMEDIATE MAINTENANCE ORGANIZATION

COSCOM AVIM ensures maximum availability of mission-capable aircraft. The COSCOM AVIM



organization and responsible staff elements are shown on Figure 7-3. It includes –

- Aircraft maintenance battalion (AVIM).
- Aviation intermediate maintenance companies.
- AVIM augmentation elements.
- LID AVIM support team, inapplicable.
- Aircraft repair parts supply platoon.

Aircraft Maintenance Battalion (AVIM)

An AVIM battalion is attached to the rear CSG to provide command and control of attached AVIM units and aviation-related repair activities. Battalion staff plans for and ensures the timely execution of AVIM mission aspects of the COSCOM logistics support plan.

Aviation Intermediate Maintenance Companies

AVIM companies (TOEs 01947L100-800) provide AVIM, backup AVUM, and aviation repair parts to corps aviation units. They provide reinforcing AVIM support and reparable exchange items for division AVIM units. They also assist corps and divisional AVUM units in preparing damaged and unserviceable aircraft for evacuation. FM 1-500 prescribes AVIM operations.

AVIM Augmentation Elements

The COSCOM/rear CSG attaches AVIM augmentation elements (TOEs 01547LA00 and 01547LB00) to AVIM units. These elements augment intermediate maintenance for corps fixed wing aircraft and the aircraft of the aerial exploitation battalion.

LID Aviation Intermediate Maintenance Support Team

This team (TOE 01577LA00) is attached to the LID AMCO if the LID deploys without a supporting corps AVIM. It may also be attached to a COSCOM AVIM company deployed in support of the LID. It offsets an estimated 46 percent AVIM work load passed back to the corps. C2 of the team is provided by the unit to which it is attached.

Aircraft Repair Parts Supply Platoon

The COSCOM/rear CSG may attach an aircraft repair parts supply platoon (TOE 42519LA00) to the repair parts supply company. The platoon provides GS level supply of aircraft repair parts in support of a corps, It can receive, rewarehouse, and ship 22 STONs per day, for a total handling capability of 66 STONs. It maintains

a 15-day stock of Class IX aircraft repair parts, totaling 11,000 ASL line items.

AVUM/AVIM EMPLOYMENT

Figure 7-4 depicts possible employment of AVUM and AVIM elements on a battlefield. Most AVUM units operate in the forward portion of the DSA. METT-T dependent, elements of AVUM units employ in the DSA, BSA, or the battalion rear area. AVUM units tailor contact teams which go forward to make on-site repairs.

A divisional aircraft maintenance company is assigned to a division and attached to the DISCOM. It provides AVIM and reinforcing AVUM support to aircraft from its base location in the division rear area. It uses three forward support helicopter repair/recovery teams to provide forward support at AVUM sites.

The AVIM battalion HHD sets up in the corps rear area, normally near the aviation brigade HHC. Four corps AVIM companies are normally assigned to the AVIM battalion. AVIM units normally locate adjacent to an instrumented landing facility. They provide AVIM and reinforcing AVUM support to corps aircraft. They also support a percentage of work load passed back from division AVIM units. When the pass back percentage exceeds supportable work loads, AVIM units may be augmented to provide the additional support required.

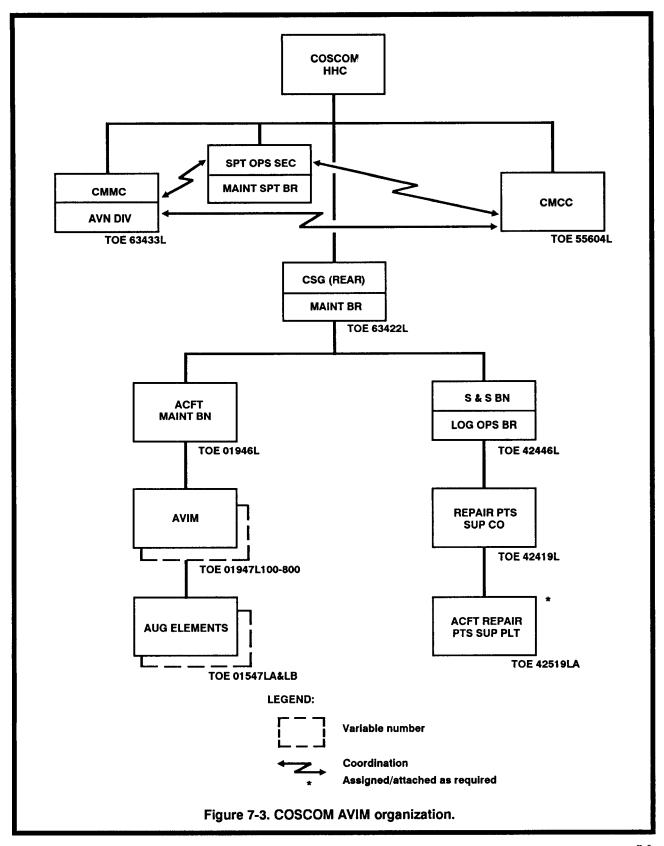
MISSILE SYSTEM SUPPORT ORGANIZATION

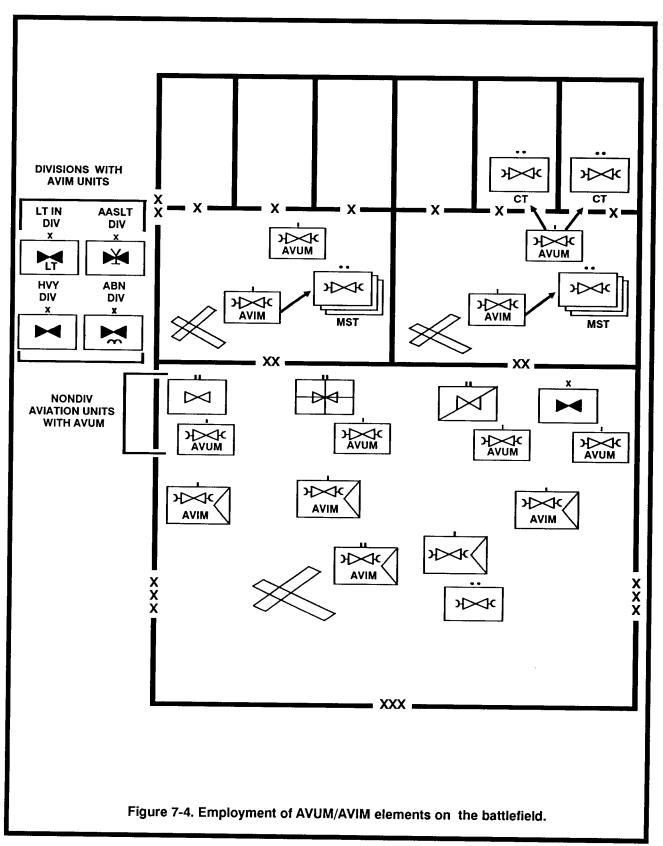
The elements which the COSCOM assigns to a CSG vary due to the type and density of missile systems to be supported. The COSCOM's DS missile maintenance organization and technical staff elements are shown on Figure 7-5. The actual support structure depends upon the system-unique missile systems and test equipment requiring support. The missile maintenance organization consists of a –

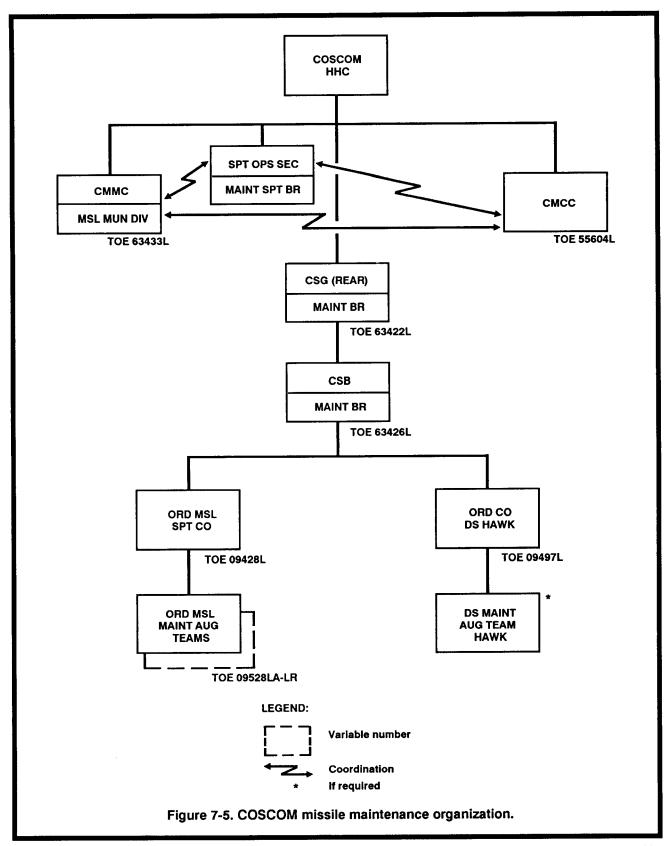
- Missile system support company.
- Missile maintenance augmentation teams.
- Ordnance company (DS) Hawk.
- Maintenance company (DS) Patriot.
- LID missile support team, if applicable.

Missile System Support Company

The missile system support company (TOE 09428L000) provides DS missile maintenance and repair parts for air defense and land combat support systems, except







Hawk and Patriot missile systems. It also provides base shop support for light divisions, ACRs, and separate brigades. Base shop elements perform test and diagnostic procedures and remove and replace components, modules, and line replaceable units. Items which cannot be repaired are evacuated for GS or depot level repair.

Supply personnel provide Class IX missile repair parts and limited Class VII items to supported units. They exchange reparable items for selected high demand components or modules.

Missile Maintenance Augmentation Teams

Based on the type of supported battalions and densities of missile systems supported, the missile system support company may be augmented with missile maintenance augmentation teams (TOE 09528LB-LV and 09510LA). The teams are weapon system or unit specific. They provide additional base shop and MST personnel and equipment. FM 9-59 lists their missions.

Ordnance Company (DS) Hawk

The Hawk maintenance company, organized under TOE 09497L000, provides DS base shop maintenance and on-site MSTs for Hawk missile system peculiar equipment, associated identification friend or foe equipment, and power generation/air conditioning equipment. It also provides Class IX and limited Class VII maintenance float items to the Hawk ADA battalion,

This company may be augmented with a Hawk GS maintenance augmentation team (TOE 09529LU). The team provides additional personnel and equipment to perform GS maintenance support for the Hawk missile system in the Hawk ADA battalion,

Maintenance Company (DS) Patriot

The Patriot maintenance company (TOE 43607L) provides DS maintenance and Class IX repair parts supply to a Patriot ADA battalion.

A Patriot missile system (DS/GS) augmentation team (TOE 09529LX) from the missile system support company can provide two MSTs and limited base shop maintenance support for Patriot missile-peculiar equipment. It also provides limited Class IX base shop or MST support.

LID Missile Support Team

This team (TOE 09550H3EY) may be attached to a nondivision maintenance company to augment the LID's missile support element.

MISSILE MAINTENANCE EMPLOYMENT

In the brigade area, the missile support section of the FSB's forward support company provides limited DS maintenance on TOW and Dragon missile systems. Section personnel work from the maintenance unit base shop, a MCP, or on-site locations.

In the DSA, the MSB's missile support company operates a base shop. It provides DS maintenance support and Class IX supply for land combat missile systems (TOW, Dragon, and MLRS) in heavy divisions. It also provides maintenance support for man-portable common thermal night sights and Stinger training sets. For airborne/air assault divisions, the headquarters and light maintenance company provides missile maintenance support. The headquarters and maintenance support company provides missile maintenance support for light infantry divisions. MSTs provide limited on-site DS maintenance on malfunctioning equipment. Augmentation teams support corps assets when a corps or EAC missile support company is not deployed.

As a result of the division based maintenance concept, the MSB's missile support company is replaced by an electronic maintenance company. That company will provide DS electronics test and diagnostic maintenance to division elements. It provides DS base maintenance and MSTs for land combat missile systems, division air defense systems, target acquisition and surveillance radar. It also provides Class IX technical supply for supported units.

The nondivision missile system support company operates in the corps rear area. The Hawk maintenance company normally collocates with the supported Hawk ADA battalion. The Patriot maintenance company collocates with the Patriot ADA battalion. MSTs perform on-site repair. MSTs may accompany corps MLRs units which deploy forward in support of the division. BDAR teams make on-site decisions concerning the evacuation of missile systems. Based on BDAR team assessment corps missile support companies provide backup for division companies.

EQUIPMENT REPLACEMENT ORGANIZATION

The heavy materiel supply company (TOE 42427L100) provides Class VII battle loss replacement items. Unit personnel can receive, store, and issue 1,400 STONs of GS level Class VII items per day. They maintain storage sites for COSCOM war reserve Class VII stocks. Upon receipt of end items from a TAACOM storage site, company personnel deprocess the items. As necessary, they prepare weapon systems for issue and linkup with replacement crews at regeneration sites.

ASSESSMENT, RECOVERY, AND EVACUATION SUPPORT

When opposing forces possess parity in the number and destructive capability of weapon systems, the side which can assess, recover, evacuate, repair, and return disabled weapon systems to battle the fastest gains a decided edge. The COSCOM's ability to perform these maintenance functions could become a decisive combat multiplier.

BATTLEFIELD DAMAGE ASSESSMENT AND REPAIR

BDAR includes any expedient action that returns a damaged item or assembly to a mission capable or limited mission capable condition. Repairs are often temporary. They may not restore full system capability.

The objective is to return disabled combat equipment for support of a specific combat mission or to enable self-recovery. COSCOM maintenance support branch personnel assess whether repairing the disabled item significantly impacts on the outcome of a combat mission.

Operator, crew, BDAR teams, MSTs, and DS maintenance personnel perform BDAR by –

- Using shortcuts in parts removal or installation.
- Fabricating parts.
- Installing components from other vehicles.
- Bypassing noncritical components.
- Cannibalizing equipment.
- Using substitute fuels, fluids, or lubricants.

BDAR manuals have been developed for major weapon systems. They are issued with the TM set for the weapon system.

RECOVERY AND EVACUATION Recovery

Owning units recover unserviceable equipment to the MCP established by their supporting DS maintenance unit. Recovery operations are often centrally managed at the battalion level. Based on METT-T corps DS maintenance units provide recovery assistance on an area basis to units without a recovery capability.

Aerial recovery involves attaching the aircraft to airlift recovery equipment, connecting it to the lifting helicopter, and flying it to an MCP. Aircraft which cannot be repaired and flown out under their own power may need to be disassembled or modified for surface recovery. Aviation units use the organic lift capability of their AVUM element. They request recovery assistance from the AVIM unit providing support in their area. The aviation brigade TOC has overall control of aircraft recovery.

Evacuation

Evacuation begins at the MCP. The CMMC provides disposition instructions. Evacuation needs to be coordinated among maintenance, supply, and transportation elements. Using automatic disposition instructions for certain items prevents delays in evacuating critical equipment. As appropriate, the DISCOM support operations branch and MCO/DTO or CMMC and MCT/CMCC coordinate transportation required to support evacuation operations.

The COSCOM evacuates items not reparable at its DS maintenance unit to GS maintenance units in the COMMZ. FM 1-500 provides guidance on evacuation of aviation items.

CAPTURED AND FOUND MATERIEL

Captured and found materiel can relieve the burden on the COSCOM's supply system. Finding units report and recover captured and found materiel to MCPs or supply unit salvage collection points. Units report captured or found medical materiel through medical channels. They report captured or found enemy materiel through intelligence S2/G2 channels.

Corps trucks evacuate materiel which cannot be put back into the supply system or used locally. Enemy materiel which cannot be used locally is evacuated rearward until a decision is made regarding its repair, disassembly, and cannibalization. The CMMC provides disposition instructions.

CLASSIFICATION

Maintenance personnel classify items turned in at MCPs. The maintenance repair code, listed in the AMDF, designates whether an item is reparable. It also specifies the maintenance level authorized to perform complete repair. The CMMC maintains stock record accounting for reparable items. It initiates supply issue for requested replacement items.

The recoverability code designates the level which decides the final disposition of uneconomically reparable, condemned reparable. The CMMC provides

disposition instructions to evacuate equipment classified as uneconomically reparable or condemned to the designated disposal activity.

SALVAGE

In contrast to scrap items, salvage items retain some value in excess of their basic materiel content. Repairing the item to its intended purpose is impractical. However, AR 725-50 allows repair for other use, provided the repair does not exceed 65 percent of the item's standard price.

CSG supply units setup salvage points near MCPs. MCPs turn serviceable items over to salvage points for return through supply channels. Salvage points turn over mechanical items to MCPs for classification, repair, and disposition.

REPAIR PARTS AND REPLACEMENT ITEMS DISTRIBUTION SYSTEMS

Repair parts and replacement items are essential to returning weapon systems and damaged or inoperable major items to battle. To reduce the inventory of lines of repair parts, a large percent of Class IX and maintenance-related Class II items are flown from CONUS to ALOC designated units. Army aviation assets routinely move high-cost, low-density critical repair parts as a part of the intratheater distribution system.

PREPOSITIONED WAR RESERVE MATERIEL STOCK

If stored in theater, PWRMS Class IX and VII items serve as the initial source of supply until sufficient quantities can be shipped from CONUS. Though stored in COSCOM storage sites, the TAMMC controls PWRMS items until their release to the corps upon outbreak of war.

COMMON REPAIR PARTS

Figure 7-6 depicts the request, requisition, and distribution flow of surface and air-delivered repair parts.

Request

Supported units submit requests and pick up repair parts at their supporting DS maintenance company. The ASLs of DS maintenance units need to cover the combat PLLs of supported units in their area. ASLs also include parts which DS maintenance companies need to perform authorized DS level maintenance tasks. When possible, DS maintenance units fill deadlined and emergency requests immediately on receipt.

Exchange of Reparable Items

Selected high-usage components are designated for on-the-spot exchange of a serviceable item for a like unserviceable item. After the exchange, the unserviceable item is sent to maintenance for repair and return to stock for the next exchange.

Requisition

As shown on Figure 7-6, when DS maintenance companies cannot fill requests from their ASL, they transmit requisitions via SARSS-1 to the CMMC. The CMMC also receives requisitions from DMMCs, BMMCs, and RMMCs.

The parts supply branch of applicable CMMC commodity divisions process requisitions. The CMMC immediately transmits requisitions for air-delivered items to the appropriate NICP. It transmits requisitions for selected items, to include requisitions for TA controlled items, to the TAMMC. After a lateral search, when common repair parts are not found within the corps area, CMMC parts supply branches transmit requisitions to the TAMMC or appropriate CONUS NICP.

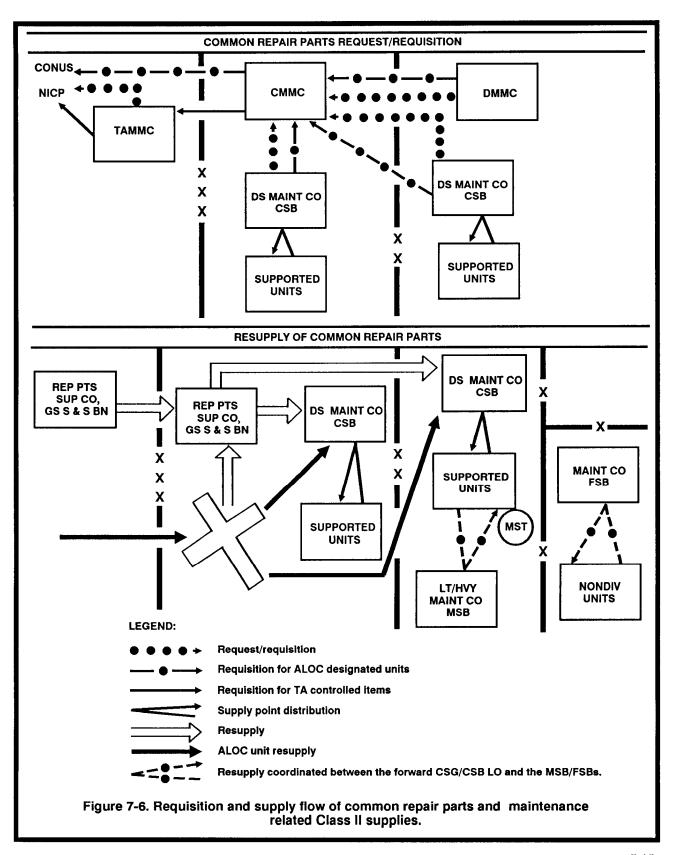
Issue

The GS repair parts supply company supplies designated Class IX items. The CMMC monitors the repair parts inventory maintained in the repair parts supply company. If parts exist in the repair parts supply company, the parts supply branches of the CMMC's commodity dvisions transmit referral orders directing shipment to the supporting nondivision DS maintenance company.

To meet urgent demands, the COSCOM maintenance support branch chief directs CMMC supply parts branches to laterally transfer repair parts stocks or redistribute stocks from DS maintenance units that have an excess on hand.

Distribution

COSCOM and TAACOM repair parts supply companies make up the GS base of supply for surface repair parts. Once surface delivered repair parts arrive in theater, theater truck assets move them to a TAACOM or COSCOM GS repair parts supply company. Repair parts are then transported to DS maintenance units.



CONUS NICPs provide Class IX and maintenance related Class II items in support of ALOC units. Repair parts requisitioned from an NICP are flown to the aerial port nearest the ALOC designated requesting unit.

AIRCRAFT REPAIR PARTS

Aircraft repair parts ensure the maximum availability of mission-capable aircraft. Figure 7-7 depicts the requisition and supply flow of aircraft repair parts.

Request

Aviation units submit requests to their supporting AVIM unit. The AVIM unit's ASL covers combat PLLs. The ASL also includes repair parts for AVIM level authorized repairs.

Requisition

Nondivision AVIM units and DMMCs transmit consolidated requisitions for aircraft repair parts to the CMMC's aviation division. AVIM units also requisition replenishment parts.

The CMMC's aviation parts supply branch processes the requisitions. It transmits requisitions for air-eligible items in support of ALOC designated units to CONUS NICPs. When non-ALOC parts are available in the corps rear area, the CMMC prepares an MRO. As necessary, it arranges to cross-level spares and initiates follow-up actions. If the aircraft repair parts or required quantities do not exist in the corps area, the CMMC's aviation parts supply branch transmits the requisitions to the TAMMC.

Supply

The CMMC directs issues to fill high priority and not mission capable supply requisitions. An aircraft repair parts supply platoon, attached to the repair parts supply company, provides GS level aircraft repair parts to AVIM units.

The COSCOM maintenance support branch chief directs that the CMMC's aviation parts supply branch laterally transfer stocks to meet urgent demands. He might also direct redistribution of aircraft repair parts from AVIM units which have an excess on hand.

Distribution

Air resupply or throughput distribution provides a means to push critical aircraft repair parts from AVIM units forward to AVUM elements. To reduce transit times, AVIM MSTs can transport supplies forward to aviation elements.

Controlled Exchange

Battle-damaged or unserviceable aircraft may be used as a source of aircraft repair parts. AR 750-1 prescribes criteria to be met before controlled exchange can be authorized.

MAINTENANCE FLOATS

The corps G3 identifies combat units which can most impact the outcome of specific combat missions and the first battles. Upon outbreak of general hostilities, nondeployed COSCOMs use ORF items stocked at DS maintenance or AVIM units to enhance equipment readiness and fill shortages in those combat units.

Deployed COSCOMs use ORFs for the same reasons and to replace initial battle losses during the first days of hostilities. Based upon guidance provided by the corps G3, the COSCOM support operations officer decides when to release an ORF to replace initial battle losses. AR 750-1 prescribes maintenance float policy, procedures, and controls.

REPAIR TIME CRITERIA

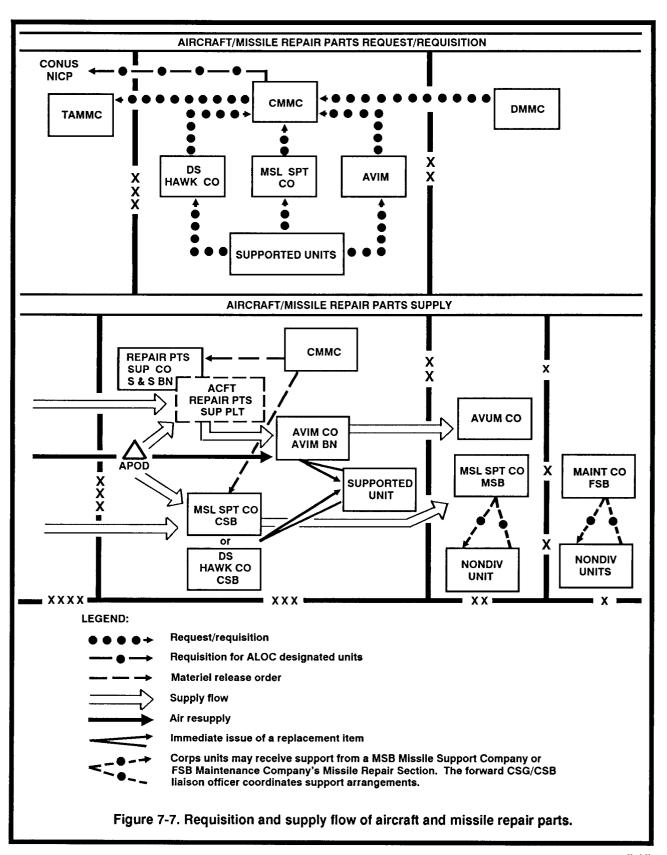
The corps G4 establishes a repair time criteria. Decisions whether to repair, recover, or evacuate are made at all levels based on the time required to repair. Repair times are established in SOP and in OPORDs when changes occur based on the tactical situation. When nondivision DS maintenance units cannot repair unserviceable items within the designated time limit, the owning unit drops the items from their property book and requisitions replacement items from the supply system.

REPLACEMENT END ITEMS

The daily battle loss report serves as the requisition for selected major end items. Units submit battle loss reports through S3 channels. The S3 determines the priority of issue and forwards requirements for replacement of major end items to the CMMC.

The CMMC reports battle loss, current status, and due in data of reportable critical, command-controlled end items/weapon systems to the corps G3 and G4. The corps G3 approves their issue and directs priority distribution to those units the corps commander regards as the most critical to the success of the corps battle.

Following command approval, the TAMMC or CMMC directs issue from a heavy materiel supply



company to the supporting DS supply company and requesting unit. Replacement weapon systems need to be linked with the replacement crew. Depending

upon METT-T, linkup occurs in the BSA, DSA, regeneration site, or heavy materiel supply company area.

MANAGING MAINTENANCE AND REPLACEMENT OPERATIONS

The COSCOM support operations officer controls COSCOM maintenance and replacement operations. He uses his maintenance support branch and weapon systems support branch and their interface with the appropriate CMMC maintenance support branch, parts supply branch, and equipment supply branch to maintain centralized control of decentralized maintenance operations.

MAINTENANCE SUPPORT BRANCH

The COSCOM support operations officer provides operational control of maintenance operations in the corps. His maintenance support branch provides technical staff control and supervision through its interface with subordinate CSG maintenance staff and the CMMC's commodity divisions. COSCOM maintenance management officers implement priorities established for maintenance of critical weapon systems. They monitor maintenance status of command controlled items. Maintenance support branch personnel monitor equipment status reports and data on Class IX stocks. As necessary, they redirect the maintenance efforts of subordinate CSGs. They indirectly manage maintenance by –

- Providing policy and procedural guidance to and coordinating the activities of CMMC maintenance managers.
- Recommending changes in mission assignment of DS maintenance units and allocation of MSTs.
- Recommending redistribution of maintenance support capability in response to changing tactical requirements.
- Recommending changes to maintenance repair time limitations based upon corps priorities, maintenance work load, availability of repair parts, the tactical situation, and stockage of major end items.
- Coordinating with the CMCC and CMMC to integrate Class IX and maintenance related Class II movements into the corps movement program.
- Recommending changes in evacuation policies.
- Developing instructions for maintenance units relative to evacuation of unserviceable equipment requiring higher level maintenance.

- Developing instructions on evacuation of unserviceable materiel and scrap.
- Authorizing repair of specific end items.
- Monitoring backlogs of critical items at DS maintenance units.
- Recommending tailoring of units and the forming of like sections from several units for high-priority maintenance to support regeneration operations.
- Recommending augmentations for maintenance units.
- Coordinating the evacuation of unserviceable end items, assemblies, and components to rear maintenance units.
- Ensuring timely support through monitoring CSSCS reports resulting from the interface between SAMS and SARSS.

Table 7-2 lists ways which maintenance management officers may recommend to offset maintenance capability shortfalls. The COSCOM support operations officer coordinates materiel management problems that require top-level decisions with the corps G4. AR 710-2 prescribes reparable management procedures.

WEAPON SYSTEMS SUPPORT BRANCH

Maintenance efforts focus on returning major weapon systems to battle. Because of the criticality of weapon systems replacement to the corps battle, the corps commander designates a coordinating staff officer as the corps weapon systems manager. Intensive management of corps weapon systems includes coordinating weapon systems repair, replacement, and transportation resources of the COSCOM as well as the crew replacement resources of the personnel group. However, the work load associated with keeping track of all assigned crew-served weapon systems, their unit of assignment, mechanical condition, and expected date of return from maintenance units are best handled at the COSCOM level.

At the COSCOM level, the weapon systems support branch chief acts as the WSM. His personnel monitor

Table 7-2. Ways to offset maintenance shortfalls.

Major Components

- Implement selected piece part repair.
- · Search for substitution items.
- Step up collection and classification operations.
- Authorize controlled exchange.
- Lower cannibalization authorization level.
- Move critical components by Army air.

Replacement Weapon Systems

- Revise maintenance priorities.
- Cross-level assets.
- Increase maintenance.
- Seek support from TA.

Critical MOS and Annual Maintenance Man-hours

- Cross-level work loads between maintenance units.
- Increase deferred maintenance.
- Temporarily task other maintenance units which have a significant number of maintenance personnel.
- Seek assistance from TA/HN.
- Contract HN capability.

Movement

- Cross-level transportation assets.
- Fix forward to reduce HET requirements.
- Divert assets from less critical missions.
- Seek assistance from supported units.
- Preposition forward following risk assessment.
- · Increase throughput.
- Request HNS.

the repair or incoming status of weapon systems in subordinate COSCOM maintenance or supply units. The WSM places emphasis on the use of critical HETs or rail assets available to push weapon systems forward to the link-up point. The WSM develops detailed weapon systems replacement management procedures. To make weapon systems replacement work he needs to —

 Coordinate directly with the division WSM who consolidates reports of shortages in the division.

- Monitor personnel status reports, SITREPs, battle loss reports, or spot reports reported through S1/Gl and S4/G4 channels.
- Monitor weapon systems shortages in each division, separate brigade, and ACR.
- Use COSCOM maintenance support branch personnel to expedite the repair and monitor the status of weapon systems or components.
- Coordinate with CMMC/TAMMC Class VII commodity managers on existing and incoming weapon systems data.
- Coordinate requirements for crew member replacements directly with personnel management branch personnel designated by the corps AG to coordinate, manage, and provide crew members or replacements.
- Obtain data from the theater army personnel operations center on TA priorities and transmit corps priorities to TA.
- Monitor the reprocessing status of vehicles by the heavy materiel supply company.
- Discuss possible link-up points with the DMMC's WSM, division RTOC, and corps sector RAOCs.
- Work with the corps G4 and G3 on requirements for air, rail, or HET support to transport readyto-fight weapon systems to the link-up point or to an assembly area for formations in reserve.

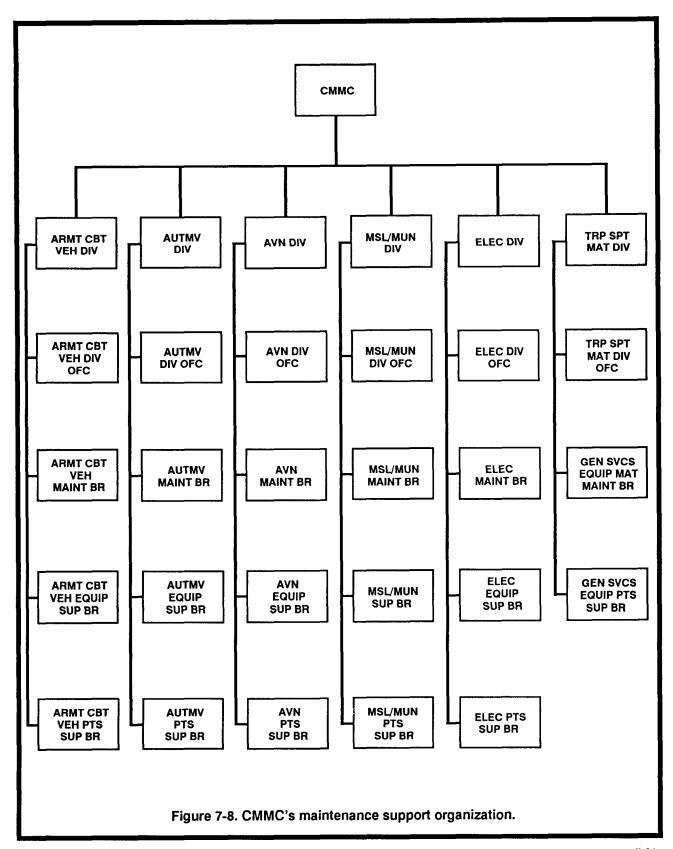
CMMC MANAGEMENT MISSION

The CMMC provides routine day-to-day maintenance management following guidance and direction furnished by the COSCOM support operations officer. COSCOM maintenance and supply branch personnel focus COSCOM maintenance and repair parts resources on the repair and return of critical weapon systems. The functional branch breakdown of the commodity divisions shown on Figure 7-8 permits intensive management of maintenance, equipment, and repair parts.

Personnel assigned to the CMMC commodity divisions implement the policies and plans of the COSCOM support operations officer. Depending on branch assignment, personnel –

 Collect and analyze maintenance and materiel status data.

- Analyze supply and maintenance support operations and apply corrective actions directed by the COSCOM support operations officer or subordinate logistics branch chief.
- Coordinate and perform liaison functions with DMMCs, BMMCs, RMMCs, and the TAMMC.
- Maintain liaison with counterparts at NICPs and with staff in supported nondivision DS maintenance units and supply support activities.
- Direct the storage and distribution of GS level stocks.
- Review and analyze demands.
- Identify items which require intensive management.
- Review ASLs received from DMMCs, GSUs, and nondivision DS maintenance units.
- Analyze not mission capable maintenance backlog.
- Take action to satisfy ASL zero balance lines.
- Monitor the materiel readiness status of the command.
- Forecast maintenance requirements.
- Establish and coordinate repair priorities.
- Monitor repair parts usage and resulting not mission capable supply support problems.
- Monitor modification work orders.
- Cross-level DS maintenance unit work loads.
- Coordinate GS maintenance support to the corps.
- Initiate, within guidelines from the COSCOM support operations officer, actions to meet stockage objectives.
- Coordinate stock status reporting procedures with subordinate COSCOM units.
- Perform inventory management functions for commodity items stored and distributed by applicable COSCOM units.
- Evaluate on hand supply assets to determine if they are sufficient to accomplish the COSCOM's support mission.
- Maintain the stock record account.



- Evaluate the work load and capability of applicable COSCOM units.
- Cross-level work loads and resources to achieve compatibility.
- Send MROs to GSUs.
- Coordinate movement requirements with the CMCC as required.
- Inform supply units of in-transit assets.

Commodity divisions refer materiel problems that deviate from the routine to appropriate support operations branch staff. The COSCOM support operations officer coordinates materiel management problems that require top-level decisions with the corps G4.

ARMAMENT-COMBAT VEHICLE DIVSION

The CMMC's armament-combat vehicle division provides supply and maintenance management of weapons (excluding missiles and their warheads). It micro manages combat vehicles and systems unique ancillary equipment, to include end items, components, and repair parts.

The CMMC's armament-combat vehicle division office programs maintenance, cross-levels resources, and manages the armament-combat vehicle assets of the corps.

Armament-Combat Vehicle Maintenance Branch

This CMMC branch manages maintenance of armament-combat vehicles. Branch maintenance managers transmit repair priority data to maintenance units. They coordinate with the armament-combat vehicle parts supply branch on repair parts requirements for maintenance of armament combat vehicles in short supply.

Armament-Combat Vehicle Equipment Supply Branch

This CMMC branch manages the day-to-day supply actions for Class VII armament-combat vehicle equipment. It manages Class VII requisitions for TOE equipment, to include processing requisitions on a daily basis and initiating follow-up actions.

Branch personnel take actions to till requisitions. They maintain stock record accountability for Class VII stocks within the corps.

Armament-Combat Vehicle Parts Supply Branch

This CMMC branch manages day-to-day supply of Class IX armament-combat vehicle parts. Branch managers maintain Class IX ASLs for armament-combat

vehicles. They recommend cross-leveling of repairs for armament-combat vehicles.

AUTOMOTIVE DIVISION

The CMMC's automotive division performs integrated materiel management for automotive equipment. It manages tactical wheeled and general-purpose vehicles; construction and MHE, and systems unique ancillary equipment, including end items, components, and repair parts.

Automotive Maintenance Branch

Branch personnel monitor maintenance of automotive equipment in the corps. They coordinate with the automotive parts supply branch on repair parts requirements for specific automotive items in short supply.

Automotive Equipment Supply Branch

This CMMC branch manages day-to-day supply actions in support of Class VII automotive equipment. Branch personnel process Class VII requisitions for MTOE automotive equipment and initiate follow-up actions. They maintain stock record accountability for Class VII automotive equipment supplies within the corps.

Automotive Parts Maintenance Branch

This CMMC branch manages the day-to-day supply of Class IX automotive equipment parts. Branch managers maintain Class IX ASLs for automotive equipment parts. They process daily requisitions for automotive repair parts and initiate follow-up actions. As necessary, they laterally transfer automotive parts or direct redistribution from activities with an excess of automotive parts.

AVIATION DIVISION

The CMMC's aviation division integrates supply and maintenance management of aircraft, avionics, aircraft armament, airdrop, and systems unique ancillary equipment. It provides day-to-day management of aviation supply and equipment. This includes repair parts and specialized equipment issued with aviation equipment.

Aviation Maintenance Branch

The aviation division's aviation maintenance branch manages the maintenance of aviation equipment. Branch personnel transmit repair priorities to AVIM units.

Aviation Equipment Supply Branch

This CMMC branch manages day-to-day supply actions

for Class VII aviation equipment supply support of aircraft and airdrop, avionics, aircraft armament, and related test equipment. Branch personnel maintain stock record accountability for Class VII aviation equipment within the corps. They process Class VII requisitions for MTOE aviation equipment and initiate follow-up actions. They coordinate with NICPs to fill requisitions for aviation equipment.

Aviation Parts Supply Branch

This CMMC branch manages day-to-day supply of Class IX aviation equipment parts. Branch personnel maintain Class IX ASLs on aviation parts. They process daily requisitions for aviation parts and initiate follow-up actions. They recommend cross-leveling of aviation parts.

ELECTRONICS DIVISION

This CMMC division performs integrated supply and maintenance management of C-E equipment and associated systems unique ancillary equipment, to include end items, components, and repair parts. It processes requisitions, programs maintenance, cross-levels resources, and manages day-to-day C-E assets of the corps.

Electronics Maintenance Branch

The CMMC's electronics maintenance branch manages maintenance of communications and electronics equipment in the corps. Branch personnel transmit repair priorities data on C-E equipment to subordinate maintenance units. They coordinate with the electronics parts supply branch on repair parts requirements for maintenance of C-E items in short supply.

Electronics Equipment Supply Branch

This CMMC branch manages day-to-day supply actions for Class VII C-E equipment. Branch personnel process requisitions for Class VII C-E equipment and initiate follow-up actions. They coordinate requisitions for controlled Class VII C-E items with the TAMMC. They maintain stock record accountability for Class VII C-E items. They also develop Class VII C-E equipment distribution plans and resolve corpswide distribution problems relative to C-E equipment.

Electronics Parts Supply Branch

This CMMC branch manages day-to-day supply of Class IX C-E repair parts. Branch personnel process requisitions for Class IX C-E repair parts and initiate follow-up actions. They maintain Class IX ASLs on C-E equipment. They recommend cross-leveling of C-E repair

parts and resolve corpswide distribution problems.

TROOP SUPPORT MATERIEL DIVISION

This division performs integrated materiel management for supplies provided to the corps by the US Troop Support Command, DLA, and GSA. It processes requisitions, programs maintenance, cross-levels resources, and manages day-to-day troop support materiel assets of the corps.

General Services Equipment Materiel Maintenance Branch

This branch manages maintenance for general materiel equipment. Branch personnel provide expertise on the repair of power generation equipment, turbine engine generators, utilities equipment, quartermaster and chemical equipment, construction equipment, special purpose equipment, and fabric items. They provide intensive management of common materiel deadlined for need of Class IX repair parts. They monitor the status of requisitions for common materiel. They coordinate with NICPs requesting expedited shipment of repair parts.

General Services Equipment Parts Supply Branch

This CMMC branch manages the supply of repair parts originating with DCSC for general materiel equipment. Branch managers establish and review ROs of common parts based upon past demand experience and anticipated requirements. They monitor ASL zero balance lines with dues out and take intensive management action to satisfy dues out.

STANDARD ARMY MAINTENANCE SYSTEM

SAMS automates maintenance management and reporting. A supported unit submits a work order request via its ULC to its supporting unit. SAMS generates a job number, requests required parts, or obtains status through its interface with SARSS.

SAMS-1

SAMS-1 automates day-to-day maintenance functions at DS/AVIM maintenance units. It provides a complete shop stock management system. It automates preparation of maintenance work orders. SAMS-1 software programs can be used to –

- Requisition parts.
- Process parts requirements for issue from shop stock.
- Compute shop stock levels.
- Manage bench stock.

- Manage shop work load.
- Maintain repair parts requirements and status data.
- Maintain information on repair tasks to be accomplished.
- Interface and transfer data to supporting supply activity on unfilled work order parts and shop stock replenishment requirements.
- Provide labor costs related to specific work orders.

SAMS-2

SAMS-2 collects data from SAMS-1 sites and provides maintenance officers information on inoperative equipment status, maintenance shop capabilities, and parts costs. SAMS-2 also produces reports on maintenance work loads, equipment backlogs, materiel readiness status, MWO status, calibration, and use of reparable items.

STAMIS Interfaces

The following interfaces between SAMS and ULLS, SARSS, and CSSCS are shown on Figure 7-9:

- The interface between ULLS at unit level and SAMS-1 at DS maintenance unit level enables units to submit maintenance requests to their supporting nondivision DS, AVIM, or DS missile maintenance unit. ULLS transmits work requests to SAMS-1. SAMS-1 feeds ULLS the work order status. ULLS also transfers readiness data to SAMS-2.
- The interface between SAMS-1 and SAMS-2 at CSBs and CSGs results in daily and weekly reports of inoperable equipment.
- The interface between SAMS-1 and SARSS-1 results in the automatic preparation of requisitions and automatic update of repair parts supply status. It enables maintenance units to monitor Class IX repair parts supply.
- The interface between SAMS-2 and CSSCS at the COSCOM HHC, CMMC, and CSGs enables maintenance managers to —
- Ensure timely support.
- □ Coordinate repair priorities.

- □ Monitor MWOs.
- Cross-level maintenance work loads among maintenance units.

CSSCS MAINTENANCE REPORTS

CSSCS collects maintenance status data through its interface with SAMS-2 at subordinate battalions and CSGs. CSSCS provides a series of maintenance status displays. COSCOM maintenance support branch personnel use the maintenance capability status displays assess overall maintenance capability for the force. They use support maintenance unit or maintenance support team status displays to assess problem areas and maintenance status in subordinate units.

CSSCS CLASS IX REPORTS

The automated interface between CSSCS and SARSS enables CSSCS to receive data on on-hand, due-in, and demand data. SARSS provides CSSCS automated Class IX ASL asset and demand data.

CSSCS data screens provide status data on Class IX assets located within the corps. However, CSSCS only tracks the Class IX assets listed on the CSSCS tracked items list. CSSCS provides status for Class IX assets in ASLs. It lists asset data in terms of quantities and DOS.

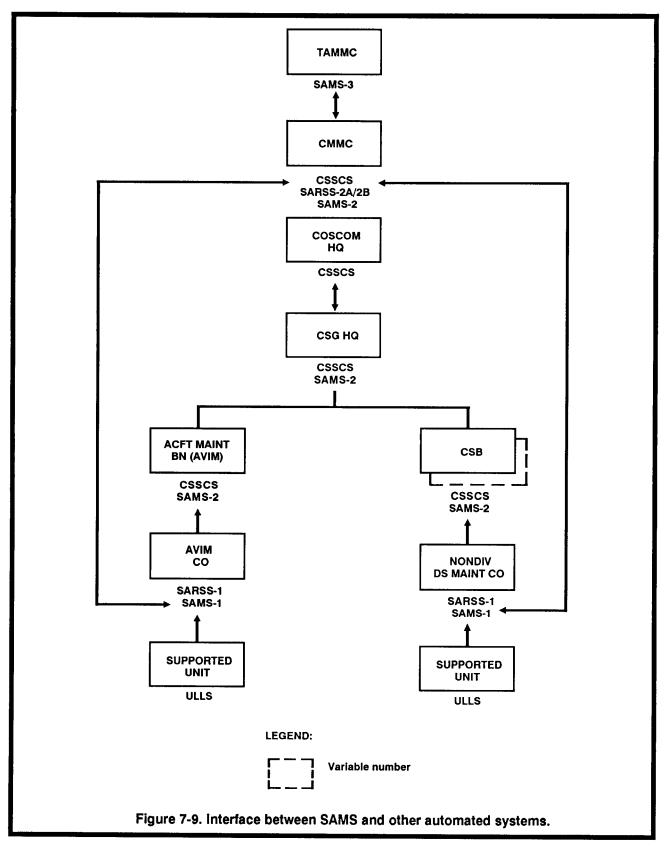
COSCOM maintenance support branch personnel use the Class IX ASL asset display report to assess current assets versus anticipated requirements.

CSSCS EQUIPMENT STATUS REPORTS

Based on the CSSCS tracked items list, the CMMC receives battalion and separate company level authorization and on-hand data extracted from SARSS-2A/2B asset visibility reports for corps units. CSSCS also tracks items identified as substitute items. SPBS-R provides input on equipment authorization and equipment on-hand. SAMS provides input related to inoperable equipment status.

COSCOM weapon systems support branch personnel use an equipment status summary report to assess the current and projected serviceable asset availability for the force.

COSCOM and CSG support operations staff officers use detailed data displays on equipment status reports or equipment items reports to assess equipment availability, assess readiness, and change maintenance priorities on a particular equipment item.



CHAPTER 8

Moving the Corps Force

Every requirement for troops or supplies generates at least one requirement for movement. The corps' transportation system provides for the rapid movement of troops and supplies about the battlefield. It affords the corps commander the capability to concentrate combat power at the critical time and place to influence the corps battle.

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PLANNING TRANSPORTATION SUPPORT

Transportation planning encompasses determining what must be moved, where it must be moved, and when it must be moved. It also includes selecting a mode of transportation that best fulfills requirements. Transportation plans focus on the timely deployment of the corps force and its materiel to the AO. Proper transportation planning results in timely delivery of combat forces and the means for their support.

Transportation planning in support of a joint or combined commander's OPLAN addresses both intertheater and intratheater movements. It needs to include reception of personnel, materiel, and equipment from point of origin and movement to destination.

TRANSPORTATION SUPPORT BRANCH

The COSCOM transportation support branch is the planning staff that integrates and synchronizes transportation planning with all other support operations provided by the COSCOM under the supervision of the COSCOM support operations officer. As such the COSCOM transportation support branch executes planning responsibilities vested in the COSCOM support operations officer for the move function.

The transportation support branch performs longrange transportation planning in conjunction with the CMCC based on AOs and likely courses of action. Transportation support branch personnel coordinate with COSCOM support operations' CSS plans branch staff in preplanning an integrated distribution system based on corps projected transportation requirements for reception, onward movement, and logistics support in the AO. They relate likely courses of action, data on the AO infrastructure, and corps G3 priorities to the CMCC. As appropriate, they recommend ways to offset transportation shortfalls. See Table 8-1.

Transportation Support Branch Chief

The transportation support branch chief serves as the principal transportation staff advisor to the COSCOM support operations officer. He provides transportation planning, coordination, and implementation support to the corps G4, CTO, and CMCC.

The transportation support branch chief maintains liaison with transportation Capstone units. Based on projected transportation requirements, he develops and recommends the troop basis and modifications to the MTOEs for transportation organizations. He recommends priority of transportation and airdrop unit deployment. As required, he maintains liaison with US and allied nation commands. He exercises staff supervision over transportation mode and transfer operations to ensure an effective distribution system within the corps.

Transportation Support Branch Staff

Transportation support branch personnel prepare plans, policies, and procedures for transportation support in the corps area. In coordination with transportation staff in corps headquarters and subordinate CSGs, they implement priorities established for movement of supplies, equipment, and personnel over controlled routes. Transportation support branch personnel –

• Recommend and coordinate plans, policies, and

Table 8-1. Ways to Offset Shortfalls.

MSR Shortfalls

- Establish control measures by route which limit unauthorized traffic.
- Develop alternate routes.
- Increase use of MPs and MRTs for circulation control and access to MSRs.
- Increase capacities of MSRs by upgrading and repairing.
- Schedule MSR use efficiently.
- Request command emphasis on meeting movement SP times and abiding by the highway regulation plan.

Asset Shortfalls

- Divert assets from less critical missions.
- Increase throughput.
- Reassess movement priorities.
- Increase use of rail and inland waterways.
- Seek assistance from supported units.
- Seek assistance from TA
- Contract for HN support.

programs to support transportation, movement control, highway regulation, and cargo transfer operations.

- Prepare movement management policies for the COSCOM.
- Prepare estimates, plans, and policies for movement control, mode operations, and terminal operations.
- Develop input for corps movement annexes and transportation estimates.
- Review corps orders for transportation supportability and specified and implied tasks.
- Coordinate plans for throughput from TA, interzonal transportation, intermodal operations, and trailer transfer operations.

- Coordinate with the COSCOM procurement support branch on the acquisition and use of HN transportation resources based on the corps movement program or other planning documents.
- Recommend locations of transportation nodes and units to support the distribution system and corps movement program.
- Recommend changes in allocation of transportation units based upon changes in the distribution pattern or to weight the corps battle.
- Advise the COSCOM support operations officer on the effective use and operation of transportation units.
- Review material distribution plans to ensure that they are transportation supportable.
- Recommend changes as necessary to increase the effectiveness of transportation.

- Develop the transportation portion of contingency plans.
- Recommend requirements to construct, improve, or maintain transportation facilities.
- Determine support requirements for corps movement control and mode operating units and facilities.
- Provide input to the corps movement program.
- Provide policy and procedural guidance to the CMCC for formulation and preparation of highway regulation plans.
- Coordinate transportation plans and polices with the CTO, corps G4, CMMC, CSG transportation branch staff, DTOs, TAMCA, and TRANSCOM.
- Coordinate with medical brigade or medical group staff on transportation requirements to support medical supply and patient evacuation when resources are insufficient.
- Develop the transportation movements annex to COSCOM OPLANs and consolidate input to the corps administrative/ logistics plan for personnel and materiel movements.

During the planning, alert, and staging phases of an operation, transportation support branch personnel perform the tasks listed on Table 8-2. They plan for the reception of the COSCOM force in an AO and for its movement to final destination. They coordinate with the CMCC and MCTs, refining the time-phased transportation requirements list for the AO.

In addition to FM 100-17, the Joint Chiefs of Staff publication, Joint Operations Planning System, provides comprehensive guidance for planning the deployment of forces from CONUS to overseas areas. It also provides guidance on planning the reception and onward movement of forces in a theater.

TRANSPORTATION PLANNING STEPS

Regardless of the type of transportation planning, transportation staff officers perform the following planning steps:

- Assess the distribution pattern.
- Determine requirements.
- Determine transportation capabilities.
- Balance requirements against capabilities,

- Determine shortfalls and critical points.
- Coordinate the transportation plan with all affected.
- Publish and distribute the plan.

Assessing the Distribution Pattern

The distribution pattern shows the locations of supply, maintenance, and transportation activities. It also delineates throughput and interzonal transportation requirements. Development of the distribution pattern is guided by the commander's concept of operation and the number, types, and location of in place and incoming units to be supported, and their time phased arrival.

Movement planners use the distribution pattern to develop the movement program and the transportation network of modes available to support movement requirements. It helps planners know where support should normally flow and where it may be diverted as METT-T dictate. The distribution pattern constantly evolves, requiring adjustments to the movement program.

Determining Requirements

The CMCC uses planning periods to forecast transportation requirements for current and succeeding periods. It forecasts requirements in coordination with the COSCOM support operations officer, the CMMC, CTO, corps G4, and CSG transportation branch personnel.

Material movement requirements are developed in terms of class of supply, estimated weight and cube, RDD, and planned origin and destination. Special handling requirements are also identified. Personnel movement estimates are grouped by category. Support for unit movement is also included, as are any OPORD specified or implied tasks.

Determining Transportation Capabilities

The CMCC coordinates with the COSCOM transportation support branch and CSG transportation branch personnel to determine the –

- Number of truck units and available truck assets.
- Number, characteristics, and capabilities of HN transportation assets allocated, to include rail, highway, and inland waterway modes of transport.
- Availability of contracted support.
- Reception, material handling, and intransit storage capabilities.

Table 8-2. Transportation tasks during deployment planning.

PREDEPLOYMENT

- Collect data on the capability of transportation units, to include tonnage capabilities and in-transit times.
- Compare requirements against COSCOM transportation unit capabilities and recommend adjustments to the OPLAN.
- Review movement forecasts from units, G1 personnel forecasts, and the CMCC.
- Coordinate with transportation officers of supported divisions, separate brigades, and ACRs
 in determining transportation requirements and policies for movements from the corps rear
 area into the division or brigade area.
- Develop the troop list and recommend modifications to the MTOEs of COSCOM transportation units.
- Obtain estimates from COSCOM support operations staff on tonnages required for resupply
 of the force.
- Obtain estimates from other Services of their requirements for Army transportation support.
- Coordinate with ACofS, G5 and procurement support branch staff on the availability of HN surface and air terminal facilities and equipment in the AO.
- Identify requirements for additional transportation units.
- Identify CONUS staging areas, ports of debarkation, air and railheads; their tonnage capabilities; and their possible use for initial deployment and continuing support.
- Coordinate with TA staff on interrelated movement procedures and movement plans in support of the operation.
- Conduct feasibility studies on the transportation network.
- Plan the area highway transportation network with the assistance of the PM, CA units, and engineers.
- Coordinate with medical brigade/group staff on transportation requirements for medical supply and casualty evacuation when dedicated medical evacuation resources are overwhelmed.
- Review the traffic circulation plan and traffic control plan developed by the MP group/brigade and recommend priorities for use of time and space on the controlled road network.

DEPLOYMENT

- Develop priorities for the deployment of subordinate transportation units.
- Obtain activity address codes and port designators of deploying units.

Table 8-2. Transportation tasks during deployment planning. (cont)

- Establish channels of communication with transportation operating agencies that will conduct movement of the deploying force.
- Prepare movement orders for administrative troop movement.
- Arrange for installation assistance in loading units and moving units deploying with organic assets.
- Coordinate indigenous labor requirements with the COSCOM ACofS, G1 and CA staff assigned to the COSCOM ACofS, G5.
- Initiate actions to comply with HN administrative requirements, such as customs, agricultural inspections, and health requirements.

STAGING

- Establish liaison with transportation staff counterparts at corps headquarters and, as required, with appropriate US and allied nation commands.
- Coordinate with procurement support branch staff regarding access to HN cargo transfer locations and transportation modes.
- Coordinate with ACofS, G5 section staff in establishing relationships with the local US State Department office and HN officials regarding HN transportation facilities.
- Coordinate with COSCOM medical brigade/group staff on transportation requirements for medical supply and patient evacuation when resources are insufficient.
- Coordinate with corps personnel group staff relative to requirements to transport soldiers.
- Coordinate with COSCOM petroleum support branch personnel and munitions branch personnel on throughput of materiel.
- Coordinate with engineers for construction, improvement, and maintenance of transportation facilities.
- Validate the estimates of HN transportation resources and the percentage of availability for corps force use.
- Coordinate with support operations section staff in determining priorities for offloading and forwarding material.
- Monitor terminal operations to ensure rapid clearance.
- Coordinate with petroleum and ammunition supply units and appropriate branch personnel on the throughput of bulk fuels and ammunition.
- Recommend reallocating transport assets.
- Monitor the use of critical items of transportation and cargo handling equipment and determine the need for additional transportation resources.

• Number and type of airlift and airdrop sorties allocated for CSS air movement operations.

Balancing Requirements Against Capabilities

Transportation planners consider all work load requirements, to include –

- Direct shipments.
- Multistops.
- Retrograde.
- Augmentation to unit movement.
- Support to allies.
- Support to civilian organizations.
- Assistance in medical evacuation operations.

The CMCC uses publication and command specific guidelines to assign requirements against capabilities by mode. Guidelines may include –

- Providing service according to priorities.
- Minimizing cargo rehandling and cross hauls.
- Planning for backhauls.
- Allocating all available transportation modes.
- Using the most efficient mode to complete movement as far forward as possible.

Determining Shortfalls and Critical Points

The CMCC considers the total transportation system, priority of movement, and the risk of failure. This surfaces any shortfalls. The CMCC then identifies shortfalls to the COSCOM transportation support branch staff for resolution.

The CMCC identifies critical points where control measures or placement of movement specialists could reduce or eliminate possible bottlenecks to movement. Critical points might include –

- Aerial ports.
- Railheads.
- Terminal transfer points.
- Transshipment points.
- Bulk fuel terminals and pipelines.

Coordinating the Transportation Plan

To ensure integrated support, COSCOM transportation support branch personnel need to coordinate changes in assumptions, policies, priorities, allocations, and locations with other staff planners.

MOVEMENT PROGRAM

The movement program identifies total transportation requirements assessed in terms of point of origin and destination. It programs transportation assets to support these requirements and identifies shortfalls. The CMCC prepares the movement program and coordinates immediate support. FM 55-0 provides more detail on the movement program.

The movement program is the authority to commit transportation assets. Each approved movement requirement has a program line number. To activate a line number, the shipper contacts the MCT to verify the accuracy of the data, such as quantity, origin, and destination. The MCT commits the mode operator (CSG or HN) to provide support.

MOVEMENT MODES

The CMCC selects the most efficient and effective mode of transport to move cargo and personnel as far forward as possible. Although motor transport is the most flexible mode, the CMCC also considers the capabilities and limitation of alternative modes. The mode selected depends on —

- Priority.
- Required delivery date.
- Commodity or cargo type.
- Special restrictions.
- Economy efficiency.
- Available resources.

Movement by Rail

Rail provides maximum capacity for moving large quantities of materiel and personnel with limited resource expenditure. The COSCOM transportation support branch needs to acquire data on HN rail that can be used for movement of large quantities of supplies or heavy equipment. Other considerations include –

- Rolling stock.
- Rail-line clearances.
- Rail gauge.
- Rail bridges
- Restriction on outside movements.

- Availability of off-road facilities.
- Vulnerability of the rail net to enemy action.

In coordination with corps G4 and COSCOM ACofS, G3 plans and operations staff, COSCOM transportation support branch personnel develop and update contingency plans for rail movements.

Movement by Air

Depending on the theater of operations, the quantity of items moved by air forms a very small percentage of the total quantity moved. Only high-priority items and critically needed rations, fuel, ammunition, blood, or repair parts are normally moved by air. Army transport aircraft capacity seldom exceeds the amount required for movement of priority cargo. Therefore, plans should not provide for routine movements by air of other than priority cargo.

COSCOM transportation support branch personnel develop plans for CSS air movement operations in coordination with the CMCC. They formulate and issue policy directives on air transportation matters. They coordinate air movement capacity data with Army aviation and Air Force planners. They also coordinate arrival/departure airfield control group operations for units arriving or departing by Air Force aircraft. They need to know data relative to —

- International airfield standards.
- Primary, secondary, and unimproved airfields.
- Effect of climatic conditions on use of airfields.
- Drop zones.

The CMCC plans the use of allocated Army and USAF airlift or airdrop. Plans should take into account opportune lift for forward or retrograde movement.

AALPS automates load planning. During contingency planning, AALPS enables planners to preplan force packages and to determine airlift requirements for force packages. During deployment planning, planners can use AALPS to tailor and prioritize force packages based on mission requirements. Planners can also use AALPS to determine precise airlift requirements and to produce cargo manifests for loading USAF cargo aircraft.

Movement by Coastal and Inland Waterways

Coastal and inland waterways can help clear cargo in ports. However, movement is relatively slow. Extensive inland waterway systems compatible with requirements for transportation exist in only a few areas of the world. Inland waterway systems are susceptible to interdiction. They are difficult to restore to usefulness if the system relies on locks.

COSCOM transportation support branch personnel need to assess the availability of boats and barges and their average capacity and, in coordination with the CMCC, assess their desirability for use.

LOGISTICS PREPARATION OF THE BATTLEFIELD

COSCOM transportation support branch personnel can use IPB products developed by corps and COSCOM intelligence and operations staff officers to plan how to support movement requirements and how to protect transportation operations. They need to ensure that ACofS, G2 and G3 staff officers are aware of priority intelligence requirements needed for development of transportation and highway regulation plans.

Of the IPB products described in FM 34-130, the following IPB products provide information or overlays which can be used to determine critical points, plan support, and plan how to protect the corps transportation system.

Battlefield Area Evaluation Products

COSCOM transportation support branch personnel can use the following data from battlefield area evaluation products to plan deployment and select possible sites for transportation operations:

- Locations and capacities of landing zones and airfields in the corps rear area.
- Area port facilities and discharge capacities.
- Rail networks, depots, and capacities.
- Condition, throughput capacity, and restrictive features of highway networks.

Terrain Analysis Products

The following IPB terrain analysis overlays can be used to help plan the type of transportation units and equipment which can best deploy to the AO:

- Surface materials (soil analysis) overlay.
- Surface drainage or ground water overlay.
- Surface configuration (slope and grade) overlay.
- Ground water/table overlay.
- Transportation net overlay.

- Key terrain overlay (fording sites, high ground and road junctions).
- Built-up areas and congestion area overlay.

Weather Analysis Products

The following IPB weather analysis products can help COSCOM transportation support branch personnel assess the impact of weather on transportation support operations:

- Overlay of areas susceptible to fog and smog.
- Seasonal fog predictions summary.
- Temperature and humidity forecasts (by season).
- Rain predictions and annual summary (by season).
- Snow predictions and annual snowfall summary.
- Cloud cover (by season).

Threat Evaluation and Doctrine Products

The following IPB products on threat and threat doctrine can be used by COSCOM transportation support branch personnel to plan employment, how to protect transportation operations, and how to implement timely proactive support:

- Threat conventional weapon systems and their ranges.
- Threat rear area general doctrine analysis and likely course of action.
- Friendly high priority targets, as considered by the enemy.

Threat unconventional warfare doctrine and units.

Threat Integration Products

COSCOM transportation support branch personnel can use the following IPB intelligence data and IPB products to plan for the best support operations on an integrated battlefield:

- Probable enemy actions, if they use NBC weapons.
- Threat air and ground named areas of interests.
- Probable enemy actions overlay, for given weather and terrain conditions.
- Threat naval and air force integration doctrine and capabilities.

NBC PLANNING CONSIDERATIONS

NBC threats will have a direct impact on transportation and movement control planning and execution. Immediate effects include casualties, destruction of supplies and equipment, destruction of LOCs, and damage to communications equipment. Sustained effects result from residual radiation and radioactive fallout, contamination, and degraded personnel performance. These effects may result in —

- Shortages of mode operating equipment.
- Degradation of LOCs.
- Disruption of movement plans and programs.
- Disruption of communications.

COSCOM TRANSPORTATION SUPPORT ORGANIZATION

COSCOM transportation forms the critical link in the theater distribution system. Figure 8-1 depicts the COSCOM's organization for providing transportation support across the battlefield. The actual organization depends on forecasted work load and units available in the force structure. A transportation group headquarters is required from EAC when three or more transportation battalions are included in the force structure.

The transportation organization is structured to move cargo, equipment, and personnel by various modes of transport. To support campaigns and major operations, it needs to move maneuver units on the battlefield as well as reposition the corps support structure. HNS can help offset shortfalls in the US transportation support organization.

The COSCOM commander attaches a variable number of truck companies and cargo transfer companies to his

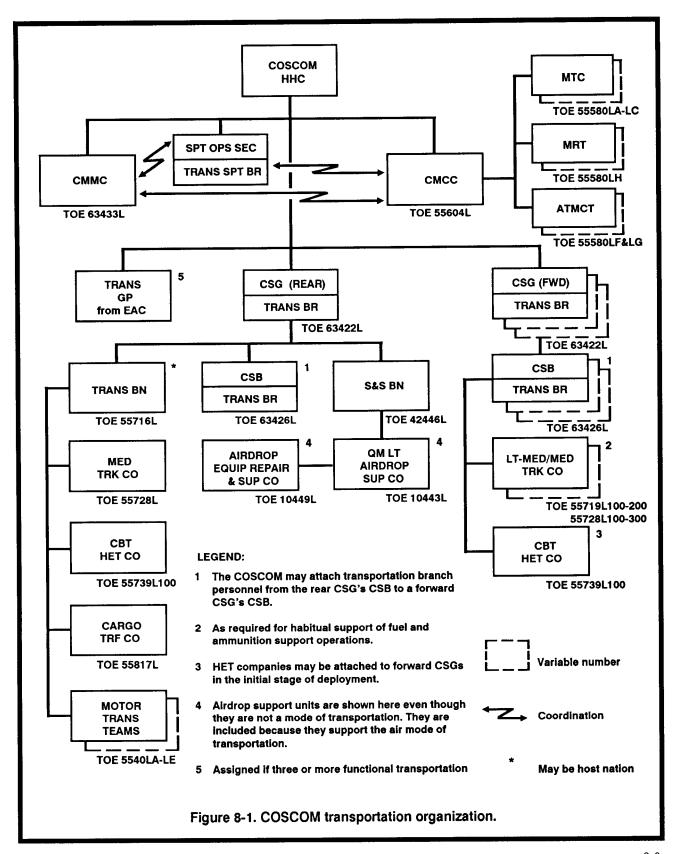
of truck companies and cargo transfer companies to his subordinate CSGs or transportation group for allocation/reallocation to CSBs and transportation battalions. FM 55-30 describes the operation of truck units.

MOTOR TRANSPORT UNITS

Transportation Battalion

The transportation battalion (TOE 55716L000) attached to the rear CSG provides direct as well as general support to corps nondivision units and reinforcing support to assigned divisions. It focuses on throughput distribution as far forward as the brigade support area.

When employed in support of an independent corps operation, the battalion may need to operate from the



waterline to forward areas of combat. This situation requires that the troop list include terminal and rail units from a EAC rail or terminal battalion.

Light-Medium Truck Companies

Light-medium truck companies (TOE 55719L100/200) move general cargo from the CSB in the division area, reinforcing the FSBs and the MSB supporting corps forces in the brigade and division area. They offset the work load beyond the capability of the MSB's truck company. They may also provide support to the ACR and separate brigades when these organizations employ on line or support rear operations.

Medium Truck Companies

Medium truck companies (TOE 55728L100-300) are allocated to CSBs or transportation battalions. These truck companies haul containerized and breakbulk ammunition and general cargo within the corps rear area and to supply points located in the DSA/BSA.

Combat Heavy Equipment Transport (HET) Companies

Combat HET companies (TOE 55739L100) may be initially attached on an ad hoc basis to a CSB during initial stages of deployment and the theater buildup phase. However, they are normally consolidated under the transportation battalion of the rear CSG.

HETs support operational and tactical mobility. HETs move heavy or outsized cargo and vehicles, such as tracked vehicles, howitzers, and personnel carriers. Initially, HETs move heavy armored forces from a port of debarkation to an initial assembly area in the corps rear area. They can relocate a brigade task force in a single lift. HETs also move heavy armored forces with slice elements from corps or division areas as far forward as METT-T factors permit.

Using HETs to move heavy armored forces to assembly areas reduces fuel requirements en route. It also reduces maintenance work load due to fewer systems breaking down en route. Crews arrive rested and prepared to fight.

HETs may also support evacuation and weapon systems replacement operations. When HETs perform a battlefield evacuation role, they may move as far forward as the most forward collection point operated by the maintenance company in the brigade area.

Cargo Transfer Companies

These companies (TOE 55817L100/200) transship

cargo at air, rail, motor, and inland barge terminals. Sequenced early in the deployment flow, they operate initially at arrival airfields, supporting combat units in offloading and marshaling unit equipment and supplies. As the AO expands, they echelon forward to conduct cargo handling operations at forward mode transfer points. They unload, segregate, temporarily hold, redocument, stuff, and load cargo whenever a change in mode occurs. With attached cargo handling elements tailored to the mission, they augment logistics operations.

Trailer Transfer Detachments

These detachments (TOE 55540LE00) operate trailer transfer points. They receive, segregate, assemble, and dispatch loaded or empty semitrailers for line-haul operations in accordance with CMCC directed priorities. Trailer transfer points connect line-haul legs to throughput cargo. They also provide emergency refueling facilities and perform emergency repairs on arriving vehicles.

Terminal Transfer Cellular Logistics Team

Depending on the theater, a US terminal transfer CLT (TOE 55510LA00) could be allocated. This CLT provides liaison and serves as the interface in joint terminal transfer operations with WHNS terminal transfer units. Based on the mission of WHNS terminal transfer units, the CLT may operate at a railhead, airhead, seaport, inland waterway port, or depot.

Though assigned to the COSCOM and attached to a CSG, the headquarters section collocates with the WHNS transportation battalion headquarters. It serves as the WHNS battalion logistics operations section. The two company sections collocate with HN terminal transfer companies. They serve as a portion of the terminal transfer company's operations section. CLT personnel –

- Provide operational mission coordination and taskings to the WHNS transportation battalion.
- Consolidate and forward transportation management reports from HN units to the CMCC.
- Coordinate mission taskings between the CMCC and HN terminal transfer units.
- Maintain visibility of in-transit US shipments and supplies, providing status reports through US channels.
- Divert cargo when directed by the CMCC.

- Assist HN documentation personnel in preparing US documentation.
- Provide technical guidance for loading US cargo on HN equipment.

An MCT passes taskings for transportation and terminal transfer support via a HN LNO team collocated with the MCT. The CLT headquarters section receives the terminal transfer tasking order with assigned transportation movement release number. It relays the tasking information to the WHNS transportation battalion S3. The WHNS terminal transfer company operations section tasks transfer platoons with the mission and provides cargo information. The CLT company sections assist with cargo documentation. Based upon input from the MCT/CMCC, the CLT may alter transportation movement priority of shipments.

SAMPLE BATTLEFIELD EMPLOYMENT

The COSCOM maintains a distribution system to support a corps which may occupy an area 100 by 200 kilometers. When supporting three divisions on line, COSCOM ground transportation assets may have to move a total of 18,000 tons of dry cargo and 2,000,000 gallons of fuel over corps MSRs.

Figure 8-2 depicts how a COSCOM commander employed his transportation assets on the battlefield. In this example –

- The CMCC sets up near the COSCOM headquarters under staff supervision of the COSCOM support operations officer. The CMCC coordinates requests for transportation support beyond the capability of the transportation assets in each MCT's area.
- An MCT collocates with each CSG headquarters to coordinate transportation support for customers in the CSG AO. The MCT executes the corps movement program and commits the CSG/CSBs to provide transportation support.
- MRTs operate from critical points to regulate the movement of authorized traffic over MSRs.
- The CSGs allocate truck units to CSBs to meet tactical or operational transportation requirements and to assist with requirements for support of retrograde, surge, or reconstitution operations. As necessary, CSGs cross-level transportation assets among subordinate battalions.
- Truck companies operate in a habitual support

- **role** when supporting COSCOM units which require full time use of truck assets. The support provided to ammunition supply companies is an example of this habitual support role.
- HET companies support operational and tactical mobility and onward movement.
- In the rear CSG, subordinate truck companies are used in a GS role. Medium truck companies and cargo transfer companies provide corpswide transportation support of critical GS level supplies stored in the corps rear area.
- A cargo transfer company operates in the corps rear area in proximity to off-loading points and support facilities. It discharges, backloads, and transships cargo at air, rail, and motor terminals and beachheads and inland waterway terminals.
- The airdrop units allow the COSCOM to provide support when ground road networks are disrupted.

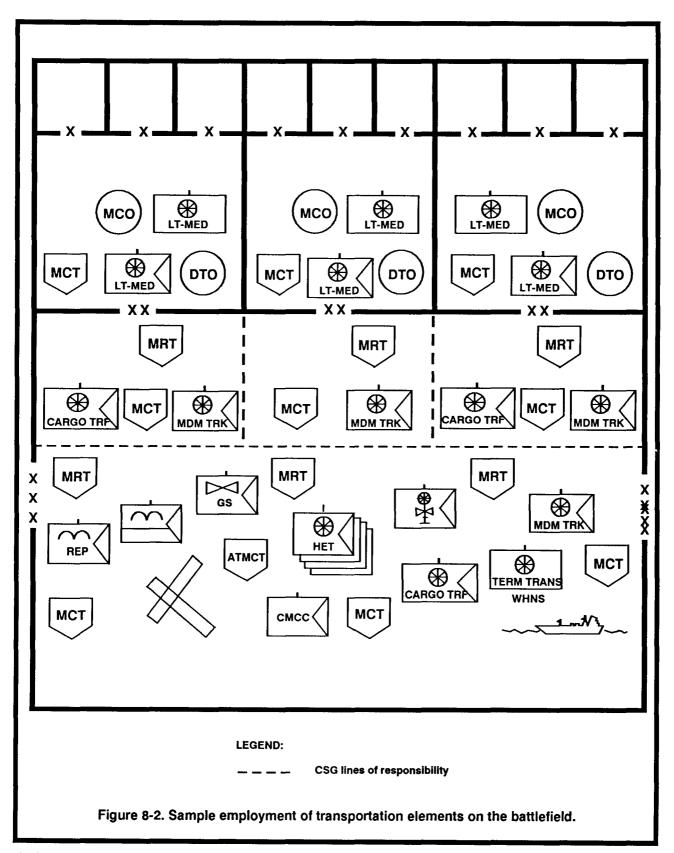
AIRDROP SUPPORT ORGANIZATION

Airdrop of supplies or equipment by Air Force aircraft provides an alternative means of support for movement of priority cargo when ground LOCs are disrupted or air-landed supply operations are impractical. When forces become isolated or contaminated areas cannot be bypassed via ground transportation, airdrop provides a means to respond to immediate requests for ammunition, fuel, rations, water, blood, blood products, resuscitative fluids, or other critically needed supplies. FM 10-500-1 covers airdrop support operations in a theater of operations.

Transportation support branch personnel can use airdrop resupply planning factors in FM 101-10-1/2 to determine the force structure needed to support the work load and the type of airdrop delivery. The COSCOM organization which supports airlift resupply operations may consist of the following units or teams normally attached to the S&S battalion HHD:

Light Airdrop Supply Company

The Quartermaster Light Airdrop Supply Company (TOE 10443L000) can receive, store, and prepare 120 tons of selected supplies and equipment a day for airdrop. Company personnel assist in loading supplies and equipment into the aircraft and releasing supplies from the aircraft in flight. They also provide technical assistance to units responsible for the recovery and evacuation of



airdrop equipment. FM 10-400 describes company operations and procedures.

As directed by the COSCOM support operations officer, the company temporarily stores small quantities of fast-moving items, such as ammunition and petroleum products, to fill emergency requests. To further reduce response time, the COSCOM support operations officer directs the preriging of selected items.

Airdrop Equipment Repair and Supply Company

The Quartermaster Airdrop Equipment Repair and Supply Company (TOE 10449L100) provides DS/GS supply and maintenance support for airdrop equipment in support of a light airdrop supply company. Personnel assigned to this company perform maintenance on parachutes, airdrop equipment, and airdrop platforms for issue to the light airdrop supply company and other corps units. FM 10-400 describes unit support capabilities.

Force Structure Alternatives

To offset shortfalls in airdrop force structure, airdrop support units are often committed to more than one geographic area.

To offset a shortage of airdrop resupply units, COSCOM transportation support branch personnel can recommend —

 Preriging critical supplies and equipment for airdrop.

- Establishing airdrop equipment operational projects for selected high-risk theaters.
- Requesting airdrop support teams organized under TOE10510. These include –
- □ Team LA, Airdrop Supply Team, which can receive, store, and prepare 50 tons of selected supplies and equipment a day for airdrop.
- Team LC, Airdrop Equipment and Supply Team, which can provide 25 percent of the mission capability of the airdrop equipment repair and supply company.
- Team LE, Parachute Pack and Maintenance Team, which can support 1,000 parachutists with personnel parachutes and parachute maintenance.

COSCOM Staff Support

Transportation support branch personnel prepare the airdrop annex to the COSCOM OPORD. They provide staff supervision over the technical training of COSCOM personnel in packing, rigging, and loading, and in the maintenance of airdrop equipment, supplies, and parachutes for airborne operations. They coordinate airdrop requests from supported units with the CMMC. Once supplies and equipment are rigged, the CMMC coordinates transportation through the CMCC.

COSCOM TRANSPORTATION DISTRIBUTION SYSTEMS

The transportation distribution system provides the link between dispersed GS storage sites and supporting DS level supply points. The habitual support relationship between the GS level supply units and appropriate transportation truck units ensures more responsive daily support operations.

DISTRIBUTION SYSTEM

The distribution system has been developed to meet the volume of shipments and the special requirements associated with certain classes of supply.

Bulk Fuel

For bulk fuel, the distribution system may consist of rail tank cars and 5,000-gallon semitrailers. They provide the link between the pipeline system and DS Class III points. Due to the nature of bulk fuel and the requirements to continuously push fuel forward,

transportation assets are dedicated to the fuel distribution system. Medium truck companies (petroleum) collocate with petroleum supply companies to support bulk fuel distribution.

Ammunition

To support ammunition requirements, the distribution system provides for continuous refill. It relies on PLS trucks to move ammunition from CSAs and ASPs to ATPs. Replenishment of ATPs might occur four times daily. Peak volume could require approximately 300 semitrailer loads daily. To support daily high tonnage shipments, medium truck units collocate with GS/DS ammunition supply units which operate a CSA and ASPs.

Repair Parts

The volume of shipments of repair parts warrants establishing standing movement requests for the routes

between the repair parts supply company and DS maintenance units. The majority of repair parts shipments are configured as throughput pallets for ALOC designated units. However, pallets are broken down at the airhead for transshipment to consignees.

Replacement Weapon Systems

Through the volume of movement is small, the unique weight of outsized Class VII weapon systems requires a HET distribution system when these weapon systems cannot be moved by rail.

HABITUAL SUPPORT

An habitual support relationship exists between truck companies and GS level supply units. This enables CSGs to provide continuous, responsive corpswide GS level supply of bulk fuel, munitions, and general supplies. The daily habitual support relationship between truck units and supply units ensures faster reaction times and more efficient use of logistics support personnel and equipment.

The MCT collocated with the CSG HQ assigns blocks of TMRs to the CSG/CSB transportation branch to support routine, recurring logistics support requirements. These are considered programed moves. CSB or transportation battalion staff officers keep CSG transportation branch staff informed of the status of subordinate truck assets. Based on local procedures, this is reported to the supporting MCT or CMCC. The MCT coordinates with the CMCC HTD for road clearance if the routes require a movement credit.

The CMMC maintains visibility of truck usage through its subordinate MCTs. The habitual support relationship between truck units and supply units can be broken only by the CMCC, upon direction of the COSCOM support operations officer, in order to meet unusual transportation requirements. Based on higher priorities and changes in the tactical situation, the CMCC, through its MCTs, then recommits CSG/CSB truck assets previously providing habitual support of logistics support requirements.

OTHER SUPPORT

COSCOM units and other units in the corps rear area submit requests for transportation support which are beyond their organic truck capabilities to the MCT serving their area. Divisions also transmit shortfalls to the CMCC for additional transportation support when division assets are exhausted.

As shown by Figure 8-3, MCTs coordinate the

requirement between the truck unit, the shipping unit, and the receiving unit. MCTs fit the requirements into the overall program in accordance with the COSCOM support operations officer's priorities. The COSCOM support operations officer determines priorities for the movement of cargo and personnel based on COSCOM or corps commander guidance and information received from the CMMC and supported units. Depending upon the COSCOM SOP, MCTs either commit individual truck companies directly or coordinate committal through the CSG/CSB transportation branch or transportation battalion S3.

MCTs issue TMRs to commit the CSGs or transportation units to support movement requirements. MCTs also forward movement bids to the CMCC HTD for movements on MSRs that require movement credit (clearance). In this respect, they synchronize both the transportation support and movement clearance.

If necessary, MCTs request additional transportation support beyond that existing in the CSG AO from the CMCC. The CMCC can either commit another CSG to provide support or recommend that the COSCOM support operations officer cross-level transportation assets among its subordinate CSGs. When necessary, the CMCC requests reinforcing support from the TAMCA.

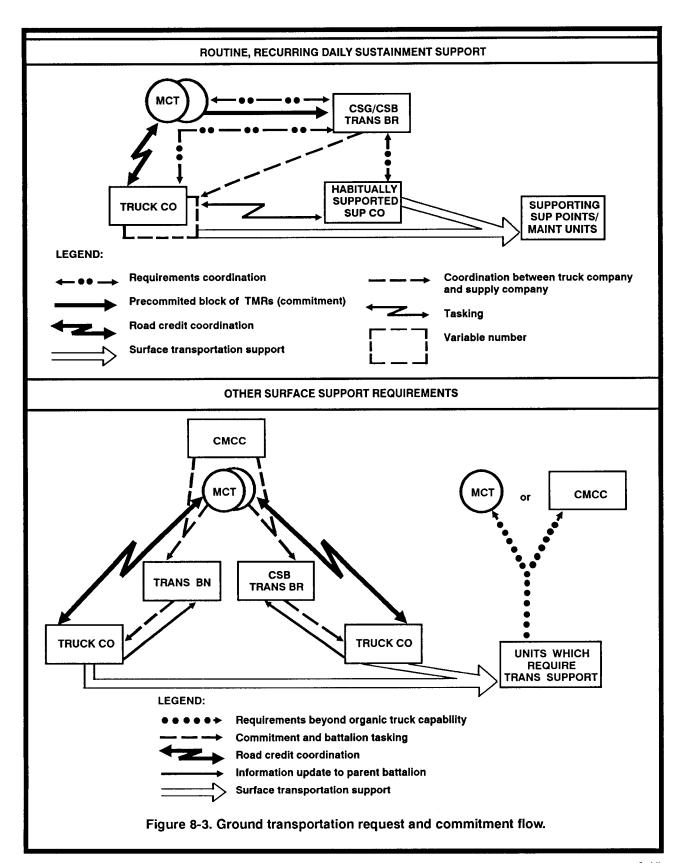
To the maximum extent possible, during peacetime the transportation requirements process follows that prescribed for war. Units submit requirements through their supporting MCT. The MCT follows local post or installation procedures to obtain transportation support assets.

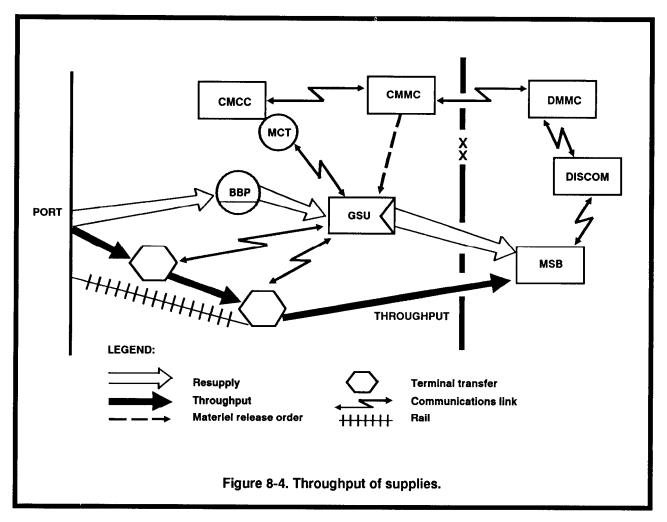
INTERCORPS MOVEMENTS

COSCOMs normally employ transportation assets to meet its transportation and distribution requirements, execute the corps movement program, and meet requirements within the corps and division areas. Movements that cross corps boundaries are coordinated between the CMCCs.

THROUGHPUT DISTRIBUTION

Throughput distribution of supplies should occur whenever possible. As shown by Figure 8-4, the term throughput applies to direct delivery of cargo as far forward on the battlefield as practical. The objective is to bypass intermediate supply organizations. This expedites the movement of supplies forward and eliminates unnecessary handling.





Throughput, however, does not mean that a container of supplies is moved by a single mode or single vehicle from the port directly to the using unit. The container might require terminal transfer from the rail to truck mode or trailer transfer from a theater prime mover to a corps prime mover. It may need to undergo break bulk to enable distribution of the supplies it contains to multiple units. The transportation system needs to be properly force-structured to permit these options.

The efficiency of throughput of supplies within the corps depends on the ability of the CMCC and CMMC to maintain in-transit visibility and ensure that supplies are routed or rerouted to meet changing tactical situations. To do this, the CMCC maintains an in-transit shipment file. The file is based on data transmitted by its subordinate MCTs, MRTs, and ATMCTs regarding the passing and receipt of TA-directed shipments,

shipments received from CONUS NICPs, and shipments generated within the COSCOM. This file helps to prevent shipments to a unit in excess of the unit's ability to receive and unload the shipment.

LOC DISRUPTIONS

Movement on MSRs may be disrupted due to -

- Priority movements of reconstituted units and critical equipment.
- Large-scale movements of casualties and patients.
- Blocked routes, due to damage or contamination.
- Refugee traffic departing the area of hostilities.
- Congestion.

The CMCC HTD and COSCOM transportation

support branch personnel coordinate with the corps rear CP's CSS cell for alternate supply routes. They assess the impact of NBC on transportation and take measures to —

- Determine location of attack, time, type agent, and radius of contaminated area.
- Assess the in-transit status of highway movements and whether any movements are immediately or potentially effected.
- Receive route information, assess routes, and determine which routes should receive priority for reconnaissance and decontamination.
- Determine which programmed movements should continue as scheduled and which should be cancelled or rerouted.
- Provide en route diversions through traffic control points and/or MRTs.

After making an initial assessment and immediate adjustments, the CMCC and transportation support branch consider the capability to support based on changes in priorities, operating areas, support relationships, and distribution patterns. Follow up actions may include —

- Reallocating areas of responsibility among movement control elements.
- Coordinating with the CMMC for disposition of contaminated material.
- Revising the movement program.
- Obtaining updated priorities.
- Coordinating for decontamination and repair of routes.
- Coordinating for movement of large quantities of water for decontamination.

CSS AIR MOVEMENT OPERATIONS

Motor transport is normally the primary mode to support forces. However, airlift becomes an increasingly important mode as the intensity, depth, and duration of operations increase. Airlift can provide rapid movement of cargo, passengers, and equipment as far forward as possible, without regard to terrain restrictions. Army aviation in corps CSS air movement operations includes support for –

Intracorps airlift.

- Aerial preplanned and immediate resupply.
- Movement of critical high priority items.
- Movement of support teams.

During movement programming the CMCC identities requirements for airlift. It forwards these requirements through the COSCOM support operations officer to the CTO. The corps G3 allocates aircraft to support the distribution system.

FMs 55-10 and 100-27 prescribe request channels. They detail the request flow for preplanned and immediate airlift requests for both Army air and Air Force.

Preplanned Requests (Army Air)

During the planning process, the CMCC receives preplanned requests from the COSCOM staff, MCTs, and corps units. It also receives validated division airlift requests. For corps units, MCTs review requests and either pass the request to the CMCC or recommend another mode. The CMCC coordinates requirements with the CTO to obtain G3 allocation.

The G3 allocates airlift assets for CSS air movement operations. The CMCC then validates requests and programs and commits the allocated airlift assets through the aviation LNO to support the missions. The CMCC informs the origin MCT of the validation and committal. The MCT concurrently commits highway assets to move the personnel or cargo to the onload site or airfield, The MCT also clears inbound movement with the destination MCT or DTO/MCO.

Immediate Requests (Army Air)

If airlift assets have not been previously allocated for CSS missions, the requesting unit passes the request through command channels to the corps G3 and informs the CMCC. The G3 is the committal authority for immediate requests. If the corps cannot support CSS missions at that time, the G3 may validate and pass the airlift request to the TA. If the G3 does not validate the request, he passes it through the CTO to the CMCC to use an alternate mode. Simultaneous coordination in logistics channels is required to support the mission.

Airlift Resupply Support (Army Air)

For airlift and airdrop, the COSCOM provides the supplies and equipment to be moved and the parachutes and air items used. DSUs and GSUs, to include DS maintenance units and medical units, prepare loads for movement by external airlift. They must maintain a stock

of slings and airdrop related items to use in support of airdrop requirements. The airdrop supply company issues airdrop equipment to DSUs and GSUs. The DSUs and GSUs need to provide a sling-out area to enable helicopters to land and pick up loads which have been rigged for external airlift.

Plans designate the units responsible for preparing loads for sling loading. They need to specify the quantity of slings each unit needs to bring with them. They should also describe how to return slings to the airdrop equipment repair and supply company.

Air Force Airlift and Airdrop

As with Army CSS air movement operations, Air Force airlift and airdrop missions are either preplanned or immediate. Within the immediate category, requests can be annotated as emergency requests. Air Force airlift and airdrop requirements can begin at any level, either as a request for airlift or airdrop or as a transportation support request that the CMCC determines can best be satisfied using airlift or airdrop.

Preplanned Requests (Air Force)

Preplanned airlift or airdrop missions are based on known or projected requirements. They are programmed in advance per command directives. The amount of time required to coordinate preplanned airlift is established by the commander of mobility forces based on operational requirements and the capability of available airlift apportioned by the theater combatant commander.

The CMCC receives airlift requests from corps units or validated airlift requests from DTOs. It either validates the request or selects an alternate mode. If the CMCC validates the request, it forwards the request to the TAMCA. If there is no TAMCA, the CMCC forwards the request directly to the theater airlift validator.

Immediate Requests (Air Force)

Immediate requests are unprogrammed requests which fall inside the planning window for preplanned requests. They are validated and passed through command channels to the corps G3. The TALO notifies the Tanker, Airlift Control Center of the impending request through an advance notification net. Coordination between the corps G3, G4 (CTO), CMCC, and COSCOM support operations officer is essential.

Army Support

The corps has specific requirements for drop zone or landing zone control and survey, for consolidating supplies or personnel and preparing them for movement, and for preparing documentation. Refer to FMs 55-12 and 100-27 for these requirements.

CONTROLLING TRANSPORTATION SUPPORT OPERATIONS

The COSCOM transportation support branch plans transportation support. It exercises staff supervision of mode, cargo transfer, trailer transfer, and intermodal operations. The CMCC implements movement priorities for movement of materiel and personnel in accordance with the corps or task force commander's priorities. Both may recommend cross-leveling of assets among CSGs based on changes in distribution patterns or to weight the battle. Centralized control over exceptional transportation requirements and highway regulation prevents congestion and conflicting movements over ground LOCs.

The CMCC uses its MCTs to coordinate all movement into, within, and out of the corps rear area. The CMCC maintains direct coordination with the TAMCA and HN concerning movements into and out of the corps rear area, to include requesting new supply routes from the HN as the situation dictates. The CMCC's highway traffic division controls movement on MSRs, into, within and out of the corps rear area.

CMCC MISSION

The CMCC is the corps' movement control organization. It provides centralized movement control and highway regulation for moving personnel and material into, within, and out of the corps area. Centralized control ensures effective and efficient use of available transportation capability. The CMMC plans, programs, coordinates, manages, and analyzes transportation and movement requirements and implements corps priorities. It provides highway regulation, in-transit visibility, asset visibility, and liaison with MP and EAC movement control organizations.

Analyze Transportation and Movement Requirements

The CMCC commands and supervises attached teams engaged in movement control and highway regulation. It monitors transportation usage data transmitted by MCTs. It consolidates and tabulates requirements by class of supply, tonnage, and movement program line number. It matches requirements to

transportation capabilities and the mode selected and forecasts transportation needs based on priorities.

The CMCC receives requests for priority non-programed movement requirements. It retains committal authority over transportation assets required for exceptional requirements, to include requests for exceptional surge requirements submitted by DTOs. The CMCC coordinates individual movements when the MCTs receive a transportation support request which is —

- Best handled by a mode which the MCTs are not allowed to commit.
- Not to be resourced per the corps movement program using COSCOM assets.

The CMCC verifies the requirements with the origin MCT If necessary, the CMCC makes adjustments to the corps movement program. The CMCC establishes policies for positive inbound clearance and directs the origin MCT to coordinate with the destination MCT to confirm receiving capabilities and to obtain a transportation movement release.

Maintain In-transit and Asset Visibility

The destination MCT coordinates with the receiving unit to ensure that the movement is completed by the required delivery date. As necessary, the CMCC coordinates with movement officers at all levels to ensure that the receiving and unloading capabilities of supported units in the division and corps areas are not exceeded and that visibility of cargo in transit is provided.

Implement Corps Priorities

The COSCOM transportation support branch chief validates relative priorities. Transportation priorities are based on UMMIPS and supplemented by corps priorities. MCTs ensure that the transportation priority is correct. If necessary, MCTs identify programed movements which can be delayed and recommend relocation of transportation support assets.

Coordinate with DTOs and the TAMCA

The CMCC coordinates the flow of motor, rail, or water movements originating in, terminating in, or crossing the corps rear area. It coordinates movements coming into and leaving the corps rear area with the DTOs and the TAMCA. It coordinates with the TAMCA for information on the capabilities of MSRs that cross corps and EAC boundaries. It coordinates moves which cross sector boundaries with the origin,

intermediate, and destination traffic headquarters prior to issuance of movement credits to the requesting unit.

When possible, alternative modes and other assets within the corps rear area are used. If not available, the CMCC requests assistance from the TAMCA. When requirements exceed transportation capabilities, movements are accomplished by priority.

Exercise Highway Regulation

The CMCC exercises highway regulation over designated MSRs within the corps rear area. It develops the highway regulation plan for inclusion in the corps OPLAN. The highway regulation plan describes the scheduling techniques and control measures applicable to each MSR or segments of MSRs. These control measures dictate the requirement to submit movement bids, which authorize movement on the MSR. The CMCC synchronizes movement with maneuver and issues movement credits based on priorities.

Coordinate with MP Brigade

The CMCC coordinates circulation and security missions with the MP brigade. The MP brigade ensures that authorized traffic moves smoothly, quickly, and with little interference along MSRs. The MP brigade reroutes traffic to meet changes in the situation, enforces MSR regulations, and reconnoiters main and alternate supply routes.

JOINT MOVEMENT CENTER

A JMC is established by the theater combatant commander for joint or combined operations. The JMC plans future operations and monitors overall theater transportation performance. It accomplishes its mission by conducting cyclic reviews of apportionment and by acting on emergency transportation requests. It ensures effective and efficient use of common user transportation resources among all participating services. It apportions transport assets to the Army component commander, which may be made available to the corps. The coordination function of the JMC remains essentially the same as that of the single Service. However, the scope of operations would be enlarged. The JMC –

 Plans common user theater transportation by land, sea, and air (excluding bulk fuels that move by pipeline) by developing a movement plan which supports the theater combatant commander's priorities.

- Apportions common user transportation capability within the command among the projected transportation tasks.
- Forecasts long-term movement requirements by analyzing requirements, Capabilities shortfalls, alternatives, and enhancements to the Defense Transportation System.
- Receives and acts on airlift requests received from authorized component validators. In a contingency corps, the CMCC is the army component validator.
- Monitors deployment of forces and recommends changes to movement requirements and priorities in JOPS.
- Deconflicts transportation requirements that cannot be met at lower levels in the movement control system.

If the corps is the Army component of a joint force, the CMCC may form the nucleus of a JMC. Another option is for the corps to provide personnel to serve in the JMC. These personnel may come from the support operation section's transportation support branch and/or the CMCC.

MOVEMENT CONTROL TEAMS

MCTs process both transportation support requests and movement bids. For transportation support requests, the MCT commits transportation units to provide support based on corps priorities from assets they have committal authority for in their geographic area of responsibility. For movement bids, the MCT forwards the bid to the CMCC HTD for processing. If the CMCC HTD approves the scheduling and routing, it issues a movement credit back to the MCT. The MCT provides the credit to the requesting unit authorizing movement on the MSR. If it cannot be approved as requested, the MCT works with the HTD to obtain an alternate schedule for movement.

MCTs maintain visibility of transportation assets in their AO and commit transportation assets of the CSBs, transportation battalion, or other allocated modes. CSGs consolidate and pass truck status and commitment information to the MCT serving their area.

MCTs forward requests exceeding mode capability to the CMCC. If the mode of transportation is rail, MCTs arrange rail transportation with the HN or allied force rail operators or forward requests to the CMCC. If the mode is by air, MCTs validate and pass requests to the CMCC. For

inbound air shipments, they coordinate the transfer of cargo from air to surface modes. As required they coordinate temporary storage sites for cargo requiring break-bulk.

After the transportation mode has been selected MCTs issue a transportation movement release number and instructions to the shipping unit concerning shipping and handling. They ensure that shipping units consolidate less-than-truck load shipments where practical. They coordinate with mode operators to ensure that assets arrive at the required time and check with the shipping unit to ensure prompt loading of transportation assets. If required, MCTs request MP escort for sensitive cargo. MPs provide guards on EPWs in transit.

Destination MCTs coordinate with receiving units to ensure that the availability of transportation assets are not reduced due to unloading delays. As necessary, they spot check unloading procedures.

To ensure effective use of transportation assets, MCTs coordinate the arrival of transportation assets. They forward reports of movement status on cargo shipping actions to the CMCC. They report on cargo held, diverted, reconsigned, transferred, traced, or expedited. MCTs also maintain an inventory of containers and submit the status of containers arriving and departing within their area of responsibility to the CMCC.

As necessary, MCTs expedite the handling of cargo frustrated due to missing or improper documentation, improper packaging, or mixing of noncompatible hazardous material. Requests for follow-up shipment status or tracing is submitted to the MCT which originally scheduled the shipment. The requesting unit provides the transportation control number of the shipment.

AIR TERMINAL MOVEMENT CONTROL TEAMS

ATMCTs operate primarily at Air Force or civilian air terminals. They arrange transport, coordinate loading and expedite movement of personnel and materiel (inbound intratheater, and retrograde) through air terminals. ATMCTs support reception and onward movement. They coordinate materiel clearance with the servicing terminal transfer company, supporting mode operators, Air Force personnel and attached liaison personnel from other Services.

MOVEMENT REGULATING TEAMS

MRTs operate at critical highway points, APODs, SPODs, TTPs, terminal transfer locations, first destina-

tion reporting points, and railheads. They divert cargo, troubleshoot movement problems, and expedite movements. They report disruptions in the flow of traffic due to vehicle breakdown, road conditions, or enemy action. As necessary, they adjust movement schedules and change truck or convoy routing. They then notify convoys of changes in routes or schedules. MRTs also provide convoy commanders the latest intelligence on route conditions, possible threat action, and the availability of en route support.

DA MOVEMENTS MANAGEMENT SYSTEM – REDESIGN

When fielded, DAMMS-R is to be the standard Army theater transportation management system, encompassing all levels of movements management and all modes of transport. Through interaction with supply and deployment systems, DAMMS-R provides information essential to wartime movement control and distribution. It enhances the planning, programming, coordination, and control of movements and transportation resources. DAMMS-R supports movements management by the CMCC, transportation operation operations by mode operators, and transport asset control functions of MCTs. Refer to Figure 8-5.

At corps level, applicable subsystems or modules of the objective DAMMS-R system include the –

- Shipment management module. The CMCC uses this module to process advance ocean cargo manifests and forecast inbound containers to the destination MCT. It can also use it to forecast shipment delivery to customers.
- Transportation addressing subsystem. This subsystem enables the COSCOM/CMCC to maintain current activity address records. It enables them to send and receive theater address data and information on shipping and receiving capabilities, communications data, and the supporting movement control element.
- Mode operations subsystem. The transportation battalion and CSB/CSG transportation branch can use this subsystem to process commitments and tasks truck units. It enables them to plan the use of transport assets, to maintain the location and status of transport assets, and to track the location and status of assets.
- Wartime MCT operations subsystem. This subsys-

- tem provides in-transit shipment visibility. It enables MCTs to task movement requirements and to monitor and control specified cargo movements, containers, and intermodal assets.
- Highway regulation subsystem. MRTs will use this subsystem to schedule the use of the road network, receive and approve road routing requests, and maintain current road status.
- Convoy planning subsystem. The subsystem will provide the capability to plan convoys and prepare load plans.
- Operational movement programming subsystem. This subsystem allows for movement programming by recording the physical distribution network capabilities.

CMCC Use

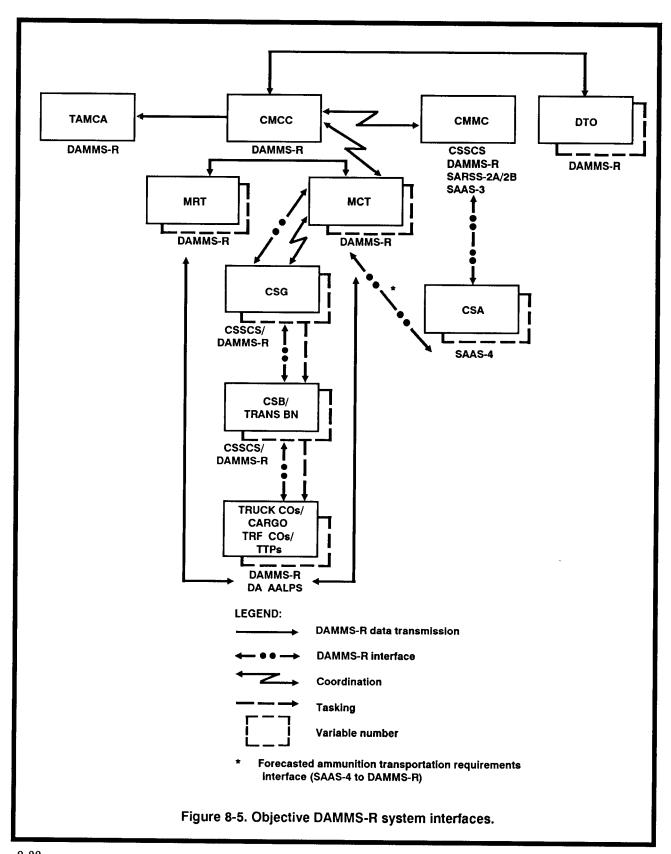
The CMCC can use DAMMS-R programs to assist in developing the movements program and monitoring the status of movements. DAMMS-R can enable the CMCC to monitor the delivery of deploying forces equipment and resupply operations. DAMMS-R supports scheduling MSR traffic, planning transport allocation to meet command priorities, and recording surface distribution decisions. The CMCC can use DAMMS-R to aid it in programming movements, selecting mode of transport, committing mode operators, and coordinating and issuing export traffic releases and border and customs clearances.

MCT and MRT Use

MCTs run DAMMS-R on TACCS to assist them in controlling movements. DAMMS-R provides in-transit visibility which enables the MCTs to trace, hold, divert, and expedite shipments. MRTs run DAMMS-R on ULC for the same purpose. DAMMS-R can enable them to maintain data on the identity, location, and current status of —

- Each transport unit's movements.
- Each traffic control element
- Each highway, rail, and inland waterway link and critical point (bridges and tunnels).
- Each active or potential shipping, transshipping, and receiving terminal.

MCTs and MRTs can also use DAMMS-R to capture and disseminate shipment and movement advice among shippers, transshippers, receiving units, logistics



managers, transport operators, and movements coordinators.

Transportation Units/Battalion Use

DAMMS-R provides transportation organizations with an interactive transportation information processing system. Transportation units run DAMMS-R applications on ULC devices. CSBs and the transportation battalion run DAMMS-R on TACCS devices.

Interfaces

The future interface between DAMMS-R and SAAS-3 and 4 can generate forecasted or pending Class V transportation requirements. The interface with SARSS-2A/2B can provide transportation forecasts and operational data regarding supply movement requirements.

CSSCS TRANSPORTATION REPORTS

CSSCS tracks selective transportation data. It can obtain key summary transportation data from the DAMMS-R system. The exact format on the display screens and data to be obtained from DAMMS-R depends on the evolution of the two systems.

Projected transportation status displays include -

- Transportation shortfall reports and transportation shortfall impact reports. These reports highlight shipment shortfalls as well as intransit losses which occur.
- Movements pass back reports. They display data on requests for support that could not be satisfied at the level of the reporting activity and had to be passed back to the next higher activity.
- Transportation task asset displays. These displays identify transportation assets available at locations to satisfy movement requirements. Assets include any truck and rail or marine assets, to include HNS, allied, and contractor support.
- MSR status displays. They provide timely status on supply routes.
- Critical cargo movements summary displays. These displays update records of movement events of controlled cargo.
- Inbound traffic volume summaries. These summaries forecast inbound scheduled and received quantities of personnel, fuel, ammunition, and other supplies.

 Unit movements displays. These displays can be used to monitor the movement status of designated unit elements. The CMCC can use these displays to monitor the movement events of elements during initial deployment and relocations within a theater.

MANUAL STATUS/SITUATION REPORTS

Control over transportation assets and movements is maintained through submission of the following reports through the servicing MCT and CMCC to the COSCOM transportation support branch chief:

Movements Situation Report

This report provides the status of all modes of transportation within the corps rear area. It highlights the movements situation and the changes or limitations to current movements which impact on transportation capability. It reports –

- Factors which reduce the capability and efficiency of movement networks and facilities. Factors include enemy action, population movements, lack of resources, and manpower shortage.
- Planned or initiated actions to meet requirements or reduce the impacts and the time estimated to overcome problems.
- Progress on previously reported remedial actions that were not yet completed.
- Forecasts for the next planning period. Forecasts are provided for planned arrivals of reinforcements, resupply by air and sea, and major moves to be executed.

The CMCC consolidates movements situation reports for submission through the COSCOM transportation support branch chief to the corps G4 (CTO).

Movements Spot Report

Subordinate units report events which impact on their operational capabilities. They report the DTG of the event, grid coordinates and required support assistance. Submitted through the servicing MCT, the report flows through the CMCC to the COSCOM transportation support branch chief. If required, an information copy is sent to the area RAOC and corps rear CP operations cell.

Vehicle Availability Report

Subordinate battalions report the total number of vehicles, by type if critical, that are —

Assigned.

- Operational.
- Committed at the time of the report.
- On extended dispatch.
- Used for internal support.
- Used for habitual support.
- Available for commitment.
- Not available because of preventative maintenance
- Not available because they are in DS maintenance.

The report also annotates the total number of drivers –

Authorized.

- Committed.
- On extended dispatch.
- Available for commitment.
- Not qualified.

Road Status Report

This report provides the status of all MSRs. It relates changes or limitations to current routes which impact on transportation capability. As applicable, it also reports on the status of railway tracks and inland waterways. Colors may be used to rate the usability of roads, rail tracks, and inland waterways and to quickly denote operational limitations.

CHAPTER 9

Supporting the COSCOM

In addition to providing control and staff supervision for achieving the COSCOM's external logistics support missions, the COSCOM headquarters also includes the staff to control and supervise the 8,000 to 22,000 soldiers assigned, attached, or placed OPCON to COSCOM units. General and special staff officers oversee the health, welfare, morale, training, and discipline of assigned and attached personnel. This chapter covers the mission and functions and the staff responsibilities of those staff elements of the COSCOM headquarters concerned with internal support of COSCOM soldiers.

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COSCOM HHC INTERNAL SUPPORT STRUCTURE

The COSCOM headquarters is organized under a G-staff organization shown on Figure 9-1. This aligns the COSCOM's general staff with the coordinating general staff officer sections in the corps headquarters.

SPECIAL STAFF

Special staff officers provide professional and specialized technical assistance to COSCOM headquarters staff and to the staff of subordinate commands.

The chaplain, COSCOM surgeon, IG, SJA and PAO serve as members of the COSCOM commander's personal or special staff. Other personal staff includes the commander of the headquarters, special troops battalion, the command sergeant major, and aides. They work under the immediate control of the COSCOM commander and assist him directly.

COORDINATING GENERAL STAFF

Coordinating general staff officers focus on the internal support requirements of personnel in subordinate COSCOM units. Table 9-1 lists their areas of support. Though general staff officers respond to the

chief of staff, they retain full authority to act on matters within their functional area. They keep the COSCOM commander informed of internal support problem areas which impact upon accomplishment of the COSCOM's external logistics support mission. They resolve problems reported by their counterpart staff officers in subordinate commands.

TOE MODIFICATION

The COSCOM commander may include any or all of the personal, special, and coordinating general staff officers within his staff. As long as his staff remains within MTOE authorizations, the COSCOM commander can integrate or realign elements to save resources and promote responsiveness of support. To do this, his ACofS, G3 submits requests according to AR 310-49 through command channels to the MACOM requesting reorganization and realignment of personnel.

If the COSCOM headquarters will be the senior logistics headquarters, it must be augmented with staff officers for those areas in which it lacks staff technical expertise.

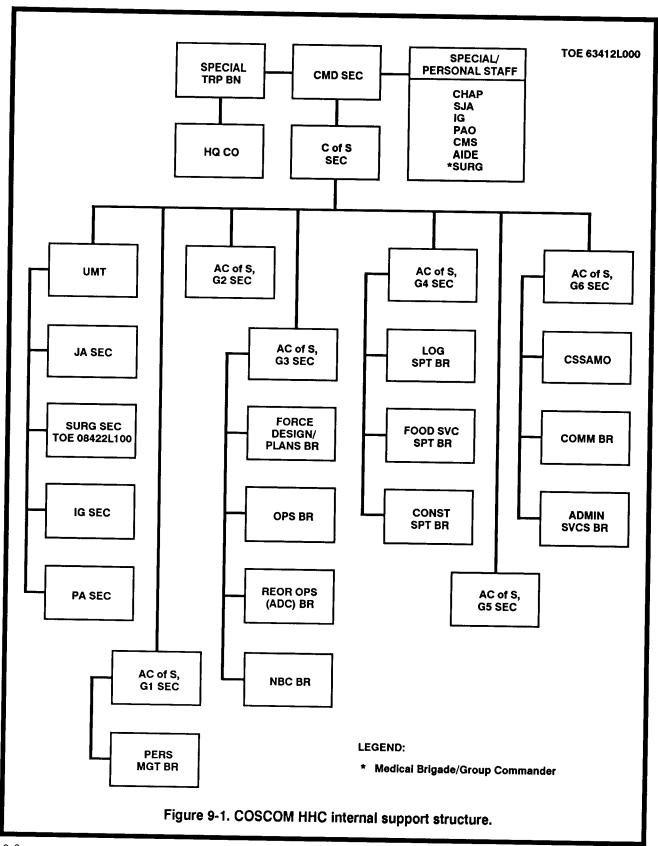


Table 9-1. Coordinating general staff section functions.		
ACofS G1 SEC PERSONNEL	ACofS G2 SEC PERSONNEL	ACofS G3 SEC PERSONNEL
	COORDINATING STAFF RESPONSI	BILITY
 Analyze unit strength data, personnel loss es- timates, and data affect- ing soldier readiness. 	 Identify priority intelligence requirements and high payoff targets throughout the command. 	 Maintain the troop list and recommend assignment/ task organization of COSCOM units.
• Update the COSCOM		Maintain current IPB.
commander on personnel services and morale support activities provided COSCOM soldiers.		 Assess the impact of rear operations and coordinate ADC activities.
		 Monitor nuclear fallout and downwind chemical hazard predictions.
		 Disseminate early warning on enemy activities and STRIKEWARN messages.
		 Identify training require- ments and determine alloca- tion of training resources.
		 Determine force structure and development require- ments.
		 Recommend the general location for the COSCOM main CP.
	INFORMATION AND ESTIMATES	
Maintain continuous personnel estimates for the command.	 Collect, analyze, prepare, and disseminate intelligence information and IPB products. Maintain a current intelligence estimate of the situation. Prepare counterintelligence estimates and implement counterintelligence measures. 	 Maintain a current operation estimate. Prepare the PSYOP estimate. Prepare the OPSEC estimate and annex to plans and orders.

Table 9-1. Coordinating general staff section functions. (cont)		
ACofS G1 SEC PERSONNEL	ACofS G2 SEC PERSONNEL	ACofS G3 SEC PERSONNEL
	PLANS AND ORDERS	
 Develop plans for custody and support of PWs and civilian internees. 	 Prepare the intelligence portion of COSCOM SOPs, plans, and orders. 	 Coordinate input to, authenticate, and publish COSCOM OPLANS/OPORDs.
		 Plan the mobilization and demobilization of COSCOM units.
		 Disseminate PSYOP plans, directives, and orders
	POLICIES AND SUPERVISION	
 Develop personnel replacement policies, identify requirements, and recommend priority allocation of replacements within the command. Supervise administration of discipline, law, and order. Plan and administer the use of civilian labor. 	 Supervise and coordinate the COSCOM's intelligence collection activities. Prepare policies for the command map program. 	 Recommend ammunition basic loads, RSR, and CSR. Supervise EW activities.

Table 9-1 Coo	ordinating general staff section function	ons. (cont)
		ACofS G6 SEC PERSONNEL
ACofS G4 SEC PERSONNEL	ACofS G5 SEC PERSONNEL	
CO	ORDINATING STAFF RESPONSIBILIT	Υ
 Monitor equipment readiness status of COSCOM 	 Assess civilian impact on COSCOM operations. 	 Manage internal automation assets.
units. Coordinate the acquisition, allocation, and disposition of real estate.	 Monitor the political, economic, and social effects of COSCOM operations on civilian populace. 	 Manage internal signal assets. Coordinate and control information management assets assigned to support COSCOM units.
 Plan and coordinate con- struction of facilities for COSCOM units. 	 Identify in-country resources, such as public works, utilities, labor, materiel, and services 	
 Provide the ACofS, G1 with requirements for use of 	available to support COSCOM units.	
local civilian labor, civilian internees, or PWs for logistics support tasks.	 Coordinate community rela- tions activities in the area of responsibility. 	
	 Establish relations with HN government officials and US embassy officials, depart- ments, or agencies relative to civil-military relationships in the AO. 	
	 Assist support operations staff in coordinating/contracting support from the HN, civilian community, and foreign military. 	
	Coordinate civil support for COSCOM units.	
	INFORMATION AND ESTIMATES	
 Provide input to the ACofS, G3 on priority ADC required by COSCOM units. 		
	PLANS AND ORDERS	
 Plan COSCOM administrative movements. 		

ACofS G4 SEC PERSONNEL	ACofS G5 SEC PERSONNEL	ACofS G6 SEC PERSONNEI	
POLICIES AND SUPERVISION			
 Prepare policies, and procedures for COSCOM units relative to internal supply, maintenance, transportation, and services. 	 Exercise staff supervision over CA units assigned or attached to the head- quarters, special troops battalion. 	 Provide centralized administrative sup- port, to include mes- sage center support 	
 Supervise the COSCOM maintenance and food ser- vice programs. 	 Prepare policies on civil- military cooperation. 		
 Conduct staff visits and in- spections of maintenance and food service areas. 	 Recommend COSCOM policy and guidance on obligations between civil and military authorities. 		
 Recommend the prescribed load for COSCOM units. 			
 Supervise the allocation of the CSR of ammunition among COSCOM units. 			
 Prepare policies for recovery and evacuation of organic vehicles. 			
 Prepares policies on field service support to COSCOM units. 			
 Provide the COSCOM's policy for collection and dis- position of excess property, salvage, and captured material. 			
 Control repair of facility utilities. 			

SPECIAL STAFF

Special staff officers provide command level expertise and assistance in specialized, technical, or professional areas to COSCOM headquarters staff and staff in subordinate commands. The ACofS, G1 section provides administrative support to special staff sections.

COSCOM STAFF CHAPLAIN

The COSCOM staff chaplain serves as a special/personal staff officer on the COSCOM commander's staff. He advises the COSCOM commander on the command's religious programs. He develops, coordinates, and implements the COSCOM religious support plan. He is also the corps staff chaplain's primary supervisor for religious support in the corps rear area, He implements the corps staff chaplain's religious support plan. The COSCOM staff chaplain –

- Exercises technical control and coordination over COSCOM unit UMTs.
- Coordinates and executes general and direct religious support for personnel and units in the corps rear area.
- Performs and provides religious support to COS-COM headquarters personnel and other unit personnel in the COSCOM AO without organic UMT support.
- Coordinates emergency religious support for units in the corps rear area, to include mass casualty, unit reconstitution, rear operations, and denominational requirements.
- Advises the COSCOM commander on all matters of religious welfare, to include the morals and morale of the command.
- Advises the COSCOM commander on indigenous religions in the AO and their impact on COSCOM operations.
- Determines the religious support needs and shortfalls in the corps rear area and accordingly requests the assignment of chaplaincy support teams from the TAACOM.
- Monitors and coordinates religious support in medical units assigned to the COSCOM.
- Monitors UMT material and supply needs and coordinates the procurement, storage, and issue of items with the corps UMT.

For more information on staff chaplain duties, refer to FM 16-1.

COSCOM Unit Ministry Team

The COSCOM UMT implements the corps rear area support plan for the corps rear area. It closely monitors changing battlefield conditions and unit locations through the coordinating staff briefs and daily religious support status reports received through technical channels. A means of communication may be through the rear operations net to and from UMTs in bases. Battalion level UMTs respond to the requirements of the COSCOM UMT. They submit their requirements through the CSGs and the medical brigade/group UMT to the COSCOM UMT. The COSCOM UMT maintains close and continuous communication with the corps UMT and coordinates with allied and civilian religious leaders in the COSCOM area of responsibility.

General Religious Support Plan

Because of the large number of units and detachments in the corps rear area and the wide dispersion of these units, the COSCOM UMT develops and implements a comprehensive general religious support plan. Execution of this RSP provides religious support to all units in the corps rear area. Continuously changing unit configurations due to battlefield conditions, necessitates constant coordination of adequate religious support to all soldiers. The COSCOM UMT continually reviews and updates the corps chaplain's RSP in accordance with battlefield changes and UMT variations.

The corps rear area general RSP is developed and implemented as follows –

- Each UMT in the corps rear area assesses unit missions and locations and develops an RSP.
- Their RSPs are consolidated and coordinated through technical channels with the COSCOM UMT.
- The COSCOM staff UMT provides data on units without assigned UMTs and the unit UMTs add general religious support coverage to the RSPs.
- Supervisors submit revised RSPs to the commander for approval.
- The COSCOM staff chaplain designates each CSG UMT as coordinator for general religious support in his area.

The consolidated and coordinated general religious support plan at the CSG level –

- Lists units and detachments located within the support group area.
- Identifies the number of chaplains located in the support group area, by denomination and unit assignment.
- Specifies general religious support coverage responsibilities.
- Identifies shortfalls, if any, in chaplain personnel and supplies.
- Provides technical control and coordination procedures for subordinate UMTs.
- Provides emergency communication information.
- Provides information on emergency religious support missions; to include, reconstitution, mass casualty, and hasty burials.
- Provides information on resupply of ecclesiastical items and supplies.

Operation Support

During the predeployment planning, deployment alert, and staging phases of an operation, the COSCOM staff UMT performs the functions listed on Table 9-2.

COSCOM SURGEON

The COSCOM surgeon serves on the COSCOM commander's personal staff. He has direct access to the COSCOM commander on health services within the command. The COSCOM staff surgeon advises the COSCOM commander on the quality of HSS being provided to personnel within the command, to include preventive, curative, restorative, and related health services. He also advises COSCOM staff on the medical effects of natural environmental factors and NBC agents on personnel, rations, and water.

The COSCOM staff surgeon retains inherent authority to coordinate directly with the corps surgeon and the corps surgeon's staff on HSS of combat operations. Direct coordination is also authorized between the medical brigade and the theater army medical command. This staff coordination increases proactive response to changing combat situations.

Medical brigade/group staff officers plan HSS for the command. They assist the COSCOM staff surgeon in determining the COSCOM's requirements for medical

services, establishing command health service policies, and recommending priorities for HSS to COSCOM personnel.

STAFF JUDGE ADVOCATE

The SJA is a member of the COSCOM commander's personal staff. He works under the COSCOM commander's immediate control and supervision. The SJA is the commander's personal legal advisor on all matters that affect the morale, good order, and discipline of the command. He is also a special staff officer. As such, he provides professional legal services to the COSCOM commander and staff and is responsible for the operation of the SJA section. AR 27-1 and FM 101-5 describe the COSCOM SJA's responsibilities. The SJA –

- Supervises the administration of military justice within the COSCOM.
- Provides legal services to the commander, staff, subordinate commanders, soldiers, and other authorized personnel on all matters involving military law, domestic law, foreign law, status of forces agreements, and international law.
- Consults and coordinates with other staff officers.
- Implements the COSCOM commander's policies on the administration of legal services and supervises the SJA section.
- Coordinates with the corps SJA, as needed.

Staff Judge Advocate Section

A staff judge advocate section, headed by the SJA and legal defense section provide legal services to the COSCOM on an area basis. Legal services are provided in seven functional areas —

- Criminal law.
- Operational law.
- International law.
- Administrative law.
- Legal assistance.
- Contract law.
- Claims.

The SJA section provides the COSCOM responsive legal services at all echelons of command as far forward as possible, regardless of the type or intensity of the combat environment. Legal services contribute to unit

Table 9-2. COSCOM UMT deployment planning.

PREDEPLOYMENT

- Implements previously developed COSCOM UMT mobilization plans and ensures integration with installation mobilization plans.
- Ensures COSCOM UMTs know unit missions, religious support parameters, and the technical channel of responsibility.
- Monitors UMT assets through the technical channel and coordinate with ACofS, G1 personnel management branch staff for assignments and transfers of replacement personnel.
- Coordinates with ACofS, G3 plans staff to update the religious support annex to war plans.
- Ensures adequate load plans for COSCOM UMTs and coordinates with ACofS, G4 staff for resupply of chaplain equipment and expendable supplies.
- Develops religious support plan for family members in coordination with the installation chaplain.
- Coordinates with the installation UMT and ACofS, G1 to provide assistance to family members
 of departing soldiers.
- Identifies the religious practices of the area of operation in which deployment will occur.
- Coordinates with ACofS, G5 staff for information on religions, customs, and mores of the people of the host nation.
- Coordinates with ACofS, G3 force design staff for time-phased priorities for deployment of COSCOM UMTs.

- Establishes communication channels with subordinate and higher UMTs per the COSCOM TAC SOP.
- Determines UMT locations and potential religious support shortfalls in the corps rear area.
- Ensures development and implementation of the corps RSP for the corps rear area. Establishes procedures and plans for emergency religious support for mass casualties, burials, and denominational requirements.
- Establishes procedures and plans for emergency religious support for mass casualties, burials, and denominational requirements.
- Establishes operational relationships and coordination with division UMTs for religious support for COSCOM units and elements located in the division's AO.
- Monitors unit UMT personnel needs, movements, and balance to ensure comprehensive religious coverage.
- Ensures liaison with HN religious leaders, where possible, and monitors PW movement and religious support requirements.
- Monitors COSCOM hospital/medical unit locations and establishes supervisory relationships with the COSCOM UMT.

readiness and effectiveness by assisting the commander in maintaining morale, good order, and discipline in the unit.

The COSCOM SJA section is designed to support 8,000 troops assigned, attached, or detailed to the COSCOM. As the COSCOM grows, additional legal personnel are required. This support is provided by Judge Advocate General Service Organizations. Refer to AR 27-1.

Operation Support

Personnel assigned to the staff judge advocate section perform the functions listed on Table 9-3 during the alert and staging phases of an operation.

INSPECTOR GENERAL

The IG acts as a personal staff officer of the COS-COM commander on matters affecting mission performance. These include the efficiency, discipline, and morale of the command. He provides the COS-COM commander with a continuing assessment of the effectiveness of the command in accomplishing its administrative and operational mission. He conducts or schedules general inspections for all assigned or attached units.

IG Section

Inspector general support is provided by the IG section under the supervision of the inspector general. IG section personnel conduct inspections, investigations, surveys, and studies as directed by the COSCOM commander and as prescribed by law and regulations. Following AR 1-201, they receive, investigate, and report on allegations, complaints, and grievances of COSCOM soldiers and agencies and recommend remedial action to correct deficiencies noted. FM 101-5 and AR 20-1 provide guidance on IG activities and procedures.

Operation Support

During the alert phase of an operation and upon arrival in the operations area, IG section personnel perform the functions or tasks listed on Table 9-4.

PUBLIC AFFAIRS OFFICER

The PAO serves as the personal staff officer responsible for dissemination of information documenting accomplishment of the COSCOM's mission to the media. He serves as the command spokesman and single point of coordination for all media inquiries. The PAO retains sole release authority for the command within

the operational area, whether to the civilian news media, corps headquarters PAO, or other military news organizations. FMs 46-1 and 101-5 prescribe PAO responsibilities.

The PAO is responsible for the public information and command information portions of OPLANs/OPORDs. He assists the ACofS, G2 and ACofS, G3 in preparing the information portion of operation plans and public affairs annexes, as appropriate. Together, they plan when to release command and public information during the phases of an operation. The PAO coordinates with the Chief of Public Affairs, HQ DA, to ensure that plans comply with both DA policy and that of the unified command in the area of potential operations.

The COSCOM PAO clears and releases all articles by or about units or personnel assigned or attached to the COSCOM. Staff sections and subordinate units do not handle any press or news inquiries without first contacting the COSCOM PAO. He releases information with minimum delay in accordance with security, accuracy, propriety, and COSCOM policies.

Public Affairs Section

A public affairs section, under the supervision of the public affairs officer, provides public affairs support to the COSCOM. Public affairs section personnel keep COSCOM soldiers informed and serve as the COSCOM's spokesman in response to media queries concerning COSCOM operations. They operate the news media center and conduct command and public information programs in support of COSCOM policies and objectives. The command information program centers on internal information aimed at keeping COSCOM soldiers and families informed. It outlines command policies or the commander's directives.

Section personnel coordinate their community relations program with the ACofS, G5. The program strives to maintain understanding, good will, and support between the COSCOM and surrounding communities. It specifies the authority to release information, its propriety, and the agencies to whom information will be released. ARs 360-5, 360-61, and 360-81 provide guidance.

Operation Support

Table 9-5 lists functions or tasks which public affairs section personnel perform during the predeployment planning, alert, and staging phases of an operation.

Table 9-3. Judge advocate section personnel deployment planning.

PREDEPLOYMENT

- Determine the legal aspects of the status of forces agreements with the HN that may affect operation plans.
- Provide legal advice to ACofS, G5 section personnel concerning relations with the populous and governments of nations within the AO.
- Review procedures required by the HN and status of forces agreements regarding the acquisition of real estate.
- Estimate requirements for the attachment of judge advocate general service organization teams and a proposed plan for their employment.
- Provide ACofS, G3 force design staff time-phase priorities for the movement of judge advocate staff to the operations area.
- Prepare the military justice and legal affairs portion of the operation plan.
- Participate in operations planning and review operations plans and orders for compliance with international and domestic law.
- Assist in the preparation of and review the COSCOM's rules of engagement for legal sufficiency.
- Brief major subordinate commands on the rules of engagement and law of armed conflict.
- Provide legal counseling and assistance to COSCOM soldiers to ensure their personal legal affairs are settled before deployment.
- Coordinate efforts of legal clerks and notary publics provided by deploying units in executing wills and powers of attorney.
- Coordinate the disposition or transfer of jurisdiction of disciplinary cases.

- Advise the COSCOM commander of status of serious administrative and UCMJ disciplinary actions.
- Provide legal services to programmed overseas movement.
- Coordinate with the command group, COSCOM staff officers, and civil affairs officers on the impact of legal issues on deployment into the contingency area.

Table 9-3. Judge advocate section personnel deployment planning. (cont)

STAGING

- Advise the COSCOM commander on criminal law matters that impact on COSCOM morale, welfare, order and discipline.
- Advise the command group and COSCOM staff officers on legal issues that impact on COSCOM mission and operations.
- Advise on international law and operational law matters.
- Advise on administrative law and contract law matters.
- Advise on command legal services program for claims and legal assistance.
- Coordinate the disposition of open claims or incidents likely to result in claims against the government.

Table 9-4. IG section personnel deployment planning.

PREDEPLOYMENT

• Transfer to the installation or rear detachment IG all unresolved investigations and action requests pertaining to the installation, local community, and COSCOM soldiers not deploying.

- Establish relations with the corps headquarters IG.
- Establish liaison through the corps IG with HN officials who may be involved in the conduct of investigations and surveys directed by the COSCOM commander.
- Coordinate with PAO, SJA, and ACofS, G5 staff to establish channels and procedures for processing and resolving problems involving elements of the command and the HN.

Table 9-5. Public affairs branch personnel deployment planning.

PREDEPLOYMENT

- Maintain a library of DA pamphlets and materials produced by the US State Department on likely contingency areas to use in command information and public information programs.
- Determine information resource requirements.
- Determine information policies for the operation area in coordination with the corps PAO.
- Determine what information facilities (printing equipment, radio stations, etc.) are available for use in the AO.
- Coordinate with corps headquarters to obtain authority to release public information.
- Prepare to establish a field photo darkroom.
- Coordinate with ACofS, G6 administrative services branch personnel for courier service and printing.
- Write the PA annex to the OPLAN.
- Coordinate with corps PA personnel.
- Determine, in coordination with ACofS, G3 operations staff, the security limits of releasable information.
- Obtain releasable information on sensitive subjects, such as troop lists, NBC, etc. from ACofS, G3 section personnel.
- Provide subordinate commanders with internal information releases designed to forestall rumors and instill confidence.
- Establish relations with the corps PAO and HN information authorities.

- Conduct command information activities to inform COSCOM units of current news and command policies.
- Provide public media with factual information releases designed to relieve fears of the effect
 of deployment on the local community, if authorized via PA channels from the Office of the
 Assistant Secretary of Defense-PA.
- Arrange to discontinue involvement of deploying elements with on-going community activities.

Table 9-5. Public affairs branch personnel deployment planning. (cont)

STAGING

- Provide releasable, accurate information for command dissemination to help bolster troop morale and confidence.
- Coordinate with ACofS, G5 section staff to determine the availability of public media facilities and arrange for their use to implement the COSCOM information program.
- Establish media center facilities to support visiting civilian press.
- Coordinate with the COSCOM SJA to ensure that information pertaining to agreements with the HN are properly presented in the command information program.
- Coordinate with the PM to ensure that information pertaining to local restrictions is accurately disseminated to COSCOM troops.
- Provide media representatives with a preplanned press packet that includes appropriate information on the COSCOM's participation in the AO.
- Coordinate support for visiting news media representatives and escort news media representatives in the COSCOM AO. If this is not possible, coordinate with the affected unit for appropriate escort.
- Review text prepared for public release by units assigned or attached to the COSCOM.
- Review hometown news releases on COSCOM soldiers for OPSEC violations.
- Coordinate press coverage of important civilian and military visitors to the COSCOM.
- Submit articles or information to the joint task force headquarters for publication in the JTF news letter or paper.
- Print field expedient newspapers.

PERSONNEL MANAGEMENT

The personnel management branch, under supervision of the ACofS, G1 coordinates plans, policies, and procedures pertaining to the assignment and personnel management of personnel within the COSCOM.

ACofS, G1

The ACofS, G1 exercises staff supervision over personnel actions pertaining to COSCOM personnel. He formulates plans and policies for the personnel service support of units assigned or attached to the COSCOM. He also provides policies for soldier resource management with the COSCOM. The ACofS, G1 is responsible for development of personnel service support annexes in OPLANs and OPORDs. This includes development of personnel support portions in contingency plans.

The ACofS, G1 provides advice and assistance to the COSCOM commander, COSCOM staff, and commanders and S1 staff officers of subordinate organizations on -

- Personnel readiness.
- Maintenance of unit strengths.
- Personnel management.
- Community and family support activities.
- Reenlistment policies.
- Safety.
- Human relations activities.

The COSCOM ACofS, G1 coordinates with the G1 staff in the corps rear CP's CSS cell on —

- Discipline, law, and order.
- Indigenous civilians and civilian labor.
- Logistics support for PWs.
- Allocation and use of replacements.
- Unit strength data.
- Personnel losses.
- Unit cohesion.

FM 101-5 lists other ACofS, G1 responsibilities.

PERSONNEL MANAGEMENT BRANCH

Personnel management branch personnel establish and maintain records on incoming and assigned COSCOM personnel, They submit reports on present

and projected manpower requirements and maintain strength accounting records and reports. They provide technical guidance to PSNCOs in subordinate commands, ensuring timely and appropriate flow of personnel management documents. Their areas of staff responsibility include –

- Unit manning reports.
- Promotions, reductions, and separations.
- Classifications and assignments.
- Awards and decorations.
- Command morale, welfare, and recreation services.
- Reenlistments and rotations.
- Discipline, law, and order.
- Safety program.
- Casualty reports.
- Survivor assistance.
- Alcohol and drug control policies.

Branch personnel monitor strength accountability for the major subordinate commands of the COSCOM. They develop estimates of personnel requirements and recommend allocations and priorities for personnel assignments. Branch personnel perform manpower/force planning and recommend changes to the COSCOM troop base and TAADS. They coordinate and prepare the personnel OPLAN and administrative annexes and appendices to the COSCOM's OPLANs and SOP They also coordinate —

- Replacements for the COSCOM with the corps personnel group.
- Medical, dental, and veterinary support requirements of COSCOM personnel and COSCOM units with the COSCOM medical brigade/group.
- Civilian labor and indigenous labor matters with ACofS, G5 section personnel.
- MP support requirements for the COSCOM with the provost marshal.
- Evacuation of PWs and civilian internees as well as the evacuation of us military prisoners with the provost marshal.

OPERATION SUPPORT

Table 9-6 lists the actions which ACOR, G1 section

personnel provide during the predeployment planning, alert, and staging phases of an operation.

INTELLIGENCE

Timely intelligence enables the COSCOM commander and staff to prepare plans and orders which ensure accomplishment of the COSCOM support mission. Intelligence also enables operations staff officers to maintain a current operation estimate and update COSCOM OPORDs/OPLANs, to include administrative movement plans and plans for deployment of subordinate units.

ACofS, G2

The ACofS, G2 provides the COSCOM commander and staff with timely tactical intelligence information. He prepares broad planning guidance on G2 staff areas. He relates corps intelligence to the COSCOM commander and staff. The ACofS, G2 implements the intelligence cycle in support of the COSCOM's logistics planning areas. FM 101-5 delineates other responsibilities of the ACofS, G2.

Intelligence/Counterintelligence

ACofS, G2 section personnel coordinate the collection and dissemination of intelligence, counterintelligence, and counterintelligence data within the COSCOM. They provide threat and counter-terrorists briefings. Section personnel exercise staff supervision over OPSEC and SIGSEC measures within the command. They prepare intelligence, OPSEC, and mapping, charting, and geodesic annexes to COSCOM OPLANs and OPORDs. They also coordinate command deception operations with the corps deception cell.

Intelligence officers maintain a current intelligence estimate of the situation in the COSCOM's area of responsibility. They evaluate the vulnerability of the COSCOM's units to hostile intelligence. They control distribution of classified maps. They continually collect, analyze, and disseminate intelligence information on the enemy and the enemy's capabilities in the COSCOM's AO to attached and subordinate units.

As the situation develops, intelligence staff officers formulate and disseminate priority intelligence requirements to subordinate units. Intelligence personnel also disseminate passwords to subordinate units.

Intelligence officers plan and execute active and passive measures to counter or neutralize hostile espionage, sabotage, and subversive activities in the COSCOM AO. They provide advice and monitor subordinate commands on implementing document security and personnel security clearances. They process courier orders for transporting classified information.

Weather Information

Intelligence personnel consolidate weather observations from subordinate units and forward the reports to the corps G2 as part of the intelligence summary report. They disseminate weather observation reports to subordinate units. Reports of weather conditions which could seriously impact upon COSCOM support operations are assigned immediate precedence.

Enemy Prisoner of War Guidance

ACofS, G1 section staff officers provide subordinate units guidance concerning responsibilities and procedures for processing and evacuating EPWs, related documents, and material. Subordinate unit commanders ensure compliance with AR 190-8 and FM 19-4 relative to handling EPWs.

FMs 19-1, and 19-40 and STANAG 2044 prescribe EPW evacuation procedures. Sundry packs are provided by the EPW battalion at EAC. FM 8-10 provides information on the medical treatment and evacuation of EPWs under the protections afforded by Geneva convention. While in medical channels, EPWs are guarded by non-medical soldiers as designated by the theater commander.

Subordinate units report information of immediate tactical value obtained from these sources through the S2 staff to the COSCOM ACofS, G2. FMs 19-1, 19-4 and 19-40 and STANAG 2033 prescribe handling and evacuation of enemy documents and materiel.

OPERATION SUPPORT

Table 9-7 lists ACofS, G2 section staff officers support during predeployment planning deployment alert, and staging operations.

OPERATIONS

The subordinate branches of the ACofS, G3 section, to include the force design/plans branch, operations branch,

rear operations/ADC branch, and NBC branch provide operations support for COSCOM units.

Table 9-6. ACofS, G1 section personnel deployment planning.

PREDEPLOYMENT

- Develop the personnel portion of OPLANs.
- Maintain the COSCOM strength data base and determine replacement actions required.
- Maintain deployment and shortage rosters by major subordinate commands.
- Provide assistance to COSCOM units relative to personnel readiness and deployment strength.
- Advise COSCOM staff and subordinate personnel staff in personnel problems.
- Identify units currently supported by the COSCOM that have not been alerted to deploy with the force.
- Recommend changes to the troop basis and modifications to personnel allocations of subordinate COSCOM units.
- Reassign or realign COSCOM personnel to fill key vacancies.
- Submit requests for filler personnel to the corps personnel group.
- Develop plans for receiving filler personnel and for their inclusion on data bases and reports.
- Implement personnel recall policy.
- Update plans to support civilian personnel (contractor) deployment.
- Ensure that all personnel assigned to deploying units of the COSCOM or designated as fillers or replacements are prepared for overseas movement.
- Coordinate reassignment of non-deployable personnel within the COSCOM.
- Coordinate appointment of Class A agents?
- Establish the location of the overseas movement site.
- Establish policy and procedures for family member assistance plans to be implemented by major subordinate commands.

- Assume personnel services responsibilities for units deploying with the force which were not previously attached or assigned to the COSCOM.
- Assist the supporting personnel service company with scheduling personnel deployment.
- Coordinate the termination of personnel support to units not alerted to deploy with the force and assist in transferring personnel services support to other elements.

Table 9-6. ACofS, G1 section personnel deployment planning. (cont)

- Provide guidance on clearance of deploying personnel from government quarters.
- Provide assistance to dependents of deploying personnel.
- Request information on NEO population of US citizens and foreign national citizens.
- Estimate days required for NEO evacuation.

- Allocate shelters for COSCOM headquarters staff and personnel.
- Establish relations with personnel staff counterparts at corps headquarters.
- Establish liaison with the supporting personnel service unit.
- Coordinate with ACofS, G5 section personnel in establishing relationships with the local US State Department office and HN officials.
- Coordinate with the ACofS, G5, SJA, and HN officials in establishing policies and procedures for employing indigenous personnel.
- Establish policies concerning interrelationships between US and HN personnel.
- Maintain COSCOM strength status data.
- Maintain personnel loss estimates and summarized personnel information for use by COSCOM headquarters staff in preparing support plans.
- Recommend replacement allocations and priorities for COSCOM units.
- Arrange for processing replacements and their personnel records.
- Arrange for leave, rest, and recreation facilities.
- Determine the availability of unit replacements and processes replacement individuals and units.
- Process appointment, promotion, demotion, separation, discharge, elimination, and retirement actions for COSCOM personnel.
- Arrange for the collection, processing, evacuation, utilization, discipline, and repatriation
 of PWs and civilian internees.
- Provide for postal, legal, and welfare services.
- Coordinate with the UMT in arranging for memorial activities.

Table 9-7. ACofS, G2 section personnel deployment planning.

PREDEPLOYMENT

- Update the COSCOM's data base on foreign intelligence pertaining to potential threats within the area of operations.
- Update the intelligence annex to plans, orders, and FSOP to the tactical situation in the area.
- Provide intelligence and OPSEC briefs to major subordinate commands and disseminate classified guidance for OPORDs.
- Provide advice and assistance to ACofS, G3 staff and the S3s of major subordinate commands on intelligence and security.
- Develop policies for collecting intelligence and counterintelligence information.
- Develop policies in coordination with corps G2 staff and the corps MI group for conducting counterespionage, countersubversion, and countersabotage.
- Coordinate with the supporting MI unit for monitoring communications to detect security violations and compromises during the alert.
- Arrange for counterintelligence inspections of sensitive areas.
- Revise the PSYOP's portion of plans as necessary.
- Coordinate with ACofS, G3 plans branch personnel on updating mapping, charting, geodesic annexes to plans, orders, and FSOP.
- Coordinate map support requirements for the objective area.
- Conduct intelligence training.

DEPLOYMENT

- Develop essential elements of information for the operation area and initiate intelligence operations.
- Advise and supervise subordinate commands in processing and preparing personnel security clearances.
- Prepare COSCOM headquarters access rosters and initiate security badge systems.
- Disseminate classified and unclassified intelligence information required to train for operations in the area.
- Disseminate intelligence and counterintelligence information within the COSCOM.

Table 9-7. ACofS, G2 section personnel deployment planning. (cont)

- Provide intelligence on population size, stratification, and skills which could be used in HNS or contract areas.
- Provide information on airfields and drop zones; port capacity; offshore and harbor anchorages; and ground, rail, and inland waterway networks.
- Provide information on existing power stations, transforming and switching stations, and electric voltage and cycles.
- Provide COSCOM petroleum support branch staff information on the location and capacity of petroleum refineries, storage areas, and pipeline distribution system.
- Monitor access to and protection of classified information.
- Coordinate counterintelligence activities.
- Investigate security violations.

- Establish relations with counterpart corps G2 staff.
- Serve as the COSCOM point of coordination for counter-terrorism operations.
- Coordinate intelligence with higher, subordinate, and joint elements and with friendly nation elements.
- Provide intelligence information and threat analysis to ACofS, G3 operations branch personnel.
- Maintain and update the intelligence situation map and overlays.
- Collect and distribute weather data.

ACofS, G3

The ACofS, G3 has primary coordinating staff responsibility for operations, readiness, and rear operations/ADC. He is responsible for maintaining the COSCOM troop list and for its revision to support contingency operations. The ACofS, G3 coordinates the collection and distribution of NBC data and NBC reports. He exercises staff supervision over OPSEC, PSYOP, and EW. He also provides guidance and develops policies for training and evaluating the training of COSCOM units.

FORCE DESIGN/PLANS BRANCH

Force design/plans branch personnel coordinate the COSCOM troop list. They also coordinate the preparation, authentication, and distribution of OPLANs and administrative/logistics plans. (OPORDs are the responsibility of the operations branch.)

The force design officer manages COSCOM Capstone trace programs and tailors logistics support force packages. He coordinates with COSCOM staff sections and major subordinate commands in developing the COSCOM troop list to support contingencies and corps long-range plans. He recommends assignment and types of units to be assigned/attached to the COSCOM. He submits a time-phasing deployment recommendation for subordinate units to the corps G3.

Force design personnel process TOE/MTOE reviews. They assist subordinate units in the submission of TOE/MTOE/TDA modifications. They review MTOE/TDA changes and activation actions to ensure compatibility with the COSCOM troop list and time phased force development list in support of COSCOM plans. To refine or tailor logistics force packages, force design personnel –

- Analyze mission.
- Determine the forces to be supported.
- Develop a support concept.
- Apply planning factors to generate quantitative requirements.
- Build the supporting force.
- Balance the supporting force to ensure it is capable of supporting the supported force and itself.
- Resource the supporting force.

To help speed the force design and planning process,

branch personnel maintain FSOPs, MTOEs, information books, and computer databases on their major subordinate commands and as many COSCOM units as possible.

Force design personnel also prepare COSCOM materiel fielding plans and coordinate new equipment training. They coordinate with ACofS, G4 section personnel for redistribution of displaced equipment. They coordinate with ACofS, G1 section staff for personnel to operate and maintain new systems.

The plans officer reviews long-range plans and contingency plans from corps headquarters. He reviews current OPLANs to ensure compatibility with corps plans and updates supporting plans. He also reviews implementing plans prepared by major subordinate commands. He is responsible for preparing base development plans and plans for support of subsequent phases of an operation.

Plans branch personnel integrate annexes and appendices prepared by other staff officers for future OPLANs. They review the implementing plans prepared by subordinate COSCOM units.

OPERATIONS BRANCH

Operations branch personnel prepare guidance and policies pertaining to the COSCOM's organization, operations, and functions. They coordinate, prepare, and update the FSOP. They maintain unit readiness status data. They prepare the current operations estimate of the situation and maintain the situation map for the COSCOM AO. They develop COSCOM OPORDs for subsequent phases of an operation. (OPLANs are the responsibility of the force design and plans branch.) They prepare the COSCOM SOP based on input from other staff sections. They also coordinate the displacements of subordinate commands and assign employment areas. Branch personnel also prepare broad training plans, coordinate mobile training teams, and monitor the training of assigned or attached units.

Operations Security

Operations branch personnel establish procedures to ensure protection of information concerning COSCOM plans and capabilities. They provide OPSEC, EW, PSYOP, and deception guidance to subordinate units to ensure successful execution of COSCOM mission operations. They also develop and recommend OPSEC countermeasures to protect EEFI.

Unclassified Map Support

Operations staff officers determine map requirements and prepare the COSCOM map program to include acquisition, production, and reproduction of maps. They provide overall supervision of unclassified maps within the COSCOM. They develop plans and requirements for terrain studies, mapping, and charting for subordinate units. They designate map grid areas and map sheets which units need to obtain. They review, consolidate, and approve requests for unclassified maps. DMMCs, S4s, and DS supply companies submit requirements for unclassified maps to the Troop Support Materiel Division of the CMMC.

REAR OPERATIONS/ADC BRANCH

Rear operations/ADC branch personnel develop rear operations policies and plans for protecting COSCOM operations and facilities. They coordinate COSCOM rear operations and ADC activities in conjunction with the RAOC in their area. Branch personnel –

- Assess the overall physical security posture of the command, to include security of critical supplies.
- Prepare the rear operations annex to COSCOM orders and the FSOP.
- Conduct physical security inspections of subordinate units.
- Determine rear operations protection requirements and request tactical support from the corps rear CP's operations cell.
- Develop ADC plans and policies and coordinate them with the operations cell of the corps rear CP.
- Review ADC plans of subordinate group and battalion S4s.
- Conduct a vulnerability analysis and ADC capability analysis.
- Recommend ADC priorities to the COSCOM commander.
- Coordinate and monitor ADC operations in the COSCOM's area of responsibility.
- Maintain a current ADC situation map.
- Keep the COSCOM commander informed of the status of ADC operations.
- Arrange for emergency logistics support for affected logistics facilities.

- Coordinate with the ACofS, G1 and ACofS, G5 for HN personnel and assets to help clear the area and provide ad hoc firefighting assistance.
- Coordinate with medical brigade/group staff for medical assistance in sorting, initial evacuation, and treatment of mass casualties.
- Coordinate with the CMCC to obtain transportation assets to evacuate patients.
- Coordinate with engineer units to clear debris and rubble.
- Coordinate with supporting chemical units to assist subordinate units in decontamination operations and radiological monitoring.
- Keep the CMCC informed of ADC operations in the area, to enable the CMCC to monitor the condition of supply routes and redirect traffic when warranted.

NBC BRANCH

NBC branch personnel provide technical advice and assistance on NBC activities throughout the command. The NBC officer advises the COSCOM commander and staff on NBC activities which impact on the COSCOM's support mission. NBC staff officers prepare the NBC portion of COSCOM plans and orders. They monitor NBC training in COSCOM units. They evaluate the vulnerability of COSCOM units to NBC weapons and prepare NBC estimates. They coordinate with corps G3 chemical personnel for COSCOM internal decontamination support by chemical units, They develop damage estimates in the event of NBC attacks. They also implement NBC countermeasure plans and plan post-attack recovery operations, to include recommending requirements for chemical unit support.

NBC and chemical staff NCOs receive, evaluate, and distribute NBC contamination and strike reports throughout the command. They coordinate chemical agent detection, biological agent sampling, and radiological surveys with supporting chemical/NBC units. They recommend appropriate MOPP and disseminate predictions of fallout to COSCOM units.

OPERATION SUPPORT

ACofS, G3 section staff officers coordinate internal operations and training. Table 9-8 lists their responsibilities in planning and supporting operations prior to deployment and during deployment and staging.

Table 9-8. ACofS, G3 section personnel deployment planning.

PREDEPLOYMENT

- Coordinate with corps G3 staff on the current tactical situation in the AO.
- Determine special mission requirements in corps OPLANs/OPORDs.
- Request information on the status of prepositioned and preplanned supplies to support contingencies.
- Review implementing plans prepared by subordinate commands.
- Develop detailed sequence of actions to accomplish deployment.
- Review current files of COSCOM unit readiness reports.
- Update logistics support force packages and tailor troop lists.
- Coordinate staff update of the COSCOM OPORD and corps administrative/logistics plans and orders.
- Issue initial OPLAN/OPORD to major subordinate commands.
- Evaluate the readiness of the COSCOM HHC.
- Provide operations updates on the situation in the AO to commanders, staff, and key personnel.
- Coordinate with local community and civilian agencies for support during deployment.
- Monitor the readiness of COSCOM units.
- Designate marshalling areas.
- Ensure that attachments external to COSCOM units are provided instructions on reporting to the deploying unit.

DEPLOYMENT

- Keep the COSCOM commander and staff informed on the developing operational situation in the operations area.
- Disseminate instructions to subordinate units on security matters.
- Obtain classified maps of the AO.
- Evaluate the readiness of subordinate units for movement.

Table 9-8. ACofS, G3 section personnel deployment planning. (cont)

- Assist COSCOM subordinate units in their preparations for deployment.
- Finalize rear operations plans for the COSCOM HHC to conform with the current situation in the operations area.
- Develop a vulnerability analysis to threat NBC weapons.
- Recommend the appropriate MOPP and chemical defense posture.
- Coordinate displacement of subordinate commands and location of facilities with the COSCOM support operations officer.

- Establish working relations with counterpart G3 staff in the corps headquarters.
- Develop plans for subsequent phases of operations.
- Recommend decontamination and EOD priorities.

INTERNAL LOGISTICS SUPPORT

Incidents which impact on the mission capability of subordinate units are reported to the ACofS, G4 section. The ACofS, G4 section consists of a logistics support branch, food service branch, and construction support branch, all of which support and assist subordinate S4s cope with internal support requirements.

Subordinate CSG S4s submit internal LOGSTAT reports and logistics spot reports to the ACofS, G4 section. In turn, ACofS, G4 section personnel keep the COSCOM commander and coordinating G-staff informed of the status of internal logistics areas. These include supply, maintenance, transportation, and field services support. Table 9-9 lists predeployment and deployment planning areas of ACofS, G4 logistics support staff officers.

ACofS, G4

The COSCOM ACofS, G4 formulates plans and policies and advises the COSCOM commander and staff on the internal logistics support of all units assigned, attached, or OPCON to the COSCOM. He approves the COSCOM administrative/logistics plans and annexes on logistics support of COSCOM units.

The ACofS, G4 also performs the functions of the logistics readiness officer. LRO functions include –

- Reviewing, analyzing, and reporting on the logistics readiness of COSCOM units.
- Tracking command controlled lines with the assistance of commodity managers in the CMMC.
- Recommending policies, procedures, and corrective actions to assist in maintaining a high state of readiness within the COSCOM.
- Managing the supply and maintenance assistance and readiness program,
- Ensuring command emphasis on preventive maintenance in COSCOM units.
- Reviewing and analyzing logistics readiness reports on equipment status and equipment readiness percentage and ratings in COSCOM units.
- Monitoring the introduction of new equipment into COSCOM units.
- Requesting inspections of materiel in the hands of COSCOM troops to determine the condition of materiel.

The ACofS, G4 is also responsible for real estate acquisition from local sources. He allocates real estate, including billets and shelter. He also manages and develops construction programs, to include coordinating construction of facilities with engineers.

LOGISTICS SUPPORT BRANCH

The logistics support branch provides staff supervision and overall coordination for internal logistics support of COSCOM units, to include internal supply, maintenance, transportation, and field services. Branch personnel coordinate with forward CSG S4 personnel in ensuring support to COSCOM units/teams in the division AO.

Internal Supply Support

The supply and services officer, chief supply sergeant, and materiel management supervisor –

- Establish supply policy for COSCOM units.
- Recommend the prescribed load of supplies maintained by subordinate COSCOM units.
- Monitor the basic ammunition loads of subordinate COSCOM units.
- Monitor the temporary loan of equipment within the COSCOM.
- Supervise the COSCOM's supply discipline program
- Provide technical advice on property accountability within the COSCOM.
- Recommend action to be taken on reports of survey by the approving authority.
- Process inventory adjustment reports and prepare monthly reports summarizing property accountability adjustments.
- Monitor the expenditure of funds to support materiel programs.
- Coordinate the evacuation of excess and salvage materiel
- Coordinate the disposition of captured enemy supplies and equipment with ACofS, G2 intelligence staff.
- Coordinate regeneration of subordinate units with the COSCOM's support operations section's staff.
- Coordinate the distribution of maps.

Table 9-9. ACofS, G4 section personnel deployment planning.

PREDEPLOYMENT

- Assess the COSCOM's logistics readiness posture.
- Coordinate with the CMMC on performing a lateral search to replace minimum mission essential equipment.
- Provide technical assistance to units relative to readiness of organizational equipment and PLLs.
- Take action to replace critical deadlined on-hand end items.
- Cross-level or reallocate assets between major subordinate commands to fill equipment shortages.
- Review plans to turn-in station, camp, and post property.
- Determine environmental considerations for Class II items and Class III products.
- Identify unique clothing and equipment requirements for the objective area.
- Coordinate with the installation clothing sales store and CIF.
- Assist COSCOM units in the preparation of Class I, III packaged, IV, and IX basic loads.

DEPLOYMENT

- Assist S4s of major subordinate commands on internal supply, maintenance, and transportation areas.
- Coordinate the requisition of additional packing and crating materials.

Internal Maintenance Support

The maintenance officer assigned to the logistics support branch reviews, revises, and writes policy and procedures for internal maintenance and material readiness. He prepares the internal logistics maintenance annex to the COSCOM FSOP. He analyzes the maintenance status and trends in COSCOM units and makes recommendations to improve overall readiness posture. He also ensures that required maintenance personnel and tools are available to support the fielding of new equipment.

Logistics support branch maintenance personnel –

- Conduct staff assistance visits to identify and assist in correcting maintenance problems in COSCOM units.
- Monitor the equipment readiness status of subordinate units.
- Conduct periodic maintenance evaluation inspections of maintenance in COSCOM units.
- Report on maintenance and repair parts problems which affect the readiness of COSCOM units
- Monitor COSCOM unit PLLs and approve or disapprove non-demand supported additions or deletions.
- Monitor the COSCOM's calibration program.
- Monitor the COSCOM's Army Oil Analysis Program.
- Recommend cross leveling of repair parts and equipment to correct readiness problems.
- Coordinate maintenance regeneration requirements of COSCOM units with COSCOM's maintenance support branch staff.

Internal Transportation Support

The transportation officer and transportation operations NCO assigned to the logistics support branch –

- Prepare movement orders for administrative troop movements of the COSCOM HHC.
- Coordinate requests for transportation assets beyond that of the organic capability of subordinate COSCOM units with the CMCC.
- Coordinate regeneration transportation requirements of COSCOM units with transportation support branch staff.

Internal Field Services Support

In the area of internal field services support, the supply and services officer prescribes policies and procedures for COSCOM units to obtain field services support. He coordinates the internal field services support of COSCOM units, to include requirements for CEB, decontamination, laundry, and mortuary affairs support. He also coordinates COSCOM unit field services reconstitution requirements with COSCOM troop support branch staff.

FOOD SERVICE SUPPORT BRANCH

The food service officer and food service technician exercise technical staff supervision over COSCOM food service programs and subsistence operations. They develop plans, policies, and procedures involving the receipt, storage, and distribution of subsistence. Together with the food service supervisor and subsistence supply supervisor, they conduct assistance/inspection visits of subordinate food service areas and subsistence storage and distribution points. Their primary concerns include adherence to established procedures, methods of preparation, and conservation.

CONSTRUCTION SUPPORT BRANCH

Branch personnel plan, manage, and coordinate freed facilities, construction, utilities, and real estate for the COSCOM. The construction support branch chief serves as the COSCOM engineer. He is the liaison officer in coordinating for support from corps engineers and the engineer brigade for the COSCOM HHC and COSCOM units.

CIVIL MILITARY OPERATIONS SUPPORT

CMO activities involve relationships between military forces and civilian authorities and populace in the AO. They determine or lessen the impact of military operations on the political, economic, and sociological functions of the area.

ACofS, G5

The ACofS, G5 retains primary coordinating staff supervision responsibility for all civil affairs and for civil military relationships in the COSCOM's AO. He exercises staff supervision or operational control over CA

units and teams attached to the COSCOM. He coordinates with corps G5 staff in the corps rear CPsS CSS cell on the CMO impact on COSCOM operations.

The ACofS, G5 represents the COSCOM commander in the local community. He serves as the principal staff assistant to the COSCOM commander in matters pertaining to the civil population, its government, economy, and civil institutions in the COSCOM AO. He advises and assists the commander and staff in identifying requirements and coordinating support from the HN, civilian community, and foreign military.

The ACofS, G5 recommends command policy concerning obligations between civil and military authorities. He establishes and maintains close and continuing relations with other US government agencies that have CA responsibilities in the AO. He advises the COSCOM commander and staff on the political, economic, and social effects of CMO on internal COSCOM support operations, to include PSYOP.

The ACofS, G5 coordinates and supervises community relations activities in the COSCOM's area of responsibility. He informs the ACofS, G2 of intelligence information obtained from the populace. He assists the ACofS, G1 with the employment of local indigenous labor for military use.

The ACofS, G5 exercises staff supervision over CA units or elements assigned, attached, or placed OPCON to the COSCOM's headquarters, special troops battalion. He prepares plans and recommends policies and procedures for CA activities. He coordinates and directs all CA activities in the COSCOM trace.

ACofS, G5 SECTION

ACofS, G5 section personnel maintain and prepare the CMO and CA portions of COSCOM OPLANs/OPORDs, administrative/logistics plans, SOPs, and policies and directives. They determine requirements for CA units and personnel to accomplish CA activities. They coordinate civil military matters with CA units and assist in developing CA essential elements of information. They also monitor the CA activities of other units of the command.

Section personnel coordinate with CA teams in identifying in-country resources available to support COSCOM internal operations and reduce the logistics burden of the command. Resources may include public works and utilities, labor, material, and services. They conduct site surveys to locate HN resources. They plan and coordinate the use of local resources to reduce the

dependency of COSCOM units on CONUS-based resupply. The extent and depth of local resources depends on US policy, international law, or HN agreements.

Section personnel coordinate internal support requirements and knowledge of available supplies, services, and resources within the local economy with procurement and contracting personnel in subordinate CSGs and the CMMC procurement branch. They facilitate meetings between the external support branch personnel who contract for supplies and services and those individuals within the HN, civilian community, civilian government, or foreign military who provide supplies and services to augment those provided by COSCOM units.

Standard policy is to use local resources and existing governmental or civilian organizations for humanitarian support, to include support of refugees and geriatrics. These resources lessen the burden on LOCs and possibly serve as potential Class X support to nonmilitary programs.

ACofS, G5 section personnel advise COSCOM staff and personnel of subordinate units on civil military cooperation. They provide advice concerning the population of the AO, to include local customs, institutions, economy, and government. They also conduct surveys and studies on obligations between civil and military authorities, to include treaties, agreements, conventions, international law, and US policy.

Section personnel also identify potential civilmilitary problems that may directly affect COSCOM operations. They prepare estimates of the probable political, economic, and social impact of military operations and recommend courses of action to exploit CA interfaces and their working relationships with the local population. They supervise the collection of contraband, arms, and ammunition in the AO. As required, they coordinate with ACofS, G3 operations branch personnel on the use of PSYOP to persuade indigenous populations to cooperate with COSCOM staff.

CA UNITS/ELEMENTS SUPPORT

CA units or elements perform a command support mission for the COSCOM. The corps may allocate CA teams to COSCOM units in either general or direct support roles. CA units attached to the COSCOM's headquarters, special troops battalion and not further attached to subordinate commands are OPCON to the ACofS, G5. CA units attached to the headquarters,

special troops battalion provide augmentation assistance, as required, to the ACofS, G5 section to aid in planning CA operations. FMs 41-5 and 41-10 describe the mission and functions of CA units or teams.

The scope of CA units or CA teams assigned or attached varies depending upon the AO and level of combat activity. CA support to the COSCOM might include —

- Conducting area studies and reviewing HNS agreements.
- Identifying available local resources, facilities, and support.
- Developing CA annexes to COSCOM OPLANs.
- Providing input to the troop information programs on culturally appropriate behavior.
- Coordinating US requirements for and assisting in the acquisition of local resources, facilities, and support.
- Facilitating initial coordination meetings between the contracting agent and foreign agency which agreed to provide a specific type of HNS.
- Minimizing local population interference with COSCOM operations.
- Conducting analyses to anticipate population movements.

- Monitoring and making recommendations to the COSCOM commander on how to minimize adverse effects on COSCOM mission accomplishment.
- Coordinating with local agencies for assistance in controlling civilian population movement.
- Assisting the COSCOM commander in meeting legal and moral obligations to the local civil population.
- Identifying local civilian sources for information concerning enemy order of battle and enemy activities in the allied rear area.

OPERATION SUPPORT

Table 9-10 lists the functions or tasks which ACofS, G5 section personnel perform during the predeployment planning, deployment alert, and staging of an operation. They focus on preventing civilian interference and obtaining essential civilian support for COSCOM operations. COSCOM assets are not normally employed in CA operations. They might, however, be used as a last resort when no civilian assets exist and assets are not required for immediate military operations. ACofS, G5 staff officers establish procedures for the control and care of refugees, evacuees, and displaced persons.

INFORMATION MANAGEMENT SUPPORT

The ACofS, G6 section provides information management systems planning, policy, and guidance for all assigned or attached units in the COSCOM AO. Information management areas include communications, automatic data processing, records management, printing and publications, and audio visual. The ACofS, G6 section prepares the management information system portion of COSCOM OPLANs as well as the computer operations outage plan. Section personnel provide integrated management of information services and support. They ensure that information is distributed throughout the COSCOM.

The ACofS, G6 section consists of a CSS automation management office, communications branch, and administration services branch. The mission/functions of each branch and the responsibilities of the ACofS, G6 are described below.

ACofS, G6

The ACofS, G6 advises the COSCOM commander, staff, and subordinate commanders on matters pertaining to automation system support within the COSCOM, command communications, and administration services. He coordinates and controls information management assets assigned to support COSCOM units. AR 25-1 outlines information management responsibilities.

Automation System Support

The ACofS, G6 plans, directs, and coordinates the automation support activities of the COSCOM. He formulates automation asset management directives. He monitors the application of DA standard automation software systems within the COSCOM. He also coordinates operational support for the automation assets of the COSCOM.

Table 9-10. ACofS, G5 section personnel deployment planning.

PREDEPLOYMENT

- Supervise the preparation of area studies on the AO.
- Obtain data on the current situation in the area relative to current relations with the HN.
- Determine the availability and location of manpower, material, and services in the AO.
- Update the CMO portion of plans and orders.
- Identify personnel qualified in designated foreign languages to assist in the conduct of CA activities.
- Determine the requirements for CA units and personnel to accomplish CA activities.
- Request CA team augmentation support from COSCOM CA Capstone units.
- Prepare plans and recommend policies and procedures for CA activities.
- Develop agreements on limits of authority and constraints for the combat area, the corps rear area, and the remainder of the HN area in concert with the corps G5 and corps headquarters political advisors.

DEPLOYMENT

- Conduct in-country briefing to deploying unit personnel.
- Coordinate with civilian authorities and commercial agencies for space accommodations to facilitate troop movements when nonmilitary facilities are required to temporarily billet troops en route to the AO.
- Coordinate with PA branch personnel to improve community relations.
- Coordinate OPSEC countermeasures and MI aspects of CA activities with ACofS, G3 and ACofS, G2 staff.

Table 9-10. ACofS, G5 section personnel deployment planning. (cont)

- Assist COSCOM staff and subordinate group staff when the performance of their mission/functions requires interaction with HN personnel.
- Establish communications with CMO counterparts on the corps G5 staff.
- Establish liaison with HN officials who will be involved in actions with COSCOM staff.
- Establish relations with US government agencies that have CA responsibilities in the AO.
- Advise COSCOM staff and subordinate commanders on the procurement of real estate and the occupation and use of HN facilities.
- Coordinate civil support to prevent civilian interference with military operations.
- Supervise the collection of contraband, arms, and ammunition in the AO.
- Provide technical advise and assistance in the reorientation of dislocated civilians (displaced persons, refugees, and evacuees), enemy defectors, and EPWs.
- Observe and analyze trends in public opinion.
- Establish community relations programs to gain and maintain public understanding, good will, and support.
- Provide public affairs branch personnel with information for dissemination to subordinate elements concerning the conduct of their activities in the HN.
- Advise, assist, and make recommendations in coordination with the SJA to ensure that the COSCOM commander's legal obligations to the local population are fulfilled.
- Coordinate support for displaced civilians and refugees.

This includes repair parts and service requirements.

The ACofS, G6 is responsible for management and operational control of the CTASC-11 in the CMMC, CMCC, and medical brigade. He develops COSCOM COOP plans to cover the possible destruction of and sharing of a CTASC-11 previously dedicated to running only SARSS 2A/2B, SAAS, DAMMS-R, or TAMMIS program system applications. The ACofS, G6 coordinates plans which prioritize the systems requiring immediate COOP in emergency situations with the COSCOM support operations officer and ACofS, G3.

As the COSCOM's information systems security officer, he evaluates ADPE and data security measures relative to transfer of classified material and access control to restricted areas. He supervises magnetic storage media management. He also formulates protective measures to minimize the effects of electromagnetic pulse and transient radiation effect in electronic systems.

Communications Support

The ACofS, G6 serves as the principal advisor to the COSCOM commander and his staff on all signal matters. This includes the installation, operation, and maintenance of signal systems and signal equipment. He develops and maintains signal estimates and communications support plans, to include signal personnel and equipment requirements. He manages and controls the COSCOM's COMSEC account. He also staffs recommendations for MTOEs pertaining to signal equipment and personnel within COSCOM units.

The ACofS, G6 formulates plans for and supervises the establishment of data communications links. This includes links with remote data bases, fixed sites, mobile computers, and the Army's tactical and strategic communication systems.

The ACofS, G6 is responsible for the installation and operation of a local area network for the command. He conducts staff liaison with the signal brigade's corps signal office (assistant brigade signal officer) regarding COSCOM communication support requirements. As the COSCOM telephone control officer, he validates telephone service requests for COSCOM units and COSCOM HHC staff sections. He advises the COSCOM commander on signal support in subordinate units and their communications impact on the COSCOM information management program.

Administration Support

The ACofS, G6 is responsible for centralized administrative services in support of the COSCOM headquarters. These include message center distribution services, photocopying services, centralized reference publications, and decentralized functional files management. He coordinates with CMMC procurement branch personnel on blanket purchase agreements for local purchases of information management supplies and equipment.

CSS AUTOMATION MANAGEMENT OFFICE

The COSCOM CSSAMO provides an automation assistance management structure for CSS STAMIS software run on microcomputers throughout the corps. It provides management and technical control over STAMIS automation assistance by ensuring that all STAMIS interface and that all CSS STAMIS function in unity. While SIDPERS software is supported by the servicing personnel services company, the CSSAMO coordinates the support.

All STAMIS change requests for STAMIS run on CTASC-II are routed through the COSCOM CSSAMO. This includes change requests for SIDPERS run on CTASC-II at the corps personnel group.

CSSAMO Mission

The COSCOM CSSAMO serves as the battlefield functional area automation manager for CSS STAMIS. As such, CSSAMO personnel maintain data on CSS hardware and software use and perform the following mission tasks —

- Coordinate the installation and synchronization of STAMIS.
- Coordinate the installation and synchronization of system change packages.
- Assist units with CSS automation COOP planning and execution.
- Coordinate the submission of engineering change proposal software to the information system command and theater army.
- Interact with division and EAC activities responsible for CSS system support.
- Provide user level STAMIS support for the headquarters.
- Coordinate signal support actions with appropriate signal office.

CSSAMO Relationships

As shown by Figure 9-2, the COSCOM CSSAMO coordinates the actions of the CSSAMO in each subordinate CSG as well as the CSSAMO in the DISCOMS, separate combat brigades, and ACRs. While the figure reflects a notional four division corps configuration, the CSS software support structure can be tailored to support a corps with a contingency mission.

The COSCOM/CSG CSSAMO is the focal point for all user STAMIS system support in the corps. It coordinates the actions of CSG CSSAMOs and the CSSAMOs in the DISCOMs. It ensures that units apply all system change packages in the proper order. It reviews system problem reports submitted through other CSSAMOs and routes the problem report to an information system command team or TA CSSAMO.

CSSAMO System Support Officer

As chief of the CSSAMO, the system support officer has staff responsibility for the automated management information systems of the COSCOM. He coordinates the administrative and logistics activities necessary to support changes in automation support requirements and priorities. To do this, he –

- Maintains a database of ADP assets within the COSCOM.
- Advises on continuity of operations, computer sites, hardware acquisition, and automation security.
- Performs system analysis and coordinates replacement systems when automation systems become curtailed or inoperative.
- Advises the COSCOM commander and staff on management information system matters identified in the 18 series ARs and other publications that pertain to CSS STAMIS.
- Provides technical advise on the interface between automation and C-E systems.
- Provides advise on the capabilities and limitations of automation support equipment under varying environments.
- Evaluates software and hardware compatibility.
- Formulates protective measures that minimize the effects of electromagnetic pulse and transient radiation effect in electronic systems.

- Develops the automation support portion of OPLANs/OPORDs.
- Provides staff level supervision of local command unique systems.

CSSAMO Personnel

As applicable, CSSAMO personnel (materiel accounting, maintenance management, ammunition, transportation, medical, and unit supply specialists) analyze and test computer programs. They also provide advice on new or modified system adaptability.

TDA Augmentation

The CSSAMO is not staffed or equipped to support command unique systems or systems unique to TDA organizations. However, a TDA augmentation composed of a mix of civilian and military personnel may be assigned to the COSCOM CSSAMO to support forces in excess of that supported by assigned CSGs. Augmentation personnel can fill vacant spaces in the CSSAMO of CSGs transitioning to war. They help integrate forces arriving in theater into the CSS automation structure.

COMMUNICATIONS BRANCH

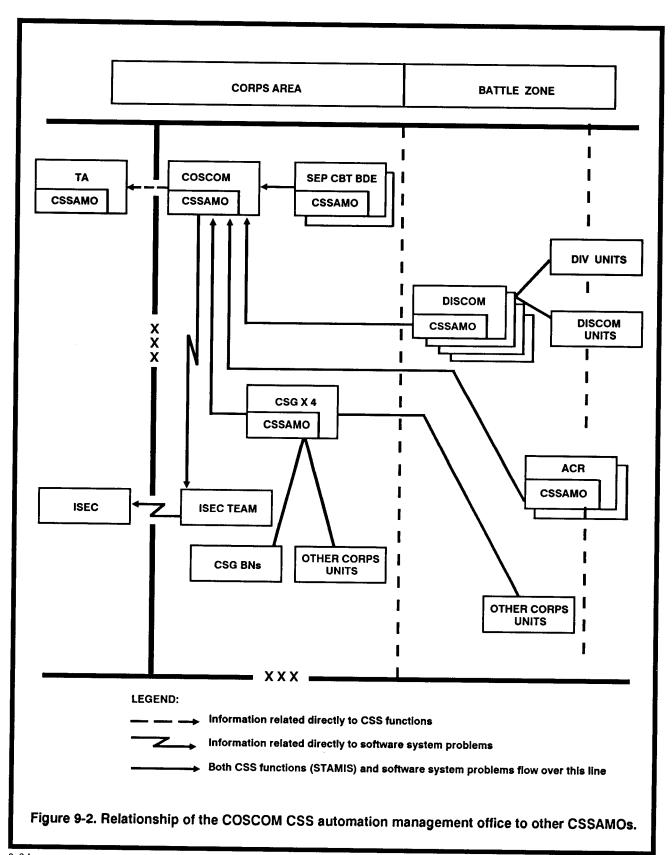
Communications branch personnel provide planning and policy guidance on the communications systems hardware and its capability to support automation STAMIS programs in the COSCOM AO. They coordinate and monitor signal support in the COSCOM HHC. They also coordinate the signal activities of supporting units.

C-E officers advise the ACofS, G6 on all C-E matters. They determine the methods to provide C-E support to satisfy COSCOM requirements and coordinate the signal activities of subordinate units. They also coordinate the preparation and distribution of automated SOI throughout the COSCOM.

The telecommunication technician (COMSEC) monitors the stockage and distribution of controlled C-E equipment and associated ASL. The communications operations chief reviews the C-E systems in subordinate units to determine their impact on the COSCOM information management program. He supervises the installation and maintenance of the telephone communications systems within the COSCOM.

ADMINISTRATION SERVICES BRANCH

This branch provides internal administrative services support for the COSCOM HHC, This includes a distribution center, central classified document



control repository, centralized administration reference library, and limited reproduction facilities. Administration services officers and administration supervisors assigned to the administration services branch perform the administrative functions noted in FM 101-5 to include –

- Correspondence and distribution management.
- Printing and reproduction services.
- Classified document control.
- Publication and library management.
- Reports control.
- Records, blank forms, mail, and file management.

Administration supervisors operate a staff message distribution center for the receipt and dispatch of all correspondence, official mail, and electronic messages addressed to COSCOM staff elements. They maintain a message distribution formula for distribu-

tion of inbound message traffic addressed to the COSCOM. They review correspondence for quality control and authenticate routine command correspondence. They also establish a courier service to and from the corps distribution center.

Administration specialists maintain administrative files, regulations, related publications, and publication accounts. They request and issue blank forms. They maintain consolidated functional files for all correspondence. The offset press operators maintain and operate the copier machines for the headquarters.

Postal supervisors and postal clerks coordinate postal service support with the supporting postal company. They also provide courier service to and from the corps and COSCOM HHC staff sections.

OPERATION SUPPORT

Table 9-11 lists the functions or tasks which ACofS, G6 section personnel perform during predeployment planning, deployment alert, and staging.

HEADQUARTERS, SPECIAL TROOPS BATTALION

The headquarters, special troops battalion provides the command and control staff element for all special troops assigned or attached to the COSCOM HHC. Special troops personnel provide organizational level administrative support to any special units or teams that the corps assigns or attaches to the COSCOM HHC. In addition to CA units and chemical units, the corps could attach signal, MI, JAG, and other units or teams to the headquarters, special troops battalion.

COMMANDER

The commander of the headquarters, special troops battalion exercises operational command and control of special troops assigned or attached to the COSCOM. He does not have sufficient staff to run the BCOC for the base cluster consisting of the COSCOM HHC, CMMC, CMCC, and the rear corps CP. However, his staff plans and coordinates local security for the COSCOM CP. They arrange guard, fatigue, and other required details to provide protected areas for CP personnel and their supporting automation and communications equipment.

BATTALION S-STAFF

The headquarters, special troops battalion possesses a staff similar to, but much smaller than, other

battalion headquarters. It has an S1, S2/3, and S4 assigned to perform the normal battalion S-staff coordinating functions for special troop elements assigned or attached to the COSCOM HHC. The S-staff also performs battalion level staff support for the CMMC and CMCC assigned to the COSCOM HHC.

- The S1 officer and personnel staff perform administrative, legal, morale support and personnel staff functions in support of COSCOM HHC, CMMC, and CMCC personnel and special troops. They process personnel actions and submit them to the servicing personnel service company. They prepare the personnel estimate, maintain strength data, prepare SIDPERS input, and determine replacement requirements.
- The S2/3 officer and associated personnel coordinate intelligence, OPSEC, tactical movement, NBC defense, and training of special troops.
- The S4 officer and associated logistics personnel coordinate internal logistics support for COSCOM HHC, CMMC, CMCC and special troops personnel. This includes arranging billeting, laundry and bath support, organizational

Table 9-11. ACofS, G6 section personnel deployment planning.

PREDEPLOYMENT

- Analyze the implications of moving the COSCOM headquarters and subordinate elements from CONUS installations to the AO.
- Develop and maintain a continuous operation plan for anticipated operations.
- Identify unique communications requirements.
- Ensure all authorized communications equipment is on hand in major subordinate commands.
- Review sources of power and communications support to link automation support operations.
- Estimate the volume of automation traffic data per day and its effect on communications support.
- Plan the phased implementation schedule of automation support between COSCOM units.
- Develop plans for backup manual systems.
- Revise C-E policies, plans, and requirements for the COSCOM, to include signal and COMSEC measures.
- Advise COSCOM units on COMSEC matters.

DEPLOYMENT

- Prepare to implement extraction from installation support.
- Coordinate with functional staff elements regarding data input and output to ensure consistency with the operation plan.
- Coordinate with the C-E officer on AUTODIN access availability to ensure transmission capability for automated systems.
- Distribute COMSEC equipment, SOIs, and keying materials.
- Ensure compliance with COMSEC procedures and requirements for automation system security.
- Provide technical advice to COSCOM staff and subordinate units on COMSEC procedures.

- Establish a central COSCOM message center.
- Coordinate the installation of secure FM radio and communications equipment between marshalling areas and headquarters elements.
- Coordinate data transmission security with the C-E officer.
- Review the impact on subordinate units' mission performance due to significant loss of automation capability.

supply support, organizational maintenance support, and field feeding support. The S4 develops and monitors maintenance programs for subordinate units. The S4 or warrant also serves as the property book officer for the COSCOM HHC, CMMC, and CMCC.

OPERATION SUPPORT

Table 9-12 lists the functions or tasks which personnel assigned to the headquarters, special troops battalion perform prior to deployment, upon deployment, and after arrival in the AO.

HEADQUARTERS COMPANY

The headquarters company provides the command and control staff to supervise enlisted personnel assigned to the COSCOM HHC. Headquarters company personnel provide administrative and logistics support to COSCOM HHC personnel and to the units or teams attached to the headquarters, special troops battalion. They assist in planning for deployment and redeployment of the headquarters. They are also responsible for supervising physical security of HHC areas.

COMMANDANT

As the headquarters commandant, the commander of the headquarters company is responsible for –

- Selection of future headquarters sites.
- Arrangement and movement of the headquarters.
- Coordination for life support at multiple headquarters sites.
- Headquarters administration.
- Supervision of maintenance of organic equipment.
- Organizational supply.
- Field feeding support.

The headquarters commandant maintains continuous coordination with the corps headquarters commandant regarding location of the corps rear CP.

ADMINISTRATION SUPPORT

Administration personnel assignment to the headquarters company is based on AR 570-2 allocation rules. Headquarters company administrative personnel provide internal administrative support services for the COSCOM HHC and special troops. Headquarters company administrative support functions include –

- Processing SIDPERS input and control data.
- Maintaining personnel transaction registers.
- Processing mail.

- Preparing official orders.
- Preparing personnel action documentation.
- Installing internal field telephones and switchboards not connected to the MSE area communications system.
- Operating the internal organic headquarters switchboard.
- Maintaining internal field wire communications.
- Providing data and assistance to G2/3 section personnel in preparing plans.
- Assisting COSCOM staff sections in the installation of MSE telephones and their four wire connection to the MSE area system.

INTERNAL SUPPLY SUPPORT

Supply personnel assigned to the headquarters company's supply section process supply room issues, receive small arms, control weapons and ammunition, prepare weapons/ammunition reports, and process laundry for COSCOM HHC personnel. They also maintain a property book and supporting transaction files.

FIELD FEEDING SUPPORT

The food services section is authorized two MKTs and sufficient cooks and food preparation equipment to provide adequate field feeding support for the COSCOM HHC. In addition, the food services section may provide meals and rations for other teams, such as CA teams and international law teams, which locate near the COSCOM HHC.

Under the area feeding concept prescribed by FM 10-23, nondivision separate units with a strength of less than 30 soldiers are not resourced with food service personnel and coordinate with the nearby feeding units for support. Nondivision separate units with required strength from 30 to 99 soldiers are authorized one cook to assist with ration preparation in the feeding unit. Supported units provide KP support to offset the increase in sanitation work load associated with A or B Rations.

Table 9-12. Headquarters, special troops battalion personnel deployment planning.

PREDEPLOYMENT

- Provide ACofS, G3 staff with data pertaining to the special troop elements assigned or attached to the COSCOM for inclusion in the security portion of OPLANs/OPORDs.
- Provide data on special troops elements to ACofS, G1 staff to be included in personnel administrative support plans.
- Provide data to ACofS, G4 and headquarters company staff on the logistics support requirements of attached special troops or units attached in support of disaster relief missions.
- Update vehicle load plans.
- Establish a family support program.
- Establish a rear detachment program to assist family members cope with situations arising from deployment.

DEPLOYMENT

- Ensure that special troops elements are prepared for overseas movement.
- Ensure that logistics sustainment resources are available to support special troops elements.
- Coordinate with COSCOM staff sections in preparation for the incremental deployment of special troops elements.
- Supervise the evacuation of buildings and facilities.

- Arrange for the reception of COSCOM headquarters staff and special troops in the area.
- Establish the physical organization of the COSCOM headquarters in facilities.

Since CMCC strength is less than 99, it is authorized one cook to assist the feeding unit. CMCC personnel receive subsistence support from either the CMMC, also authorized two MKTs and sufficient cooks, or the COSCOM HHC.

INTERNAL MAINTENANCE SUPPORT

Maintenance personnel assigned to the maintenance section of the headquarters company provide unit-level maintenance support of organic equipment authorized the COSCOM HHC and the CMMC. Maintenance support functions include –

- Installation and maintenance of lighting systems.
- Installation of above ground electrical distribution systems.
- Testing electrical circuits and components.
- Malfunction and repair defect isolation.
- Inspections and repairs of electrical distribution systems and equipment.

The motor pool element provides ground transportation for general officers assigned to the COSCOM headquarters.

SECURITY SUPPORT

Headquarters company personnel perform internal security support functions, to include coordination of perimeter defense and base defense support. As appropriate, they also –

- Execute the camouflage plan.
- Collect and disseminate NBC information.
- Maintain chemical supply records.
- Conduct unit reconnaissance for NBC contamination.
- Decontaminate unit equipment, supplies, personnel, and terrain.

OPERATION SUPPORT

Table 9-13 lists task which headquarters company personnel perform during predeployment and deployment phases and upon arrival in the AO.

Table 9-13. Headquarters company personnel deployment planning.

PREDEPLOYMENT

- Maintain COSCOM HHC current alert notification roster.
- Maintain personnel readiness folders for COSCOM HHC personnel.
- Ensure that COSCOM HHC personnel are qualified for overseas movement
- Ensure that COSCOM HHC personnel have received required immunizations.
- Update personnel data cards for COSCOM HHC personnel.
- Maintain a list of critical personnel shortages by grade and MOS.
- Maintain a list of nondeployable personnel.
- Ensure the readiness of organizational equipment.
- Arrange assistance for dependents of departing COSCOM HHC personnel.
- Conduct troop orientations.
- Maintain sufficient office supplies and blank forms to sustain operations for a specified number of days following deployment.
- Color code files and publications so they are easily pulled to accompany the headquarters upon deployment.
- Arrange for the disposition of headquarters documents and material not required for deployment.

Table 9-13. Headquarters company personnel deployment planning. (cont)

DEPLOYMENT

- Secure the area during deployment.
- Obtain basic loads of MREs, in-transit MREs.
- Obtain ammunition basic load.
- Supervise the deployment of company materiel and staff section personnel as they deploy by increments.
- Implement a personnel vehicle disposition plan.
- Turn-in or account for all nondeployable equipment.
- Prepare company buildings and facilities for evacuation.

- Prepare the assigned company site.
- Prepare COSCOM HHC buildings and facilities.
- Arrange for the reception and process arriving COSCOM HHC personnel.

CHAPTER 10

Reconstitution Support

The reconstitution process begins with battlefield reorganization, followed by assessment by higher head-quarters to determine the unit's combat effectiveness. Following assessment, further reorganization or regeneration may be required. Mission priorities, resource requirements, and time dictate the reconstitution process.

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REORGANIZATION OF COSCOM UNITS

Given the current austere CSS force structure of forward deployed corps, reorganization is the only reconstitution effort, before the corps matures and CONUS-based CSS units and personnel replacements arrive in theater. Since reorganization consists of actions taken to shift internal resources within a degraded unit, this section focus only on the reorganization of COSCOM units.

REORGANIZATION

During the early stages of combat, immediate and deliberate reorganization represents the reconstitution process most easily executed. Subordinate groups or battalions cross-level equipment and personnel or combine two or more attrited units to form a single mission capable unit.

Low density equipment and specialized MOSS make reorganization of logistics elements more difficult than reorganization of combat units. Reorganization of COSCOM units requires detailed planning, earlier selection of elements for reorganization, more extensive cross-leveling, and increased reliance upon individual replacements.

Immediate Reorganization

Immediate reorganization of COSCOM units consists of those actions which quickly or temporarily restore degraded units to a minimum level of effectiveness. Reorganization actions need to occur in or as close to the employment location as possible.

Subordinate commanders follow procedures set forth in OPORDs and FSOPs, to include succession of commands. Plans for succession of command or staff restoration need to specify the use of subordinate echelon assets. All subordinate unit SOPS need to include battle rosters, redistribution criteria, and contingency manning standards.

Following an attack, battalion and group staffs shift readily available assets and direct replenishment actions. All units attempt to replenish unit basic loads.

Deliberate Reorganization

Given more time and additional resources, battalion and group staffs perform deliberate reorganization to restore subordinate units to a specified degree of mission effectiveness. The medical brigade/group can replace modules from hospitals with modules from another MTF. CSG groups or battalions conduct more extensive cross-leveling. DS maintenance can be more intensive. Some replacement resources may be available. All units use the lull to rebuild stocks of Class III, V, VII, and VIII. DS supply companies provide sundry packs and Class VI items to improve soldier morale.

Battalion S4s schedule soldier rotation through CEB points. Personnel service support, such as postal service and chaplain support, needs to be provided to improve morale and ease stress.

To provide supporting units more time in which to reorganize, CSG support operations officers can either adjust customer support lists to the degraded capability of the supporting unit or change support sources.

REORGANIZATION ASSESSMENT

Commanders continually assess the ability of their unit, battalion, or group to perform assigned missions. Their staff officers keep the commander and their next higher level of command informed on —

- Personnel status. Commanders report on —
- ☐ Effectiveness of the remaining chain of command.

- ☐ Unit strength.
- ☐ Casualties.
- Physical condition of soldiers. This includes battle fatigue, sleep deprivation and fatigue level, length of time in combat, number of rest periods, minor injuries and illnesses, and accumulated radiation dosage.
- ☐ Condition of key personnel.
- □ Number and experience level of replacements and whether replacements are individuals or crews.
- □ Level of training required.
- Equipment status. S4s continually assess the status of weapons, mission essential equipment, vehicles, and communications equipment.
- Current supply status. Supply personnel determine the quantity of ammunition and petroleum stocks remaining as well as the capability of logistics support units to resupply the unit.
- Maintenance status. Maintenance personnel report deadlined equipment and the capability of nondivision DS maintenance units or MSTs to repair or replace damaged weapons and mission essential equipment.
- Soldier and unit morale. Staff officers assess and report on intangible morale factors. These include unit leadership, esprit de corps, commitment, cohesion, and discipline. They also report on the length of time their unit has been in combat and the nature and intensity of the most recent combat

- experience. The availability of field services support and health services support also impacts on unit morale.
- Availability of combat and CS. Protective covering fires and a secure AO allow degraded COS-COM units to continue their mission support operations or to reorganize while remaining in the combat area.

REORGANIZATION APPROVAL

Normally, the commander one echelon above approves reorganization. Subordinate group or brigade commanders approve the reorganization of their battalions. Subordinate battalion commanders approve the reorganization of their units. However, the corps commander must approve a reorganization that results in a major force structure change.

REORGANIZATION CONTROL

If the C2 of the unit undergoing reorganization remains viable, or C2 has been reinforced or reestablished, command lines remain the same as before reorganization. However, commanders should be prepared to modify command lines. All subordinate unit FSOP need to include command succession and procedures to reestablish CPs.

The unit commander structures and directs immediate reorganization as well as the reorganization of subordinate elements. Guidance from the next level commander ensures that deliberate reorganization efforts complement the corps commander's concept of operations.

REGENERATION ASSESSMENT

Regeneration transcends normal day-to-day logistics support actions. It consists of the extraordinary actions planned by the corps rear CP to restore units to a desired level of combat or mission effectiveness.

The deputy corps commander forms an RTF assessment element to determine whether regeneration is required. The RTF then forms battle damage assessment teams which assess unit status and regeneration requirements.

REGENERATION TASK FORCE ASSESSMENT

The RTF assessment element conducts an assessment of units which are candidates for regeneration. The RTF assessment element personnel assess the

degraded unit's C2 and requirements for personnel services, logistics, and training. Though the exact composition of the RTF assessment element cannot be predetermined, Table 10-1 lists representative staff officers who may comprise the RTF assessment element. They –

- Conduct detailed assessments to determine unit status and remaining capabilities.
- Reestablish the C2 structure of attrited units.
- Determine CSS requirements to restore the units to required mission capability.
- Determine how able attrited units are to assist in their regeneration.

- Determine the availability of replacement equipment and personnel.
- Marshal unit resources to prepare the units for movement to the regeneration site.

Depending on the criticality and sensitivity of the information, the RTF assessment element transmits C2 and training requirements through command channels. It transmits detailed CSS status data and requirements through the COSCOM command net, or MSE area communication system, to appropriate staff sections/branches.

BATTLE DAMAGE ASSESSMENT TEAMS

The RTF commander forms BDATs which travel to the degraded battalion/brigade units as they marshal and prepare to move to the regeneration site. Normally, one BDAT is assigned per battalion sized unit.

BDATs assess the requirements and materiel readiness status of the units. They assist the degraded units in their move. An MCT might accompany the BDAT to coordinate the move to the regeneration site. BDATs continue to assist the units until regeneration is complete.

The personnel and equipment assigned to each BDAT are METT-T dependent. However, BDATs need to be able to communicate with the RTF, with COSCOM/CSG support operations staff, and with supporting units. Each BDAT requires sufficient mobility and self-supporting life support Capability not to be a burden on already attrited units.

Table 10-1. Sample RTF assessment element.	
Corps Staff	
	Deputy Corps Commander
	Deputy G1
	Deputy G2
	Deputy G3
	Deputy Corps Surgeon
	Corps Chemical Representative
	Assistant Corps Engineer
	Corps Deputy PMO
COSCOM Staff and Elements	
	COSCOM Support Operations Officer
	Selected Support Operations Staff
	CMMC Representatives
	Movement Control Team Representative
Other Staff and Elements	
	Signal Brigade S3
	IG Chief
	UMT

RECONSTITUTION PLANNING

Reconstitution planning and execution cannot be reactive. A reconstitution plan must exist which can then be adapted to the situation. Timely execution of the reconstitution plan maintains the corps momentum. COS-COM support operations section staff officers develop and update the logistics support portion of reconstitution plans to correspond to the corps commander's priorities and assessment input from the RTF reconstitution element and BDATs. They integrate and synchronize logistics support of reconstitution provided by CSGs and the medical brigade/group.

RECONSTITUTION PLAN

The corps rear CP plans and controls reconstitution. Corps rear CP operations staff officers plan for and control regeneration efforts, in conjunction with the rear CP CSS cell. The corps commander's reconstitution plan establishes his reconstitution intent, concept, and priorities. These influence the COSCOM and group commanders in developing plans for implementing reconstitution.

COSCOM CSS plans branch personnel develop COSCOM reconstitution support plans. The COSCOM support operations officer synchronizes logistics support requirements between the CMMC and CMCC and with agencies outside the command such as the TAMMC and TAACOM ASGs.

PLANNING CONSIDERATIONS

Reconstitution plans must take into account the situation, degraded units' conditions and missions, and the expected intensity of future conflicts. Reconstitution plans should cover —

- Information requirements.
- Reporting procedures.
- Assessment procedures.

- Staff reconstitution responsibilities.
- Function, composition, and equipment of BDAT assessment teams.
- Procedures to reestablish C2.
- Techniques to maintain cohesiveness.
- Procedures for acquiring assistance from TA commands.

In developing the logistics support portion of reconstitution plans, COSCOM support operations section staff officers need to consider –

- Time constraints.
- Level of capability desired, based on current and anticipated tactical situations and unit missions.
- Capability of COSCOM elements available to assist units in their move to the regeneration site.
- Availabitity of replacement supplies and equipment.
- Location of possible regeneration sites.
- Available lines of communication.
- Transportation assets available for medical evacuation and for recovery and evacuation of supplies and equipment.
- Exposure to mass casualty weapons.
- Accumulated radiation status and delayed weapons effects
- Nature and extent of special requirements (decontamination and combat stress control teams).

Figure 10-1 provides a reconstitution planning and execution flowchart. Table 10-2 provides a reconstitution planning checklist.

REGENERATION SUPPORT

If normal logistics support and reorganization actions are insufficient to restore combat effectiveness, regeneration support may be necessary. Regeneration consists of rebuilding a degraded or reduced unit through large-scale replacement of personnel, equipment, and supplies; reestablishment of C2; and the conduct of mission essential training. The COSCOM coordinates and executes the large-scale logistics support for regeneration of division/corps battalions/brigades.

FM 100-9 provides guidance on regeneration of combat, CS, and CSS units and CSS support of regeneration operations.

REGENERATION CONTROL

The corps commander directs regeneration. He forms an RTF to execute regeneration. The corps commander appoints an RTF commander to control the regeneration process. The RTF commander may be a

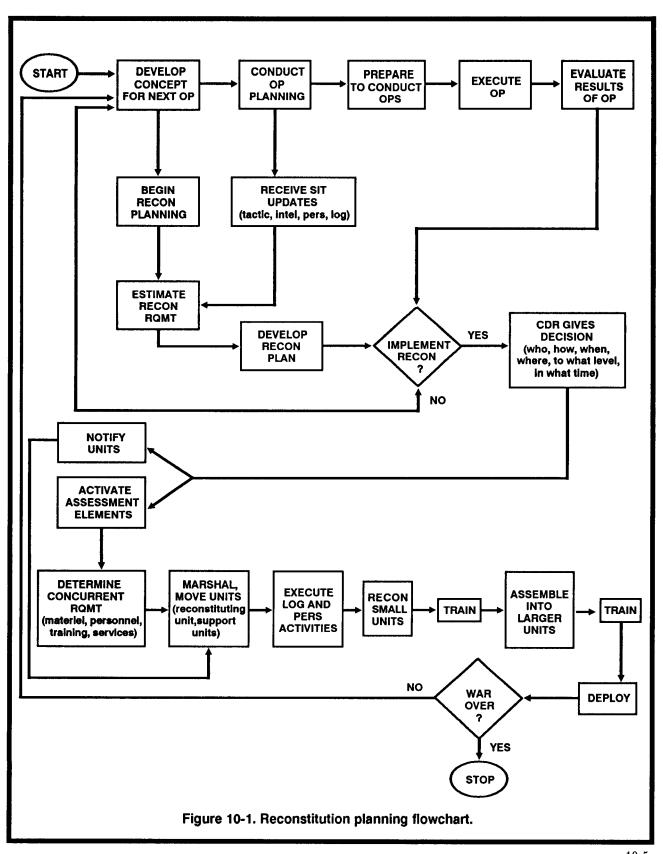


Table 10-2. Reconstitution planning checklist.

SITE SELECTION *

- What is the size of the battalion/brigade to be regenerated?
- How far will degraded units have to travel?
- What LOCs are available?
- What road and rail networks lead to the regeneration site?
- How near is the regeneration site to MSRs?
- How near to a city is the site to enable use of fixed facilities?
- Is a decontamination site en route or is there space available in the area?
- Has the site location been coordinated with HN representatives and allied commands in a combined environment?
- * The corps rear CP, in conjunction with the COSCOM, performs a terrain evaluation. The commander directing reconstitution designates the site location.

SOLDIER SUSTAINMENT

- Will degraded unit soldiers have a place to eat, sleep, and bathe?
- How many MKTs are needed to prepare hot meals?
- Can ration supplements be procured locally?
- What are the requirements for NBC suits, OCIE sets, and ration supplement sundries packs?
- What are the Class I basic loads?
- What are the potable water support requirements?

HEALTH SERVICE SUPPORT

- What nonmedical evacuation assets are required?
- Are emergency medical treatment and advanced trauma management resources needed?
- What medical supplies, to include combat lifesaver bags, are needed?
- How many combat stress control teams are required?
- What hospitalization requirements exist?
- What requirements are there for routine HSS (such as sick call)?
- What are the requirements for preventive medicine and veterinary support?
- How many medical RTD personnel are available?
- How much Class VIII is needed to bring the units up to their basic Class VII load?

Table 10-2. Reconstitution planning checklist. (cont)

FIELD SERVICES SUPPORT

- How many CEB teams are required?
- Are personal hygiene supplies available at the shower points?
- What is the laundry requirement?
- What mortuary affairs support is needed?
- Has salvage materiel been recovered?

REARM SUPPORT

- How much ammunition is needed to replenish the basic loads?
- What HNS ammunition stocks are available, and how is support coordinated?
- What barrier materials are needed?
- How many equipment deprocessing teams are needed?
- How is ammunition uploading of weapon systems performed?
- Are track vehicles and major assemblies available in war reserve stocks?

REFUEL SUPPORT

- How much Class III is needed to replenish the basic loads?
- Has a level of fill been established?
- What are the packaged Class III requirements?
- How is jet fuel issued to degraded units?
- What HNS is available, and how is it to be coordinated?

MAINTENANCE SUPPORT

- What recovery and evacuation equipment is needed?
- What is the percentage of match between the DS maintenance unit's ASL and degraded unit PLL?
- How can equipment issued from TA that is not common to the units being regenerated be supported for PLL, ASL, TMDE, special tools, etc.?
- Are degraded unit ULCs operational?
- What is needed to restore the ASL, tool kits, and maintenance capabilities of degraded maintenance units?

Table 10-2. Reconstitution planning checklist. (cont)

- How will repair priority change?
- What MSTs are needed to augment maintenance support requirements?
- What additional tools and test equipment are required?
- Has a reinforcing maintenance unit been designated?
- Is controlled exchange/cannibalization authorized?

MOVEMENT SUPPORT

- How can reconstitution best be supported on an area basis to preclude positioning supporting elements?
- What recovery and evacuation assets are required to support degraded unit movement to the regeneration site?
- How is the move from the battle area to the regeneration site to be supported?
- Are there specialized transportation requirements, such as requirements for HETs or MHE?
- What HNS transportation assets are available, and how are they to be incorporated?
- Will the road march interfere with maneuvers?
- Is an MCT/MRT needed to coordinate traffic movement and to manage transportation requirements?

TAACOM SUPPORT

- How can the TAACOM support or assist in regeneration?
- Where are ASGs to position stocks in the corps rear area to support regeneration requirements?

deputy commander, a key member of the G3 staff, or a subordinate commander.

As soon as the decision to regenerate is made, division, brigade, or ACR units are attached to the corps headquarters. This assists the RTF in extracting the units from combat. It also precludes the parent division from cross-leveling critical assets from the degraded units for use elsewhere by the division. To further reduce the capability of already attrited units makes it almost impossible to regenerate them later.

REGENERATION TASK FORCE

The exact composition of the RTF is METT-T dependent. It includes both CSS elements and operations

elements. CSS elements coordinate provision of replacement or RTD personnel and provide the supplies, field services, HSS, maintenance, and transportation support required to regenerate units. Operations elements help reestablish and reinforce the chain of command, manage regeneration site terrain, provide a safe site for regeneration, and execute training. Table 10-3 lists elements which might be attached to the RTF. The RTF commander adjusts the makeup of the RTF based on initial assessments and the tactical situation.

The reconstitution plan designates a headquarters element, such as a CSB headquarters, as part of the

Table 10-3. Sample RTF composition.		
COSCOM LOGISTICS UNITS/ELEMENTS	OTHER CSS ELEMENTS	
CSG Headquarters CSB Headquarters Contracting Agents CMMC Commodity Managers Movement Control Team CA Teams DS Supply Co Elements Ammo Techs and Inspectors CEB Teams DS Maint Co Elements/MSTs AVIM Co Elements Truck Co Med Evacuation Elements Med Triage Elements Med Treatment Elements Med Holding Elements Combat Stress Control Tms Vet and Prevent Med Teams Chem Decon Elements Civil-Mil Ops Team	Personnel Serv Co Elements Personnel Replacement Elements DS Postal Element MWR Personnel Public Affairs Teams Staff Judge Advocate Sec Finance Support Teams Unit Ministry Teams Engineer Elements	
	OPERATIONS ELEMENTS	
	Attrited Units Area RAOC Representatives NBC Recon Elements Military Intel Element Military Police	

RTF. The RTF commander should not ad hoc headquarters from various units. CSB or CSG support operations staff officers supervise the execution of the bulk of logistics regeneration missions.

After the corps commander decides to regenerate units, the RTF performs the following tasks:

- Assesses regeneration site location recommendations.
- Moves RTF elements to the regeneration site.

Dispatches BDATs.

- Coordinates the movement of supplies and personnel replacements to the regeneration site.
- Coordinates the evacuation of assets to the regeneration site.
- Establishes training areas.
- Plans the distribution of deadlined equipment after redeployment.

The RTF operates the regeneration site. RTF personnel coordinate —

- Emergency medical treatment and advanced trauma management.
- Medical evacuation.
- Security.
- Battlefield repair.
- Equipment recovery.
- Materiel evacuation.
- Large scale resupply.
- Psychological and stress counseling.
- Chaplain support.

The RTF possesses communications assets which enables it to communicate with degraded units, supporting units or elements, and corps and appropriate COSCOM sections/branches. The corps signal brigade needs to supplement communications capability. To facilitate communications, the tactical CP of the battalion/brigade being reconstituted collocates with the RTF headquarters.

SUPPORT OPERATIONS SECTION STAFF

Support operations section staff officers revise reconstitution plans based on assessment from the RTF assessment element and BDATs. They perform tasks listed on Table 10-4 as they integrate logistics support of regeneration.

CMMC ASSISTANCE

The CMMC reviews RTF assessment reports and transmits MROs to GSUs to ship replacements for combat losses and critical equipment shortages. To minimize supply action processing time, the COSCOM support operations officer directs that supporting units give priority to MROs for attrited units.

To reduce the burden on the maintenance system, the CMMC needs to make every effort to maintain equipment integrity within the unit. Increasing the types of major items increases the type of repair parts and TMDE required. This would result in a disparity between available maintenance MOSS and required maintenance. It would also result in an increase in maintenance assets needed to support the mix of weapon systems.

INITIAL SOLDIER SUSTAINMENT

Initially, soldiers need hot meals, showers, clothing

exchange, and a safe place to sleep. Following this, combat medical stress teams and UMTs assist in stress reduction. The DS replacement company provides uniforms, MOPP gear, and individual and organizational equipment. The RTF provides public affairs information (newspaper and radio broadcasts) and phone contact with families. Ration supplement sundry packs and personnel service support, such as postal service, MWR activities, and finance support should also be available.

SUPPLY SUPPORT

COSCOM units may provide fuel, water, rations, and ammunition to attrited units as they move to the regeneration site. Supply elements may need to move forward to a link-up site to provide this support.

Initially, the RTF emphasizes rearming and refueling of operational systems. Attrited units which do not require decontamination draw sufficient ammunition from an ATP or an ASP to cover their move to the regeneration site. The CMMC and CMCC redirect ammunition in transit from the supporting ATP to another ATP or ASI. COSCOM munitions support branch personnel need to plan for ammunition stocks for area defense, unit basic load replenishment, and training requirements.

The RTF elements or units at the regeneration site arrange for –

- Resupply of essential major end items.
- Replacement of chemical defense equipment.
- Replenishment of basic loads of Class III and V.
- Supply of critical repair parts, water, rations, and sundry packs.

Contracting personnel assigned to the CSGs and COSCOM procurement support branch contract for fresh fruits, bread and locally available ration supplements.

The RTF uses existing area support CSB units to provide logistics support for regeneration efforts. Ammunition and fuel may be available from supply points near the regeneration site. The KIT would not have to establish stocks of these items at the regeneration site.

TRANSPORTATION SUPPORT

The move to the regeneration site is normally classified as an administrative move, organized and planned by the CMCC. The CMCC coordinates with the rear CP's CSS cell to ensure that the move does not conflict with

Table 10-4. Support operations staff officers support of regeneration.

SUPPORT OPERATIONS OFFICER

- Recommends locations for the regeneration site to the RTF commander based on terrain requirements for logistics support elements and current locations of logistics elements designated to provide regeneration support.
- Recommends logistics elements to be attached to the RTF.
- Recommends MSRs into and out of the regeneration sites.
- Coordinates with TAMMC on preconfigured unit sets of supplies and equipment.
- Recommends allocation of critical supplies based on corps commander priorities.
- Keeps the CMMC informed of changes in priority of support.
- Coordinates with TAMCA for additional transport capacity.
- Synchronizes cross-leveling operations.

TROOP SUPPORT BRANCH PERSONNEL

- Estimate Class I, VI, and II requirements.
- Estimate potable water requirements.
- Estimate requirements to replace basic loads of MREs.
- Estimate requirements for NBC gear and OCIE.
- Estimate construction, fortification, and barrier material requirements and coordinate with transportation support branch staff and the CMCC on movement of these materials to the regeneration site.
- Identify possible supply and field services elements for attachment to the RTF.
- Estimate support requirements for RTF elements.
- Preplan the use of push packages for NBC and OCIE.
- Ensure that rations, MKTs, and cooks arrive at the regeneration site before the first units requiring hot meals.
- Plan for issue from combat ASLs uploaded on trucks.
- Coordinate for CEB and laundry support at regeneration sites.
- Plan for water support of CEB and laundry operations.
- Coordinate mortuary affairs support at the regeneration site.

Table 10-4. Support operations staff officers support of regeneration. (cont)

MUNITIONS SUPPORT BRANCH PERSONNEL

- Estimate type and quantity of munitions required to replenish unit basic loads.
- Estimate type and quantity of munitions to support both crew training and defense of the regeneration site.
- Identify ammunition elements which could be attached to the RTF.
- Plan for issue of ammunition to attrited units as they move to the regeneration site.
- Assess the impact which regeneration support has on normal ammunition support.
- Coordinate with the CMMC on redirection of munitions stocks to the regeneration site.
- Coordinate for additional MHE to support receipt and issue of munitions at the regeneration site.

WEAPON SYSTEMS SUPPORT BRANCH PERSONNEL

- Plan ways to expedite recovery of critical weapon systems.
- Coordinate with the COSCOM transportation support branch and CMCC for HET or rail movement of weapon systems to the regeneration site.
- Coordinate with the TAACOM on availability of replacement weapon systems.
- Provide guidance on ready-to-fight versus ready-for-issue weapon systems.
- Provide guidance on controlled substitution and cannibalization of critical weapon systems.
- Coordinate priority issue of replacement weapon systems.

PETROLEUM SUPPORT BRANCH PERSONNEL

- Estimate quantity of fuel required for each fuel type.
- Plan for refuel-on-the-move support of attrited units at a link-up point on the line of march to the regeneration site.
- Recommend source of support (Class III point or petroleum supply platoon).
- Coordinate with the CMMC on diversion of bulk fuel tankers to the regeneration site.
- Assess the impact of regeneration support on normal fuel support operations.

MAINTENANCE SUPPORT BRANCH PERSONNEL

- Identify maintenance teams and units which can best provide support.
- Recommend maintenance elements or teams which could be attached to the RTF.

Table 10-4. Support operations staff officers support of regeneration. (cont)

- Direct currently supporting maintenance units to expedite repair of critical major end items and weapon systems.
- Coordinate with the CMMC on cross-leveling maintenance work loads.
- Recommend attachment of maintenance assets to the RTF.
- Coordinate removal of deadlined equipment.
- Coordinate with the CMMC/NICPs on ALOC unit designations.
- Recommend that supporting MSTs or maintenance units perform work without job orders.
- Assess the impact of regeneration support on normal maintenance support operations and recommend ways to adjust work loads.

TRANSPORTATION SUPPORT BRANCH PERSONNEL

- Identify transportation assets which could be used to support regeneration.
- Recommend transportation elements which could be attached to the RTF.
- Coordinate with the CMCC to support movement to, within, and from the regeneration site.
- Recommend the allocation of transport assets to support the resupply and evacuation of materiel to regeneration sites.
- Coordinate with the ACofS, G1 regarding transportation requirements for personnel replacements.
- Coordinate with the CMCC/TAMCA on throughput of materiel into regeneration sites.
- Integrate HNS transportation assets in reconstitution plans.
- Determine the number of HETs available to support resupply and evacuation of critical weapon systems to and from regeneration sites.
- Coordinate augmentation of medical evacuation with nonmedical transportation assets to transport casualties to the regeneration site or appropriate medical treatment facility.

PROCUREMENT SUPPORT BRANCH PERSONNEL

- Ensure that local sources are included in reconstitution plans.
- Provide advice on local source suitability and availability to offset logistics support of regeneration.
- Contract support from local sources.

tactical movements. As additional status data is received from the RTF assessment element and BDATs, the CMCC adjusts the movement plan, to include special requirements for vehicles not off-road capable or that require special road clearances.

An MCT can be attached to the RTF to help coordinate movement to, within, and from the regeneration site. If degraded units are able to move themselves, the CMCC provides the units with priority road time. The COSCOM petroleum officer ensures that the degraded units receive adequate refuel-on-the-move support. If additional corps transportation assets are required to support the move, the COSCOM support operations officer tasks the CMCC to provide recovery vehicles and HETs.

A truck company may be OPCON to the RTF to provide direct support. Allied nation or HNS transportation assets help offset recovery and evacuation shortfalls.

SERVICES SUPPORT

CEB teams accompany the RTF advance party to the regeneration site in order to begin sustaining soldiers soon after their arrival at the site. Force provider equipment may be set up at the regeneration site to provide showers, dining facility, laundry, and field sanitation.

MAINTENANCE SUPPORT

The BDAT assesses requirements for immediate battlefield repairs, use of expedient repairs, and cross-leveling. COSCOM maintenance support branch personnel establish priorities for recovery, repair, and cannibalization and the degree of maintenance to be performed.

CMMC maintenance managers concentrate on repair of major end items critical to the degraded unit's combat effectiveness. They perform a lateral search for critical repair parts identified by the BDAT and coordinate with the CMCC/MCTs for movement of parts to the regeneration site.

Evacuated inoperable and battle damaged end items provide a major source of replacement systems. Therefore, recovery and evacuation of combat damaged equipment must begin as soon as practical. All available assets, including additional recovery and transportation assets from TAACOM and HN assets (truck, rail, and barge), should be used.

AVIM forward support platoons send teams forward to perform expedient battle damage repairs. If large numbers of aircraft are damaged, the RTF should con-

sider locating the regeneration site at or near a corps AVIM location.

DS maintenance units and MSTs focus on recovering items, such as radios, installation kits, thermal sights, machine guns, communications security devices, and basic issue items, needed to make complete weapon systems. They use controlled substitution and cannibalization to recover serviceable components and repair parts. COSCOM maintenance support branch personnel ensure that units undergoing reconstitution receive priority of maintenance efforts, replacement equipment systems, tools, and test equipment.

The GS repair parts supply company ships repair parts directly to the RTF maintenance company element. Designating that maintenance element as an ALOC unit aligns air shipment from CONUS NICPs directly to the RTF unit.

WEAPON SYSTEMS REPLACEMENT

The COSCOM weapon systems support branch chief manages weapon system replacement actions in support of regeneration. To help provide more responsive regeneration, he recommends that some Class VII items be configured in unit sets. Unit sets should be prepared for those units which corps G3 staff officers estimate could receive heavy losses or require more rapid reconstitution based on future missions.

Major weapon systems are replaced per RTF status reports and corps commander priorities. CMMC weapon systems managers allocate these systems based on the corps commander's priorities, known losses, and available replacements. They monitor systems undergoing maintenance and their anticipated due-out date.

COSCOM/TAACOM heavy materiel supply company personnel prepare weapon systems ready-for-issue. This means that all ancillary items (fire control, machine guns, radio mounts and radios) are installed. They also ensure that basic issue items are aboard and that vehicle are fueled.

Crews link up with weapon systems at the regeneration site. They bring the system to a ready-to-fight status. Weapon systems which are ready-to-fight have been boresighted and verified and have ammunition stowed aboard.

HEALTH SERVICE SUPPORT

Emergency medical treatment is performed as far forward as possible to stabilize patients for evacuation or

for return to duty. Air and ground ambulances evacuate soldiers to medical treatment facilities. Combat stress control elements assess the mental health status of unit personnel and advise the commander on unit morale and cohesion. Medical treatment personnel coordinate incorporation of RTD soldiers with the RTF's personnel replacement element.

SPECIAL SUPPORT

When units have been severely degraded due to events such as a NBC strike, additional assistance is required to intensify support in the following areas:

- Decontamination.
- Health service support.
- Personnel services.
- Clothing exchange and bath.

- Religious support.
- Straggler control.
- Recovery of damaged equipment.

TAACOM BACKUP SUPPORT

The COSCOM of a committed corps may not be capable of providing the full magnitude of support required by a large scale regeneration effort. The TAACOM might need to provide –

- Additional transportation backhaul or recovery assets.
- Critical weapon systems and GS level supplies.
- Reinforcing DS/GS maintenance.
- Additional field services support.
- Units to assist the RTF.

CHAPTER 11

Protecting the Support Structure

Because of their importance to the support of tactical operations, COSCOM units and facilities remain vulnerable to attack by enemy forces. Enemy forces attempt to disrupt support activities and interdict LOCs. The COSCOM's support structure needs to be protected if corps forces are to retain their capability to surge and survive to win the corps battle.

Protection includes actions taken to offset Level I, I, and III threats. It also includes enforcing self-protective measures such as dispersal, cover, concealment, and camouflage. Units must use self-defense weaponry to fortify bases and base clusters and prevent unnecessary loss of mission supplies and equipment. Protection also includes deception actions

taken to mislead the enemy as well as actions taken to secure ground LOCs and protect critical Class VII, fuel, or ammunition supply points.

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THREATS TO COSCOM SUPPORT ORGANIZATIONS

Threat doctrine stresses decisive engagements to breach the main battle area and penetrate into the corps rear area to destroy high-priority targets and logistics reserves. Threat activity in the corps rear area is conducted to prepare for future threat operations or support current threat close operations. It may encompass insurgents, terrorists, sympathizers and tactical forces as well as the effects of artillery, missiles and rockets, air attacks, and radio electronic combat. FMs 102-1, 100-2-2 and 100-2-3 describe threat forces and tactics.

LEVELS OF RESPONSE

Rather than focus on the size or type of threat, units focus on the level of response required to defeat the threat. To assist commanders and staffs, PM 100-15 categorizes Level I through Level III threats by the following levels of response:

- Level I threats are those which can be defeated by base defense forces.
- Level II threats include those which are beyond the capabilities of base defense forces. These threats can be defeated by response forces, normally Ml?
- Level III threats are those which necessitate a corps command decision to commit a tactical combat force.

Since incidents do not follow a progressive sequence, commanders may face any combination of these threats at the same time. Indeed, some threat activities begin well ahead of general hostilities.

TARGETS WITHIN THE CORPS REAR AREA

An understanding of the threat to the corps rear area and detailed IPB and LPB products help to ensure protection of the support structure. Threat forces conduct operations in the corps rear area to seize and maintain the initiative, facilitate strategic and operational level penetrations, and degrade or eliminate the corps' capability to conduct coherent operations.

To achieve these aims, enemy activities in the corps rear area target –

- Chemical weapon storage sites and delivery systems.
- Corps CPs.
- Air defense artillery sites.
- Critical signal nodes.
- Critical logistics facilities and units.
- Key choke points along LOCs.
- Regeneration sites.

LEVEL I THREAT OBJECTIVES

Agents, sympathizes or terrorists attempt to create confusion, fear, or panic. They use sophisticated camera listening devices, or long-range secure radios to gain

information for exploiting vulnerabilities. They attempt to cause delay by disrupting CP operations and communications and automation networks. Individual agents or small terrorist cells conduct random attacks to sabotage logistics support operations. Enemy sympathizers conduct political demonstrations to create hostile civil strife in host countries. Reconnaissance teams conduct clandestine surveillance to gather intelligence on logistics support structure and operations. They also conduct acts against targets of opportunity.

Supporting RAOCs disseminate information to bases and base clusters on the current situation in the area, to include likely enemy targets and intentions. This information appears in the intelligence estimate and IPB products produced by the corps main CP's intelligence cell.

High priority targets include the COSCOM CP and its subordinate functional control centers. The threat attempts to disrupt CP communications nets and destroy the CSS automation management office at the COSCOM and each CSG. Petroleum and ammunition supply points as well as supply points which receive, store, or issue Class VII items present lucrative targets for sabotage. MHE may also represent a priority target. Because of the reliance of logistics units on MHE, the loss of any or all MHE impacts adversely on support provided by distribution systems.

RESPONSE TO LEVEL I THREATS

Units need to detect, isolate, minimize, and defeat Level I threats before logistics support operations become disrupted. Level I threats can be defeated by base or base cluster self-defense measures, to include OPSEC, COMSEC, and perimeter defense.

Base commanders form base defense forces. Base defense forces provide internal base security and reinforce the base perimeter when threatened.

BDOCs develop a base defense plan. They submit that plan to their designated base cluster, if applicable. BCOCs consolidate these plans and forward them to the supporting RAOC.

BDOCs/BCOCs switch organic radios to their supporting RAOC's frequency to obtain data on rear operations and the tactical situation. Units within the base/base cluster transmit Level I incidents reports both to the RAOC serving their area and to their chain of command.

LEVEL II THREAT OBJECTIVES

Level II threat objectives include command, control, and communications facilities; supply convoys; propositioned war stocks; and reserve units marshaling in the corps rear area.

Special purpose forces, squad-size or smaller, perform reconnaissance, sabotage, and intelligence collection missions in the corps area. These forces have been trained in demolitions, communications, and languages. They often dress in HN or friendly forces uniforms or civilian clothes. They may be tasked to disrupt, destroy, or prepare for large-force incursions.

Armored reconnaissance squads airdrop into or infiltrate the corps rear area to locate reserves, monitor unit positions or movements, and conduct ground reconnaissance for avenues of approach. Other reconnaissance elements raid supply points or conduct ambushes along MSRs. Instead of attempting to seize key terrain features, assault forces focus on creating gaps to allow exploitation forces to strike deep into the corps rear area.

RESPONSE TO LEVEL II THREATS

Logistics units must use every possible measure to prevent surveillance by Level H forces. The corps rear CP's operations cell disseminates early warning information on threat airborne or air assault activities or insertions in the corps rear area. Following early warning, the operations cell notifies the RAOCs which then inform response forces and base clusters/bases.

The base cluster defense plan needs to include air, ground, and NBC attack alarm systems and describe internal air defense measures. Base defense forces prepare to detect and defeat or minimize the effects of Level I and limited Level II threat attacks against their base or base cluster.

BCOCs/BDOCs (for isolated bases) request MP assistance or supporting fires through the RAOC serving their area. The corps rear CP's operations cell designates MP elements to respond to bases or base clusters under attack by Level II threat forces.

LEVEL III THREAT OBJECTIVES

Airborne or ground infiltration forces, company to battalion-size, attempt to seize industrial complexes, key terrain, airheads, landing zones, seaports, bridgeheads, or river-crossing sites. They exploit penetrations to attack targets in the corps rear area. Level III threats attempt to disrupt command, control,

and communications facilities or to destroy prepositioned stocks, logistics corridors, and supply convoys.

Exploitation forces could commit before the first echelon battle ends and second echelon forces arrive. They might try to prevent withdrawal or relocation of defending units by blocking withdrawal routes and seizing bridgeheads and road junctions. They might also try to destroy LOCs, seize airheads, prevent reserves moving forward, and destroy critical logistics facilities.

RESPONSE TO LEVEL III THREATS

Level III threats can be delayed or disrupted by MP response forces with supporting fires. The corps must commit a tactical combat force to defeat a Level III threat.

Logistics units report the size and intent of Level III threats to their supporting RAOC. The corps G3 task organizes a tactical combat force, normally a composite brigade-sized force, which the corps commander commits. All units in the TCF's area of operations become OPCON to the TCF for rear security operations.

The corps rear CP's CSS cell coordinates logistics requirements for the tactical combat force with the COSCOM support operations officer. As required, the COSCOM support operations officer directs the CMMC to divert critical supplies and services to support the TCF.

SELF-PROTECTIVE MEASURES

Few COSCOM units can continue their support mission while under attack, no matter how minor the threat may be. If threats continually force COSCOM units to cease mission support and take defensive actions, corps tactical operations could be effectively interrupted. To preclude continual support degradation from occurring, swift measures should be taken to defeat threat forces that are creating problems in the corps rear area. Passive security measures must give way to active measures in order to ensure maximum support efficiency.

All soldiers must become proficient in basic tactical skills. This includes establishing perimeter defensive positions in urban areas as well as field environments. Every unit is responsible for providing its own local security. Economy of force means that all COSCOM units are responsible for defending themselves against attempts to disrupt support operations. In coordination with the MP units in their area, they employ self protective measures to minimize the destructive force of enemy forces.

Self protective measures include passive measures, such as dispersion, cover, concealment and camouflage. Often, merely avoiding detection serves as the best defense. Self protective measures also include active measures, such as —

- Using crew-served weapons and preparing individual positions.
- Emplacing obstacles.
- Placing SAWS in key positions to protect base cluster perimeters and critical stockage points.

- Adjusting indirect fires.
- Reacting to air, NBC, and indirect fire attacks.

DISPERSION

Organizing units into a defensive 360-degree perimeter absorbs manpower and provides only a thin line of protection. Once penetrated, the perimeter remains nearly impossible to re-form.

Point defense of functional small unit areas, with the fullest possible use of unit dispersion, has evolved as the most practical method of defense. Instead of manning the entire perimeter, logistics units form reaction forces to defend critical elements. The enemy could even pass through the base cluster area without hitting any defended point.

To reduce the vulnerability of the corps' GS supporting base, logistics organizations traditionally disperse similar type units throughout the corps rear area. Dispersion helps to avoid catastrophic damage from air, artillery, and mass destruction weapons. Even if a logistics unit was not listed as a primary target, it could become an excellent target of opportunity. The dispersion required depends on the —

- Type of Threat. The probability of attack by air, as an example, requires greater dispersion than an attack by small units.
- Terrain. Occupying urban terrain decreases dispersion requirements because of the cover provided by buildings in built-up areas. Road networks with increased access which can bear expected traffic loads allow for greater dispersion of elements.

- Access to Supported Customers. Increased dispersion of COSCOM units decreases the ease of access by customers. However, dispersing classes of supply throughout the corps rear area provides customers with one-stop support at several locations.
- Defensibility. Dispersion also depends on the ability of a unit to prevent, resist, or defeat enemy forces. Normally, units defend themselves better in built-up areas. In the field, defensibility improves as dispersed units withdraw to form closely knit base clusters.

COVER, CONCEALMENT, AND CAMOUFLAGE

Logistics resources that cannot be detected cannot be targeted. Cover, concealment, and camouflage remain critical to protecting logistics units, facilities, and supplies from enemy detection and attack.

- Cover includes natural and artificial protection from enemy observation and fire. When selecting sites, advance parties need to consider the type of cover available for fighting positions and logistics resources. When available, engineers provide hardened sites for critical logistics resources.
- Concealment includes natural or artificial protection from enemy detection. COSCOM units need to conceal customer access areas as well as unit signature and mission equipment. Smoke may be used to conceal activities and to deceive the threat.
- Camouflage consists of using natural or artificial materiel, objects, or tactical positions to confuse, mislead, or evade the enemy. With the exception of medical units, logistics units use camouflage to conceal operations and the identity of critical assets. (According to FM 8-10 and STANAG 2931, camouflage of a medical unit, vehicle, or aircraft on the ground results in the loss of the protective status afforded by the Geneva convention.) Use of extensive camouflage nets may prevent the enemy from determining the type of logistics support element. TM 5-200 describes field techniques for preparing camouflage materials. FM 5-20 covers engineer camouflage operations.

INTELLIGENCE GATHERING

Logistics units use observation posts, listening posts, or unattended ground sensors on likely avenues of approach to collect intelligence on threat activity. In areas where the populace remains friendly, local law enforcement or government agencies can provide information

on threat activities in the area. BCOCs implement an integrated warning plan within their cluster and with adjacent bases or base clusters. G2/S2 personnel transmit intelligence data and IPB products over rear operations nets.

DIRECT/INDIRECT FIRE PLAN

It is always difficult to identify enemy troops at any distance. Logistics units need to preplan targets for artillery support. However, artillery support may not be timely. Clearances to fire artillery in the corps rear area must be closely controlled to prevent firing on friendly forces.

RAOCs assist group and battalion rear operations branch personnel develop direct/indirect fire plans. These fire plans need to identify –

- Probable enemy avenues of approach.
- Probable engagement areas.
- Target reference points.
- Priority of defense for support elements.
- Fire support request and coordination measures with designated fire support element.

OBSTACLES

Obstacles slow, impede, or channel enemy movement and incursions. They buy time until reaction forces can deploy or a response force can arrive. Effective use of obstacles involves sound countermobility planning and early warning.

Countermobility Plan

S2/3 staff officers in COSCOM organizations develop countermobility plans. These countermobility plans need to identify –

- Obstacle constraints and restrictions using the COSCOM OPLAN.
- Possible obstacle locations and type of obstacles.
- Available obstacle assets, to include real and artificial mine devices.

COSCOM Staff Support

The COSCOM ACofS, G3's rear operations/ADC branch coordinates obstacle support requirements with the supporting corps engineer element.

REACTION FORCE

Subordinate battalion commanders designated as base/base cluster commanders organize and train a reaction

force to provide base/base cluster defense of selected support elements. When enemy forces exceed base and base cluster defense capabilities, response forces provide the initial force to close with and destroy the enemy. The reaction force should be armed to deliver the greatest possible volume of fire using unit resources. It commits on the order of the base/base cluster commander. S4 staff officers coordinate reaction force equipment and supply requirements.

AIR DEFENSE

Air attack is perhaps the greatest single threat to logistics units in the corps rear area. Threat air forces may include attack helicopters, attack aircraft, and fighter bombers. Attack helicopters employ in support of threat offensive airborne or heliborne operations in the corps rear area. When necessary, helicopters attack missiles being transported or in firing positions. They attack C2 facilities and air assets on the ground. They also conduct raids and ambushes.

The best air defense measure consists of avoiding being detected from the air. This is accomplished by innovative use of natural terrain or by using camouflage nets.

Each soldier receives training in small arms air defense techniques, to include visual identification of hostile aircraft. If soldiers fire in mass, small arms can bring slow, low flying aircraft down.

COSCOM Staff Support

The COSCOM OPLAN establishes air defense policies. It includes corps directives on firing at aircraft. COSCOM ACofS, G3 staff officers plan for engineer hardening of critical positions. They coordinate with the corps air defense elements in determining air defense

priorities for critical support elements. Depending on the intensity of the air threat, priority of corps critical assets, and availability of air defense assets, the corps G3 task organizes ADA assets under the corps rear CP. The rear CP's operations cell coordinates ADA coverage with the supporting ADA unit to provide as much coverage of the prioritized list of critical assets as possible.

Early Warnings

The corps rear CP's operations cell disseminates air defense early warnings through the rear command net. Most COSCOM units receive air defense warnings through the tactical chain of command.

NBC DEFENSE

Commanders continually examine and adjust the degree of risk that they can accept with respect to their support mission. Chapters 4 through 8 of this manual describe the possible impact of NBC attacks on logistics missions. Each unit FSOP includes information on planning and conducting NBC defense. All unit personnel receive training in —

- Contamination avoidance measures, to include NBC reconnaissance, detection and warning of NBC hazards, and measures to limit the spread of contamination.
- Protective measures, to include wearing MOPP gear, recognizing NBC alarms, and administering self aid and buddy aid.
- Decontamination operations, such as emergency or partial decontamination of personnel and equipment. (Chemical decontamination units perform deliberate decontamination of equipment.)

BATTLEFIELD DECEPTION

Logistics units use battlefield deception measures to conceal or falsify unit disposition and support capabilities.

STAFF RESPONSIBILITIES

The corps G3's battlefield deception cell plans the deception story and prepares the deception annex to the corps OPORD. Based on the corps deception plan, the corps rear CP tasks the COSCOM to execute deception events and employ deception devices and decoys. COSCOM ACofS, G2 intelligence staff officers prepare the deception annex to COSCOM OPLANs and OPORDs. FMs 34-60 and 90-2 detail staff responsibilities in support of battlefield deception plans.

ELECTRONIC DECEPTION

Electronic deception techniques help deceive EW reconnaissance elements and force the enemy to use up some of their intelligence, jamming, and deception assets. Techniques which COSCOM units may use to mislead enemy forces relative to the size, activity, and location of supporting as well as supported units include —

- Transmitting preplanned messages containing false information on support capabilities.
- Using dummy codes in valid LOGSTAT messages.

- Routing messages to other stations in the COSCOM command/administrative logistics net to create the impression that all units in the net appear equally committed.
- Maintaining periods of radio silence to create the impression of forthcoming unit movements.
- Creating the impression of unusual logistics support activity.
- Transmitting unit signatures from false locations, while suppressing signatures from actual locations.

LOGISTICS DECEPTION

Deception techniques help conceal logistics facilities or hide vehicular movements associated with receipt, storage, and issue operations. In support of the corps deception plan, COSCOM ACofS, G3 staff officers could task subordinate units to use one or more of the following deception techniques:

• Use houses and factory buildings to conceal

- supply, field services, maintenance, and transportation support operations.
- Disguise containers and packages to resemble those used by civilian suppliers.
- Set up supply points in unorthodox positions.
- Use empty fuel drums and ammunition boxes to help represent supply point activity where none exists.
- Use training exercise recordings of logistics unit activity to simulate the presence or movement of logistics support activities.
- Establish deception supply routes.
- Use civilian trucks, buses, and cars to transport supplies.
- Simulate the evacuation, abandonment, or destruction of supplies and equipment.
- Use unserviceable items, salvage, or combat loss items as decoys.

REAR SECURITY

The rear CP's operations cell and subordinate RAOCs plan and conduct rear security operations. RAOCs designate base/base cluster commanders and form bases and base clusters to increase security. The rear CP's CSS cell identifies key logistics units or supporting activities which require priority protection. For example –

- Critical Class V and III resupply convoys require special protection by MP or maneuver forces.
- Air defense assets need to accompany critical convoys or be prepositioned along the supply route.
- Aerial resupply missions require army aviation support.

BASE/BASE CLUSTERS

RAOCs group units into either bases or base clusters to increase mutual security, take advantage of limited communications assets, and conduct a sustained defense against attacks. This decreases the rear operations commander's span of control.

RAOCs ensure that bases and base clusters develop viable self-defense plans. Their primary concerns are the positioning of units within their area of responsibility and the control of Level I responses to enemy activity.

RAOCs also provide continual threat information to units within their AO.

The COSCOM headquarters, CMMC, CMCC, and the corps rear CP are normally grouped into a base. In addition, if the tactical combat force is a dedicated force, its CP collocates with the corps rear CP to facilitate coordination. An MP combat support company prioritizes and integrates the corps rear CP, TCF CP COSCOM HHC, and centers into its area security plans. It occupies key terrain around the COSCOM and corps rear CP site and conducts screening type operations to prevent infiltration into the area.

AR 600-20 prohibits a medical unit commander from commanding a base or base cluster containing nonmedical units. MP commanders are avoided due to their response force mission. FM100-15-1 directs that RAOCs avoid designating group and higher head-quarters as base or base cluster commanders. However, the RAOC may designate COSCOM battalion commanders as the base/base cluster commander.

Base commanders are responsible for -

 Ensuring all personnel receive training in the basic defense techniques needed to establish a viable defense.

- Preparing a base defense plan.
- Rehearing all personnel and units within the base on the effective execution of the base defense plan.
- Organizing a reaction force.
- Recommending movement or repositioning of the base to enhance security.
- Coordinating mutual support from bases in or near their vicinity.
- Coordinating response force operations.
- Adjusting base defenses as the threat changes.
- Determining the defense status of the base.

COSCOM ACofS, G3 and CSG S3 staff officers ensure that battalion personnel are well trained in base or base cluster defense operations.

Base Defense Operations Center

The base commander establishes a BDOC to plan, coordinate, and supervise base defense operations. He draws personnel and equipment from tenant units to form a functional BDOC. BDOC tasks include –

- Ensuring the base perimeter is defined and that responsibilities for sectors are established.
- Ensuring wire communications are established.
- Increasing/decreasing the defensive posture based on threat operations.
- Developing and monitoring the base defense plan.
- Monitoring and reporting base defense status.

Base Cluster Operations Center

The base cluster commander establishes a BCOC. The BCOC interfaces with the sector RAOC. BCOC tasks include –

- Developing the base cluster defense plan.
- Coordinating with the RAOC for fire support, reaction forces, and response force assistance.
- Maintaining continuous communications with the area RAOC and assigned bases.
- Receiving and passing base defense status reports.
- Receiving and passing information on the threat.

Each base or base cluster maintains organic radio equipment dedicated to the rear operations net. The BCOC uses that net to maintain communications with

subordinate bases, adjacent clusters, and the supporting RAOC.

Base/Base Cluster Defense Plan

Each base/base cluster commander develops and implements a comprehensive defense plan to defend their sites and protect their support capabihy. The defense plan includes measures to detect, minimuze, or defeat Level I and limited Level II threat attacks. To maximize mutual support and prevent fratricide, the sector RAOC coordinates the defense plans with adjacent bases/base clusters and joint, combined, and HN forces. The rear CP's operations cell integrates these defense plans into an overall corps rear fire support plan.

RESPONSE FORCES

The corps rear CP's operations cell designates corps response forces to respond to base/base clusters under attack by Level II threat forces. The corps relies on the MP brigade for response forces. It augments the brigade with combat and CS assets as available. Fire support assets in support of MP response forces consist of artillery or Army aviation. They are placed OPCON to the MP brigade when dedicated.

The corps designates other backup or alternative response forces when MP elements are unavailable for commitment in sufficient strength for response force operations. Response force options include engineer units, chemical units, transiting combat units, and elements of the reserve or HN assets if available. The corps rear CP coordinates with the corps G3 prior to committing other than MPs to response force missions. These optional forces are placed OPCON to the MP brigade to ensure unity of effort.

Response forces position themselves to best interdict enemy forces en route to key corps facilities or to best respond to an attack on priority facilities. The operations cell coordinates with the corps FSCOORD for fire support of response forces. If unable to defeat an enemy force, response forces maintain contact with the enemy force to delay or disrupt the enemy until the corps commits a TCF.

TACTICAL COMBAT FORCE OPERATIONS

The primary mission of a TCF is to defeat threat forces in the corps rear area that exceed the capability of the MP brigade. The G3 designates a TCF capable of defeating Level III forces in the corps rear area and within divisional rear areas. The size and composition of the TCF varies based on the corps rear area IPB and

METT-T analyses. The TCF supports an on-order or dedicated rear operations mission.

The corps commander does not normally commit the TCF until the rear operations commander determines that base cluster defense forces and or response forces cannot counter the threat. Once committed, all units within the TCF's designated area of operations become OPCON to the TCF for rear security operations until forces defeat the threat.

FIRE SUPPORT

Response forces and the TCF require timely fire support to ensure the defeat of the rear threat. The corps rear CP plans rear area fire support. The fire support element at the corps rear CP continually monitors available fire support assets. Units passing through or being reconstituted in the corps rear area which posses artillery or mortar could provide limited fire support to assist critical bases/base clusters counter threat incursions. The fire support must fit the approved tire plan and restrictive fire coordination measures.

Armed or attack helicopters provide fire support for based/base clusters, response forces, and TCF. The corps rear CP establishes request and fire direction channels for Army aviation assets.

AIR DEFENSE

Depending on the intensity of the air threat and availability of air defense assets, the corps rear CP's operations cell coordinates air defense coverage along MSRs to protect critical nontactical convoys from air attack. Adjacent or transiting units may provide fire support to combat Level II and III threats.

APPENDIX A

Deployment Planning Checklist

This checklist was developed to help assist COSCOM support operations section staff and ACofS, G3 operations planners prepare to meet logistics requirements. The checklist can also be used by support operations staff at subordinate command levels.

GENERAL

	Is a listing of doctrinal nation and proceedings publications appropriate to the lovel at which
ш	Is a listing of doctrinal, policy, and procedural publications, appropriate to the level at which the plan is prepared, provided to assist the implementer?
	Are there any contingency plans that apply?
	Are the necessary maps for implementing the plan listed and available?
	Is there a concise statement of the purpose for the logistics support plan?
$\overline{\Box}$	Does the general paragraph provide a summary of the requirements, taskings, and concept
	of operations that the logistics plan supports?
	Are the objectives specified?
	Does the assumptions paragraph list the assumptions upon which the concept of operations
	and logistics support are based?
	Are responsibilities for support clearly stated for the following
	☐ Office of the Joint Chiefs of Staff?
	☐ US Forces Command?
	☐ US Atlantic Command?
	☐ US Central Command?
	☐ US Southern Command?
	☐ Joint Deployment Agency?
	☐ Special Operations Forces?
	☐ Headquarters, Department of the Army?
	☐ US Army Materiel Command?
	☐ Unified commands and their Army component commands?
	☐ National Guard Bureau?
	☐ Office of the Chief of the Army Reserve?
	☐ Defense Security Assistance Agency?
	☐ Defense Mapping Agency?
	☐ Department of State/American Embassies?
	☐ Military Groups?
	☐ Offices of Defense Coordination?
	☐ Military Liaison Offices?
	☐ Defense Logistics Agency?
	☐ General Services Administration/Federal Supply Service?
	☐ US Army Troop Support Agency?
	☐ Army and Air Force Exchange Service?
	☐ US Army Medical Department Center and School?
	☐ US Army Medical Materiel Management Agency?
	☐ US Army Soldier Support Center?
	☐ US Transportation Command?
	☐ Military Traffic Management Command?
	☐ Military Airlift Command?
	☐ Military Sealift Command?

	 □ US Army Forces Command? □ Other major commands? □ Unit commander providing command and control (task force, brigade, division)? □ Unit or element providing logistics support (CSB, CSG, DISCOM)? □ Unit or element providing finance support (Theater Finance Command, Finance Group, or Finance Support Command)? 		
	CONCEPT OF LOGISTICS SUPPORT		
	Does the plan describe how supply, maintenance, transportation, and field services support		
	are to be provided? Does it specify which logistics elements provide the support? Are the logistics elements adequate? Is there any excess capability? Does the deploying force require augmentation?		
П	Has the logistics planner developed the support to complement the tactical planning?		
	Have initial preplanned supply support and AMC emergency support packages been considered?		
	Have the terrain and enemy intelligence been analyzed to determine the impact on logistics support?		
Ш	What are the facilities requirements to support the logistics system? Have these requirements been incorporated in engineer plans? Can any of the facility requirements be satisfied by host country facilities?		
	Is site preparation required?		
	Has the deployment flow been properly analyzed to determine time-phasing for introduction of logistics elements?		
	Has HNS availability and risk been considered?		
	Have arrangements been made with customs?		
	SUSTAINING THE SOLDIER GENERAL		
	Is supply system and procedural guidance provided?		
	Is the flow of requisitions described?		
	Is a project code required (JCS, DOD, DA)?		
	Are in-country DODAAC required (supply support activity or unit level)?		
	Are changes to the DODAAC required, such as "ship-to" address?		
	Are direct support system/air lines of communication procedures described? Are some supply support activities to be designated as ALOC or DSS?		
	Are provisions made for contracting local purchase, and contractor operated parts store support?		
	Are the stockage objectives specified for each class of supply?		
	Are automated or nonautomated procedures used?		
	Is the communications transceiving capability provided compatible with the automated systems being deployed?		
	Have interservice support requirements been identified?		

	What support is to be provided by the host nation, allies, or other Services?
	What intratheater support is required?
	Are procedures described for cancellation or diversion of materiel inprocess or intransit at the termination of the operation?
	Does the plan address control of aviation intensively managed items?
	Are provisions made for emergency resupply?
	Have initial preplanned supply support and AMC emergency support packages been considered?
	Are provisions made for logistics support of civilians and prisoners of war? Has handling of POWs and detainees been considered in terms of medical treatment, sundry packs, security, holding areas, and evacuation?
	Is there covered storage in the area of operations to protect supplies from the elements? If not, are shipments packed for outdoor storage?
	Are materials-handling equipment requirements provided?
	Is sufficient rigging material available for airdrop?
	Has the Army air clearance authority been advised of cargo tonnage projected for movement through the designated port?
	Is the Defense Automatic Addressing System aware of the communications routing identifier and DODAAC to be used for processing direct requisitions and direct supply status?
	Have distribution procedures for maps been addressed?
	CLASS I
	Are the ration cycles described by phase?
	Are fresh eggs, fruits, vegetables, meats, juices, ultra-high temperature milk, and canned soft drink supplements to MRE, T, and B Ration meals considered?
	Do local fresh fruits and vegetables meet US standards?
	Have unitized operational rations been considered for ease of handling and accountability?
	Are cash meal payment procedures established?
	What is the method of distribution (unit distribution or supply point distribution)?
	Are bakery supplements to MRE, T, and B Ration meals considered?
	Are field bakery services required? Can the host nation satisfy the requirement?
	Are veterinary personnel adequate for the subsistence support requirements?
	Are hospital rations addressed?
	Are chill and freeze reefer requirements for unit dining facilities and Class I supply points addressed?
	Is a ration cycle proposed?
	Are EPW capture rates included in subsistence plans?
	Is EPW field feeding available?
CLASS VI	
	Are deploying personnel provided guidance on personal demand items?
	Are ration sundry packs available?
	Is a <u>tactical</u> field exchange considered? If field exchange support is required:
	☐ Has Headquarters, AAFES (Plans), been notified?

Have staffing stock assortment, security, facility, transportation, and communications requirements been identified and coordinated?
Has a check cashing policy been determined?
WATER
Are water support requirements satisfied? Are the sources of water fresh, brackish, or salty? Is the source of water local systems surface or wells? What type of water purification equipment is required? Are chillers required? What is the water planning factor in gallons per person per day? What are the treatment, storage, distribution, and cooling requirements? Are they satisfied by deploying unit capability? What are the well drilling requirements? Are there any existing wells? What is the quality of water from existing wells? Are potable ice considerations covered? What is the requirement planning factor?
Are containers available in the event water is to be airdropped. Have medical planners provided for certification of ice as potable? Is ice provided by the engineers or by the host nation?
CLASS II
 Are requirements for individual clothing, CTA 50-900 items, and mission-essential consumables addressed? Have provisions been made for replacement of damaged personal and chemical protective clothing? Are there any items that require special consideration, such as: Tentage or tentage repair kits? Folding cots? Insect bars with mosquito netting? Banding materiel and tools? Water purification chemicals and test kits? Insect repellent and sun screen? Field laundry or hospital laundry supplies? Bath supplies? Field feeding facility supplies (paper or plastic products)? Trash disposal supplies? Vector control equipment and supplies? Latrine chemicals or supplies? Batteries? Cold weather clothing and equipment? EPW enclosures (tentage, barriers, and building materials for towers)
CLASS VIII
Are procedures unique to medical supply described?

Are resupply procedures established? Are mandatory parts list or PLL requirements specified? Are ASL objectives addressed? Are reparable items and medical stand-by equipment program procedures addressed? Are special medical equipment and supply requirements identified based on medical mission and the area of operations? Are special storage requirements satisfied? Is the disposal of salvage medical supplies addressed? Are medical oxygen requirements identified and resupply procedures established? Is local purchase an option?
FIELD SERVICES
Are laundry, bath, and clothing renovation requirements addressed? Is mortuary affairs capability provided commensurate with the expected requirement? Are procedures for trash collection and disposal covered? Is delousing support required? Are post exchange services provided? Is fire protection provided at aviation, ammunition, and petroleum sites? Is mortuary support covered? Are food services support procedures covered? Are there provisions for local procurement or contracting of field services? Is trash and waste disposal covered?
ARMING THE FORCE CLASS IV
Are unique requirements for construction or security materials addressed? Is in-country procurement considered? Have Army Class IV data sources been queried on preexisting data bases or studies describing locally available construction materials? Are basic loads to be deployed? Are prescribed loads to be deployed? Do nonengineer units have basic loads? Will these to be deployed? Are prepositioned material stocks permitted?
CLASS V
Is unit basic load deployment adequately addressed? Is the logistics support structure prescribed? Have EOD support procedures been addressed? What are the RSR and CSR? Are there special or unique requirements for flares, mines, or demolition items? Has a request for site construction and improvement of ammunition storage facilities been addressed in engineer planning?

	Have storage, handling, shipping, security, and safety requirements been reviewed and addressed? Are requirements identified by category of munitions (conventional, missile, chemical, or nuclear)? Are supporting rates of munitions addressed? Are special permits needed or provided for? Have unit configured loads been considered? Are training ammunition requirements for reconstitution been addressed?		
_			
П	FUELING THE FORCE Is the single fuel concept to be used?		
	Are contractors to provide bulk fuels?		
	Are accountable officer requirements addressed?		
	Are existing pipeline distribution systems available? What are the pipeline and storage capabilities? Are port facilities available?		
	0 1		
_	Are petroleum quality surveillance procedures specified?		
	1		
	Is there a petroleum laboratory available? Are Army oil analysis program laboratories addressed?		
	Are quality assurance representative responsibilities established?		
	Have jet fuel requirements for medical units been considered?		
	v .		
	Are industrial gasses addressed?		
	FIXING THE FORCE		
П	Does the plan describe how unit, DS, and GS maintenance are provided?		
	Are aviation intermediate maintenance requirements addressed?		
	Is missile maintenance support available in the area of operations?		
	Are special medical maintenance requirements addressed?		
	Does the plan cover test, measurement, and diagnostic equipment repair and calibration?		
	Are procedures for Army oil analysis program specified?		
	Does the plan address equipment classification?		
	Are reparable items covered?		
	Are replacement items addressed?		
	Is the evacuation of reparable addressed?		
	How are repairs under warranty performed in the area of operations?		
	If a single fuel is used, is warranty voided on new diesel power pieces of equipment?		

	Have extreme weather aspects (heat, cold, humidity, dust, etc.) been considered?
	Have site security and storage requirements been identified and included in engineer plans?
	Have special power requirements for maintenance facilities been identified (voltage, phase, frequency, stability, and anticipated load)? Are transformers required?
	Are building suitability screening factors identified by type of maintenance facility (minimum height and width for doors, floor load bearing requirements, environmental control necessities, etc.)?
	Is disposal of hazardous materiels such as lithium batteries and radioactive residue specified?
ш	Are procedures for salvage collection, evacuation, and disposal covered?
	REPAIR PARTS SUPPLY
	Are PLL requirements specified?
	Are ASL requirements, including reparable, specified?
	Are cannibalization procedures addressed?
	Are requirements for special nonexpendable components addressed?
	Can the GS base support the Class IX supply system?
	Is stockage of major assemblies addressed?
	Have special storage requirements been addressed for dry batteries, classified repair parts, high dollar pilferables, etc.?
	CLASS VII REPLACEMENT ITEMS
	Does the plan specify the equipment level for deploying units?
	Are equipment redistribution requirements specified?
	Are replacement actions for salvage equipment specified?
	Are special equipment requirements addressed?
	MOVING THE FORCE
	GENERAL
	Is there a requirement for the area oriented depot to arrange for special assignment airlift mission to expedite cargo distribution to the area of operations?
	Are the transportation support systems for direct support system and ALOC described?
	What are SEALOC requirements?
	What type and number of terminal transfer units are required (rail, highway, port, airfield)?
	Is coastal line of communication required (Army freight ships, landing craft, lighterage)?
	Are there coastal restrictions?
	Is a logistics over-the-shore operation required?
	Have materials-handling equipment requirements been addressed?
	Are in-country highway, rail, air, and inland waterway mode requirements addressed?
	What ports are available? What is access to or from the ports? What special port clearance
	requirements apply? Is transportation movement priority provided?
	What is the weather impact on ports, airfields, and highway nets?
	What is the availability of Defense Intelligence Agency data or analysis regarding the country
	or area transportation infrastructure?

	What are the transportation funding arrangements?
	Are transportation account code requirements specified?
	Are the sea port of debarkation and embarkation and aerial port of debarkation and embarkation specified?
	Has the use of foreign flag sea or airlift been addressed?
	Is an intratheater, intertheater, and in-count movement system for personnel and cargo specified? Are procedures for shipping supplies and equipment that arrive at home station after units have deployed addressed?
	Have medical evacuation requirements been included in the plan?
	Is refrigerated transportation required?
	What support is provided by the host nation, allies, or other Services?
	LOGISTICS OVER-THE-SHORE
	What shorelines are conducive for LOTS operations? What types of roads access the shorelines? What types of railroads access the shorelines? What civilian contract or HN personnel and equipment assets are available to assist in LOTS operations?
	INLAND WATERWAYS
	What inland waterways are available? What are the capabilities and limitations of the inland wateways? What inland terminals are along the waterways? What are the characteristics and capabilities of the inland terminals? What is the present usage of the inland waterways? What is the enemy's capability to interdict the inland wateways? What effect does the weather have on the inland waterways? How accessible are the inland waterways to roads and rail lines?
_	INTERCOSTAL SHIPPING
	What intercostal shipping assets are available to support shipping bulk fuels, ammunition, and dry cargo? What intercostal shipping routes are currently in use? What is the enemy's ability to interdict intercostal shipping? CONTAINERS
	What is the container policy?
	What civilian contract or HN personnel and equipment assets are available to assist intermodal operations?
	What is the capability of units and ports to handle container shipments?
	Can containers be used with carrier delivery direct to the supply support activity?
	FIXED PORTS
	What freed ports are available to support military marine terminal operations?

	What are the characteristics and capabilities of the freed ports?	
	What type and quantities of materials-handling equipment are available for use in support of military marine terminal operations?	
	How many berths and anchorages are available for use in support of military marine terminal operations?	
	What is the enemy's capability to interdict the ports?	
	What port security measures are currently in use?	
	What is the port's capability to handle containerized cargo and roll on/roll off cargo?	
	What routes access the ports? Are there any special port clearance requirements?	
	What inland waterways access the port?	
	What is the current throughput capability of the port?	
	What are the characteristics and capabilities of the port's warehouse facilities and storage area?	
	What effect does weather and sea have on port operations?	
	What contract civilian/HN marine terminal personnel and equipment assets are available to support military terminal operations?	
	What is the present level of usage of the ports?	
	What capability do government/local civilian contractors have to repair damage to port facilities?	
	AIRFIELDS	
	What airfields can be used? What are their capabilities?	
	Have departure and arrival airfield control groups requirements been satisfied?	
	Are prerigged projects available for on-call delivery? Are call forward procedures specified?	
	Is airdrop resupply capability provided commensurate with the expected requirement?	
	What are the personnel and cargo reception capabilities of the airfield?	
	What is the current usage of the airfield?	
	What are the characteristics and capabilities of the roads that access the airfield?	
	What contract civilian/HN personnel and equipment assets are available to assist in arrival/departure airfield control group operations?	
	What airfield facilities are available for military use during operations?	
	What impact does weather have on airfield operations?	
	What engineer assets are available to upgrade and maintain airfields?	
	Have MAC channel airlift requirements been specified?	
	Has support been planned for USAF mobile areo-medical staging facilities?	
	Has a coordinating headquarters been designated for all logistical airlift support?	
MAIN SUPPLY ROUTES AND ALTERNATE SUPPLY ROUTES		
	Is the highway net described? What are its capabilities and limitations?	
	What routes are available to support military operations?	
	What are the characteristics and capabilities of the routes available to support military operations?	
	What are the convoy restrictions?	
	What are the dimensions of tunnels along the routes?	
	What are the dimensions and classifications of bridges along the routes?	
	What capability does the government have to repair damaged segments of routes?	

	What engineer assets are available to maintain or upgrade routes?
	What segments of the routes are heavily used by the civilian populace?
	What are the most likely routes fleeing refugees might use?
	What is the best source for additional information on the routes?
	RAIL
٦	Is there a rail system available?
_	What rail lines are available to support military operations?
╗	What is the condition of the rail lines? What are their schedules and capabilities?
\exists	What is the gage of the tracks?
	What effect does the weather have on rail operations?
7	What rail assets are available to support military operations? Are loading ramps available at rail yards and terminals?
	Are loading ramps available at rail yards and terminals?
	What is the location and lifting capacity of railway cranes in the area of operations?
	What is the location and lifting capacity of railway cranes in the area of operations? What is the enemy's ability to interdict the rail lines?
]	What capabilities do the government or local civilian contractors have to repair damaged track, bridges, and tunnels?
	What are the characteristics and capabilities of the rail terminals and marshaling yard?
	What is the present level of usage of the rail lines?
	What is the description (model number, wheel arrangement, horsepower, weight, tractive effort, and type coupler) of typical line-haul locomotives and switch engines currently in service in the area of operations?
	What are the capacities, dimensions (length), and age of typical rolling stock currently in service in the area of operations?
	Is a track profile of the mainline indicating the location, percent, and length of ruling grade available?
	Is a plan showing location and length of minimum radius curves together with any sections of multiple main line track available?
	What are the location and length of passing tracks on the main line?
	What is the current level of traffic (trains per day) using the main line in the area of operations?
	What are the location, type, and capacity of rail yards in the area of operations?
	What are the number and length of track in each yard?
	What are the location; description (type, construction, length, clearances, and cooper rating); and condition of rail bridges and tunnels on the main line?
	What are the location, description, and condition of station facilities supporting the operation of the main line?
	What are the location, storage capacity, and condition of locomotive fueling facilities in the area of operations?
	What are the location and quality of water supply on the main line?
	What communications and signals are in use for train operations?
	What is the weight (pounds/yard) of main line rail?
	What is the predominant type of cross tie used in the area of operations?

	What are the location and availability of spare parts for motive power and rolling stock? What type of wheel bearing is used on rolling stock?	
	RETROGRADE	
	Are retrograde procedures spelled out for excess and unserviceable items? Are there provisions in the plan for maneuver/war damage resulting from logistics operations? Are special Department of Agriculture cleaning requirements for retrograde equipment identified?	
	COMMUNICATIONS SUPPORT Are the communications to support logistics operations provided for in the communications planning? Have communications frequencies been cleared with the host country? Have arrangements been made for telephonic assistance (functional and technical) after deployment? Are phone books for the country or local area available?	
	AUTOMATION SUPPORT	
	Are automated logistics systems procedures properly addressed? Have backup master files been established and prepared for shipment separate from the primary master files?	
	Has site selection and preparation for automated equipment considered accessibility, geographical, terrain, and security requirements?	
	Are maintainers, operators, and managers assigned and well trained? Are sufficient copies of user manuals on hand and current?	
	Are repair parts on hand and up to required levels for computer hardware including generators and other subsystems?	
	Have provisions been made for backup support for repair parts, hardware maintenance, and the receipt of software change packages and emergency change messages?	
	Has coordination been made with the next higher supply support activity for catalog update, reconciliation schedule, and loading of supported unit DODAACs?	
	Have details been worked out for transmission of documents to higher echelons?	
	Have appropriate parameter changes been made in the automated systems (for example, signal and overseas deployment codes)?	
	Do customer units require training and are customer user manuals available for automated system support?	
FINANCE		
	Are provisions made for the types of finance support required?	
	What are the funding aspects of logistics support?	
	Have all requirements been costed?	
	Has an account processing code been established?	
	Are local currencies authorized/desirable for financial transactions in support of the contingency force? Have local currency acquisition points been identified?	
	Have Class A agents been appointed to the servicing finance officer?	
	Have contracting/ordering officers and impress fund cashiers received instructions concerning interface and coordination with the servicing finance unit or element?	

Have all soldiers completed POM to include sure-pay or correct check addresses?
Have soldiers made provisions for support of family members while deployed
and for receipt of information concerning impact of deployment on their pay?
What is the source of funding for Class X supplies?
CONTRACTING/LOCAL PROCUREMENT
Are there adequate provisions in the plan for contracting support?
Are there provisions for contracting support/local purchase?
Have an adequate number of contracting officers with the proper arrant been provided?
Is finance support available to the contracting officer?
Have individuals been trained/appointed for local procurement? Is local currency available?
Have local procurement procedures been established?
Are linguists available to support contracting/local purchase requirements?
If Class X materiels are required, does the plan describe the source?

APPENDIX B **Supporting Offensive Operations**

COSCOM logistics assets are essential to maintaining the momentum of offensive operations. The corps' goal is to support maneuver and combat support units engaged in the main battle. The COSCOM provides forward support to nondivision units in the division area and reinforcing support to divisions and elements organic to the combat battalions and brigades.

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PLANNING SUPPORT

Close coordination between the COSCOM support operations officer, G2, and G3 staffs and corps 'and division G2, G3, and G4 staffs keeps support operations section staffs informed of the support required to sustain different types of offensive operations. CSS plans branch staff officers perform a risk benefit analysis to help determine how best to provide support to offensive operations. They need to consider the areas listed in Table B-1 as well as –

- Support priorities.
- Critical requirements.
- Task organization option.
- LOC considerations.
- Impact on supply requirements.
- Impact on maintenance support.
- Impact on health service support.
- Impact on field services support.

SUPPORT PRIORITIES

Logistics support priorities are given to those organizations which the corps G3 views as capable of contributing more significantly to the battle. Appropriate COSCOM support operations section branch staff officers recommend priorities for the allocation of critical supplies and COSCOM support assets. After coordinating with the corps rear CP's CSS staff, the COSCOM support operations officer redirects the priority of support to reflect changes in the corps' battle.

CRITICAL REQUIREMENTS

Applicable support operations section branch staffs anticipate critical requirements and prepare directives regarding push package support required to maintain the momentum of the offensive operation. Critical supplies, particularly fuel and ammunition, are held ready to move in support of the operation. Selected critical supplies can be prerigged for airdrop resupply based on the factors of METT-T.

Table B-I. Offensive logistics planning considerations.

- Basic loads carried by units supported.
- Continuous resupply to the ATPs.
- Prepositioning Class I and III supplies near the FLOT.
- Resupply distances.
- Existing road network and trafficability.
- Requirements for combat forces to protect supply convoys.
- Limitations of air LOCs.
- Requirement for air resupply.
- Requirements for airdrop equipment, to include the need to prerig selected critical items.
- Requirements for battlefield recovery.
- Policy for minimum essential repair.
- Revising the controlled exchange or cannibalization policy.
- Health service support assets.
- Augmentation of mortuary affairs support.
- Possibility for foraging for some supplies.

TASK ORGANIZATION OPTION

The COSCOM could task organize a CSB to support a maneuver force undertaking an offensive operation. The COSCOM support operations officer monitors changes in the composition of the supported force as a result of attachments or detachments. While support may be enhanced, the maneuver force would be slowed down by a CSB with limited cross-country mobility and survivability. The combat force might be further hindered by the requirement to protect the CSB task organization.

LOC CONSIDERATIONS

Forces either carry all resources needed throughout the operation or they are supported through either a surface or an air LOC. Corps service support plans need to take into account LOC vulnerabilities and resulting high level equipment losses.

Surface LOC

A surface LOC remains vulnerable to enemy actions. The tactical force intermittently or continuously secures surface LOCs. Scarce combat and CS forces need to protect supply convoys. To reduce this requirement and shorten the surface LOC, COSCOM supply units place stocks as far forward as possible, though not in positions that impede maneuver forces.

To assure optimum support of the offensive operation, the CMCC balances movements and transportation assets. It ensures that corps priorities implemented by the corps rear CP's CSS cell are followed and that corps truck assets move supplies, equipment, and personnel to areas of greatest need.

Air LOC

An air LOC requires air superiority or at least air parity and close interservice cooperation with the Air Force. Forces need to secure landing fields for air landings. Airdrop and ground support equipment is needed to airdrop supplies. Resupply by air consists of emergency on-call resupply of high-priority requirements. Routine aerial resupply by the Air Force is required to support contingency operations.

To meet increased transportation demands during surge operations, medium lift cargo helicopters from the aviation brigade augment surface transportation. Corps aviation deliver emergency loads of ammunition or petroleum directly to the trains of engaged battalions.

SUPPLY REQUIREMENTS Bulk Fuel Requirements

Offensive operations are movement intense operations which call for high fuel consumption. Bulk fuel requirements increase, depending on the dispersion and activity of maneuver units. As an example, an armored division consumes from 20 to 30 percent more fuel in pursuit than in a defensive operation. Depending on road networks, corps truck assets deliver bulk fuel to BSA and battalion trains areas.

Ammunition Requirements

Historically, ammunition expenditure remains lower in the offense than in other types of operations. However, emerging technology, to include weapons stabilization platforms, alter ammunition consumption planning data. Corps transportation assets transport ammunition to forward positioned ASPS and all ATPs.

Class IV Requirements

The COSCOM moves Class IV construction materials forward only in support of specific plans or requirements. Corps trucks deliver construction materials directly to the emplacement area. Logistics units in the area provide MHE and off-loading assistance, if so directed.

Captured Supplies and Equipment

Support operations section staff officers ensure that units understand the value of captured supplies and equipment as a possible source of support. Maneuver units should capture rather than destroy usable enemy assets. Medical supplies and equipment remain protected under the Geneva convention and cannot be destroyed.

MAINTENANCE SUPPORT

Maintenance support branch personnel determine the priority and level of repair. Priority of maintenance support goes to primary weapon systems first, then to lesser systems in descending order as time permits. Maintenance support branch personnel compute and order on call repair parts push packages in anticipation of their requirement. MSTs provide on-site assistance for quick return of weapon systems to battle. Truck assets backhaul disabled critical weapon systems to maintenance collection points.

HEALTH SERVICE SUPPORT

The COSCOM provides prepackaged medical material for initial resuscitation and stabilization of

large numbers of casualties. Corps medical units receive patients evacuated from the clearing station in the BSA or a medical treatment facility in the DSA.

Ground ambulances and air ambulances evacuate patients from medical elements and medical treatment companies to corps hospitals. When organic medical evacuation resources are exceeded, the COSCOM uses nonmedical transportation assets to support evacuation operations. The COSCOM medical group/brigade coordinates for augmentation

medical personnel to provide en route medical care on nonmedical vehicles.

FIELD SERVICES SUPPORT

Except for airdrop and mortuary affairs support, the COSCOM suspends field services until the tactical situation permits. Critical life sustaining supplies may be airdropped to forward or encircled forces. Corps resupply vehicles backhaul remains to corps mortuary affairs collection points for processing and further evacuation or temporary burial.

OFFENSIVE OPERATIONS

CSS plans branch personnel develop plans to support various types of offensive operations. The major types of offensive operations, described in FMs 100-5 and 100-15, include —

- Movement to contact.
- Hasty attack.
- Deliberate attack.
- Exploitation.
- Pursuit.

CSS plans branch personnel plan logistics support in ways that permit support of each type of offensive operation without an interruption of support. Close coordination with corps and division G2, G3, and G4 staff officers keep support operation section staff informed of the tactical situation.

MOVEMENT TO CONTACT

A movement to contact occurs when a defending enemy disengages or attempts to disengage and the corps commander wants to force the enemy to take part in a battle before the enemy establishes a strong defense. It might also occur when the enemy has not established or fortified its positions.

The movement to contact force consists of a covering force, an advance guard, and a main body. Depending on METT-T, a flank and rear security force might also employ. The covering force maintains sufficient combat and CSS to be self-contained. Main body forces normally take enough supplies to support them through the movement to contact and ensuing battle.

Only minimal corps resupply occurs during the move to contact. COSCOM petroleum support branch personnel plan for increased consumption of bulk fuels.

Petroleum staff officers arrange for refuel-on-the-move support. Munitions support branch personnel plan for reduced ammunition expenditure. As the force moves the COSCOM performs recovery and evacuation of equipment left in place. Concurrently, it moves and positions supplies and medical assets forward to best support the operation.

Since the main body normally moves to contact in multiple columns along available road nets, the COSCOM assigns MCTs or MRTs to aid in controlling movement. These teams synchronize the forward movement of supporting units to avoid interfering with tactical movements.

ATTACK Hasty Attack

The movement to contact ceases and the attack begins when the corps commits units from the main body. The corps launches a hasty attack to prevent the enemy from establishing an effective defense. Since time prevents obtaining external logistics support, units executing a hasty attack carry limited logistics with them. The COSCOM prepares to provide fuel and ammunition resupply, attaches MSTs, and assists in medical treatment and evacuation support.

Deliberate Attack

If the corps force encounters an enemy force that it cannot outflank or an enemy force in well prepared positions that it cannot overcome by a hasty attack, it needs to prepare for and synchronize a deliberate attack. The COSCOM places support emphasis on resupply of critical stocks – normally fuel, ammunition, and repair parts. In addition, the COSCOM provides MSTs and medical treatment and evacuation support early in the deliberate attack phase.

In support of a deliberate attack the -

- COSCOM support operations officer prioritizes support to the main effort through the CMMC and CMCC.
- COSCOM petroleum and munitions support branch personnel coordinate with the forward CSG's support operations officer and the CMCC to push resupply of fuel and critical ammunition items.
- Forward CSGs position supporting units as far forward as the tactical situation allows. Staff emphasis focuses on keeping MSB and FSB Class III points and FSB ATPs full. To retain the mobility to follow the attacking force, stocks are uploaded or kept as mobile as circumstances permit. Resupply in forward areas of the combat zone normally occurs at night.
- CMCC diverts transportation assets to deliver critical fuel and ammunition supplies.
- CMCC coordinates with the corps G3 and G4 on maintaining an MSR for each committed division. It also coordinates the use of alternate supply routes.
- COSCOM maintenance support branch personnel coordinate with the CMMC and forward CSG's support operations officer to ensure rapid on-site repair of critical weapon systems. Forward CSGs attach MSTs to the deliberate attack force.
- Medical brigade/group staff officers coordinate with the CMCC for additional transportation assets to speed medical evacuation to corps hospitals.
- COSCOM CSS plans branch personnel prepare plans for support of follow-on operation.

The corps initiates an exploitation when attacking forces make decisive gains and enemy resistance lessens. Exploitation prevents the enemy from developing a counterattack or conducting an orderly withdrawal. The exploiting force might be inhibited more by vehicle breakdown and lack of fuel than by combat losses or ammunition expenditure. In order not to impede maneuverability, adequate maintenance support needs to accompany the exploiting force.

Support of the exploitation is tied to movement assets. The ability of the logistics structure to move fuel and ammunition forward determines the limits of advance. If tactical forces cannot keep ground LOCs open and secure, COSCOM transportation support branch personnel plan for aerial resupply.

To support the exploitation forces, COSCOM support operations section staff officers –

- Coordinate the forward echelonment of logistics supporting elements with corps and division G4 and G3 staffs. Forward CSGs move the nondivision ATP and Class III supply point assets forward to shorten ground LOCs in support of exploiting forces.
- Coordinate with corps G3 staff on obtaining support from maneuver support forces to keep ground LOCs open.
- Task MSTs to accompany the exploiting force to perform repairs on site on vehicles needed to enable the exploitation force to maintain their momentum.
- Shift support priorities as necessary.
- Plan aerial resupply of critical supplies to the exploitation force securing objectives deep in the enemy's rear area.
- Coordinate with corps G3 staff on possible seizure of enemy fuel and ammunition.

PURSUIT

Pursuit follows a successful exploitation as pursuit forces intercept and destroy the main enemy force. The corps objective may be either to cut off and annihilate a retreating enemy or to destroy the enemy's will to fight.

Pursuit is transportation dependent. Open and secure LOCs suitable for transporting fuel and ammunition remain essential to a pursuit operation. Aerial resupply augments surface LOCs and alleviates problems created by road congestion and disruption.

To support pursuing forces, COSCOM support operations section staff officers need to –

- Arrange for air resupply of fuel and ammunition.
- Coordinate requirements with corps G3 and corps MP brigade staff to keep ground LOCs open.

- Coordinate with CMCC and medical brigade staff on evacuation of casualties.
- Coordinate with CMCC and forward CSG support operations staff officers on the evacuation
- and disposition of disabled equipment.
- Direct that staff officers focus on requirements for future operations.

HEAVY/LIGHT MIX CONSIDERATIONS

Differences in force structure, types and quantities of equipment, and tactical doctrine between heavy and light forces result in differences in support required from the corps. COSCOM support operations section staff officers need to understand these differences in order to plan reinforcing supply, maintenance, and transportation support from the corps. Appendix A of FM 71-100 provides additional information on augmentation to heavy/light forces.

BULK FUEL

The COSCOM pushes bulk fuel to division Class III points based on fuel forecasts and status reports. Jet fuel is pushed from corps rear areas to the division aviation brigade. Light forces lack bulk fuel storage and distribution assets required by offensive operations. The corps throughputs bulk fuel to the BSA whenever possible.

AMMUNITION

A major difference between heavy divisions and light divisions occurs in the weapon systems organic to each division and the resultant difference in ammunition consumption factors. FM 101-10-1/2 details the consumption factors for each type of force.

LIDs rely on ammunition loads configured by non-division DS ammunition companies. For example, when a light brigade is cross-attached to a heavy division, the heavy division ammunition officer arranges with COSCOM munitions support branch staff for a different mix of Class V to be throughput to the ATP in the light brigade BSA. The mix of new and old weapon systems technology and associated mix of Class V munitions required by heavy and light forces places an additional burden on the corps Class V distribution system. Under MOADS, the goal is 100 percent throughput of ammunition from the corps to the ATP in the BSA for all divisions.

DS MAINTENANCE

COSCOM DS maintenance units perform minimal DS maintenance during the offense. Unit maintenance support in the LID is consolidated at brigade level. Corps forces in support of LIDs rely on replacement over repair, with increased maintenance passback to

nondivision DS maintenance units. The COSCOM attaches an MST and missile maintenance team to the LID to offset maintenance passback to corps maintenance units.

The COSCOM maintenance support branch coordinates with the CMMC in tailoring maintenance support to the equipment unique to the heavy and light forces. The heavy DISCOM does not maintain the required repair parts to support equipment such as 105-mm towed howitzers and 60-mm and 81-mm mortars unique to light forces. Light DISCOMs do not have the repair parts or maintenance capability to support heavy systems. Planners ensure that unit maintenance assets accompany light infantry forces of less than brigade size when they are cross-attached to a heavy force. ASLs need to be revised to cover the combat PLLs of heavy and light forces. Nondivision DS maintenance units need to alter the repair parts stocks they maintain for exchange and repair.

TRANSPORTATION

Mobility remains critical to offensive operations. Light divisions and light brigades possess a transportation shortfall. If light forces of a heavy/light mix force are to keep pace with heavy elements, corps transportation assets need to move light units and their supplies. To remain mobile, offensive forces cannot move large amounts of reserve stocks forward.

DISCOM support operations branch personnel coordinate configured unit load requirements with their counterpart staffs in the COSCOM. To relieve congested ground LOCs, the COSCOM plans on increased air delivery, with the associated requirement to provide increased rigging and airdrop repair. Light brigades remain particularly dependent on corps aviation assets and aerial delivery.

CORPS SLICE

COSCOM support operations section staff officers coordinate with corps G4 staffs in the corps main and rear CP's CSS cell in determining the composition of the corps slice needed to support heavy/light forces. The tailored slice of support for heavy divisions might

include a petroleum supply platoon, an ordnance section, a maintenance company, and medium truck companies.

In addition to the augmentation specifically designed for light divisions (LID MST, missile maintenance support team, AVIM support team, supply support team, and CEB and mortuary affairs sections), the slice of support for light forces might include -

- An ordnance section.
- •ADS maintenance company.
- Medium truck companies.
- An airdrop supply element.

CORPS FA BRIGADE SUPPORT CONSIDERATIONS

In support of corps G3 plans, the COSCOM might direct that a forward CSG focus support to a corps FA brigade.

CSB AREA SUPPORT

Corps FA organizations receive area support from a CSB employed in the division area or behind the division. However, the forward CSG LO/COSCOM LO at the DISCOM may coordinate for corps FA brigade elements to receive rations, water, and bulk fuel from FSB or MSB elements.

OUT-OF-SECTOR SUPPORT

If the FA brigade moves to another sector, or even out of the corps, the CSB providing area support in the new sector provides support. However, if corps FA elements move to an allied corps, the COSCOM support operations officer arranges for CSB task force elements to accompany them. Elements that could move with corps FA brigade elements might include –

- DS maintenance company platoons and MSTs with artillery oriented ASL.
- ASP and/or nondivision ATP to receive and issue CCLS of artillery rounds and rockets.
- DS supply company elements.
- Truck platoons.

APPENDIX C

Supporting Defensive Operations

At any given time, divisions, separate brigades, and ACRs defend, delay, move out of contact, or execute a withdrawal. The immediate objective of corps defensive operations are to cause an enemy attack to fail. Other objectives might be to gain time, to concentrate elsewhere, to wear down the enemy prior to going on the offense, or to retain key objectives. Logisticians help combat commanders achieve these objectives.

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PLANNING SUPPORT

To plan support for defensive operations, CSS plans branch personnel assigned to the support operations section need to understand the tactical concepts of defensive operations described in FMs 100-5 and 100-15. To arrange for the type, quantity, and priority of logistics support, logistics officers need to understand the mission capability of supported units. They can then enforce the corps commander's priorities, ensuring that COSCOM units provide supplies and equipment where and when needed and in the quantity needed. Table C-1 lists defensive operations planning considerations. The expected duration of the operation, follow-on missions, and possible linkup all affect the support organization and execution.

AMMUNITION REQUIREMENTS

COSCOM munitions support branch personnel plan for an increase in ammunition stocks. Expenditures of ammunition, particularly artillery rounds, mines and explosives, usually remain heavier in defensive operations. The ACofS, G3 and COSCOM support operations officer recommend changes to the CSR. Supported units could stock Class V supplies in excess of their basic loads. However, with limited unit transportation assets, other classes of supply might be grounded if they carry Class V in excess of their basic load. Increased ammunition usage places additional demands on the transportation system.

BARRIER AND FORTIFICATION MATERIALS

During a defensive operation, all units require barrier materials to prepare obstacles to delay or disrupt enemy advances. They require construction materials so that their soldiers can prepare or harden individual and crew fighting positions against enemy fires.

Engineers require Class IV barrier and fortification materials for their countermobility and survivability missions. They require barrier materials to create obstacles at the post probable avenues of approach and

Table C-I. Defensive operation planning considerations.

- What are the support priorities?
- Is push package content to be altered?
- Where and how is stockpiling to be performed? How are stockpiles to be protected?
- Can we afford the time to double handle the stockpiles if they have to be moved? What is the
 impact on the availability of critical stocks if they cannot be moved and have to be destroyed?
- What is the vulnerability of logistics units to rear area attacks?
- How mobile are supporting elements?
- Is deception scheduled to divert enemy intelligence gathering assets?
- Is there a need to revise the ammunition CSR or required supply rate?
- What are the basic loads of supported units?
- What barrier material is required to enable defense forces to dig in and fortify a given piece of terrain?
- Are there logistics restrictions on engineer equipment?
- What barrier/fortification items have been designated as command-regulated items, requiring corps approval prior to issue?
- Have all MSRs been designated as controlled routes?
- Have alternate routes been selected?
- Have specific routes been reserved for use by designated withdrawing elements?
- Has emergency destruction of supplies or equipment been authorized to prevent capture?

at choke points along the flanks of advancing forces.

FUEL EXPENDITURES

Expenditures of fuel are lighter. However, if the defense depends on movement, expenditures of fuel could approach those of an offensive operation. COSCOM petroleum support branch personnel need to consider the security of fuel sites as subordinate petroleum and DS supply units stockpile fuel during the defense.

MAINTENANCE SUPPORT

To avoid interfering with tactical operations and yet obtain a higher degree of protection, maintenance units usually position further to the rear than in offensive operations. They remain in position for longer periods during defensive operations. This allows maintenance units more time to complete extensive maintenance. They also increase repair parts stockages and build up reserves of critical maintenance stocks.

SUPPORTING DEFENSIVE FORCES

COVERING FORCE

The covering force operates in the area that begins at the line of contact and extends rearward to the forward edge of the main battle area. Covering forces provide early warning of attack. They delay, disorganize, and deceive the enemy regarding the location of the main battle force and furnish information about the enemy's disposition. Covering forces gain time for main battle forces to prepare its defense.

Forward CSGs position only those fuel, ammunition, and maintenance elements critical to supporting the covering force in the covering force area. They withdraw these elements when the risk of their loss becomes unacceptably high or when their presence in the covering force area hampers combat element passage. If possible, withdrawing logistics elements displace in echelon so that limited support can still be provided forward. Withdrawing elements preposition supplies at successive delay positions.

CSGs attach an MST to the defense force for rapid repairs on site. These teams assist with rapid recovery or destruction of damaged equipment to prevent enemy capture. The CMCC tasks corps HET assets to evacuate all reparable systems to evade enemy capture. Damaged equipment that units cannot recover to the main battle area needs to be destroyed in place.

MAIN BATTLE FORCE

The main battle force may defend delay, or attack. The COSCOM provides priority of support to the main effort. The COSCOM support operations officer shifts priority of support.

Logistics units echelon in depth throughout the main battle area. They reposition as necessary to support the counterattack. Supporting elements refuel and ensure full basic loads prior to the counterattack.

To ensure that interruptions in communications do not disrupt supply support, the COSCOM pushes packages of critical items forward on a scheduled basis. Push packages contain critical ammunition items, NBC defense items, bulk fuels, and selected repair parts. Habitual support relationships need to be stressed with resupply at night being the norm. Transportation assets stockpile critical supplies for support of the defense effort at probable avenues of approach.

To reduce the requirement to evacuate damaged equipment, maintenance elements repair critical weapon systems as farforward as possible. DS maintenance units concentrate on repairing the maximum number of damaged, reparable systems and returning them to the battle in the least possible time.

To ensure bed availability for new casualties, the medical brigade and CMCC arrange rapid evacuation of wounded personnel from forward hospitals. Corps aviation assets support aeromedical evacuation to corps hospitals.

HEAVY/LIGHT FORCES

Heavy/light mix of forces impact on the supporting ASL stockage. The COSCOM support operations officer informs the corps G3 of the logistics impact that results from the proposed mix of force types. To offset problems resulting from probable interoperability of equipment, the CMMC recommends reallocation of repair parts stocked at DS maintenance companies or direct shipment from the GS repair parts company. FM 71-100 provides additional information on augmentation to heavy/light forces.

RESERVE FORCE

The corps commits its reserve force to decide a battle in progress or to affect future battles. The COSCOM provides support based on the corps commander's guidance. It replenishes basic loads. Support operations section staff plan changes in support requirements as units shift to the offense. They recommend ways to reposition supporting units to better support the next battle.

APPENDIX D

Supporting Contingency Operations

The COSCOM might support a contingency force in an undeveloped area where a US military infrastructure does not exist. FM 100-5 delineates eight distinct contingency operations. However, the contingency environment considered most likely is one in which an undeveloped friendly HN requests military assistance. The corps tailors a contingency force to conduct operations short of war. It can also execute short duration combat operations to defeat threat forces or expel them from occupied territory.

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SUPPORTED FORCE

The supported force structure depends upon the potential threats and environment. The COSCOM tailors its support organization to the size and composition of the contingency force and whether it is a forced or nonforcible entry.

A contingency force that deploys with an entire COS-COM cannot be smaller than one division. Initially, only one division might deploy. However, the supported force may rapidly expand to several divisions in size.

If the initial division is a light infantry division, the COSCOM identifies corps augmentation required by that LID. The DISCOM needs to understand if the corps can provide additional manpower. If augmentation teams or assets cannot be provided in time, the COSCOM support operations officer determines how the required function is to be provided.

COMMAND RELATIONSHIPS

When supporting a contingency force, deployed elements of the COSCOM operate under the command of the major Army component of the task force. The major Army component commander provides mission orders, policies, priorities, allocations, directives, and guidance to the COSCOM.

The COSCOM headquarters exercises C2 of all Army nondivision logistics units and activities assigned to the task force. The corps might also assign the COSCOM to exercise OPCON of selected CS units in the contingency force rear area. These could include air defense, chemical, CMO, MI, ME and signal units. The corps authorizes additional personnel and equipment to enable the COSCOM headquarters to control these CS units in the contingency rear area.

The major Army component commander normally authorizes the COSCOM headquarters to deal directly with CONUS commands, centers, and agencies without going through intervening headquarters. These include, but are not limited to, the NICPs, LCA, Finance Group, and Military Traffic Management Command. The COSCOM places requirements for backup support and services on these agencies and coordinates the delivery of their support.

OUT-OF-SECTOR SUPPORT

The COSCOM provides or arranges out-of-sector support for detached units deployed out of the geographical area. Whenever possible, units detached from a US corps need to be accompanied by a slice of corps logistics structure.

The COSCOM also provides or arranges out-ofsector support when US units employ under the OPCON and control of another nation or an alliance. The gaining allied nation might provide some commonuse ammunition, fuel, and field services.

PLANNING AND EMPLOYMENT CONSIDERATIONS

PLANNING PHASE

CSS plans branch personnel assigned to the support operations section prepare contingency plans for support of the contingency force. The commander's guidance states the COSCOM's involvement in support of a combined or joint task force. Table D-1 lists contingency planning considerations. FM 8-42 provides a detailed discussion of HSS planning factors for support of peacetime contingency operations.

Logistics staff officers use the contingency checklist at Appendix A during the planning phase. Planners need to consider the —

- Task force structure.
- Given situation.
- Climate, terrain, and weather.

 Man-made facilities, to include roads, building and fortifications.

The corps commander may task the COSCOM to prepare logistics plans, directives, and guidance for the contingency force as a whole, and not just for the Army elements. Upon approval, they are issued in the name of the contingency force commander.

If the COSCOM supports other Services or allies, the guidance needs to state the items and quantity of support required. For example, guidance needs to explain how the army component provides logistics to Air Force elements and what that support entails.

COSCOM ACofS, G5 section staff prepares and distributes industrial resource folders for the operational area. These resource folders include information on—

Industrial capabilities and sources.

Table D-1. Contingency planning considerations.

- Contingency force equipment density data, including substitute items for MTOE items.
- · Simplification of supply requests procedures.
- Compatibility of Class III and V supplies.
- · Priorities for deployment.
- Tonnage of cargo to be airlifted or moved through ports.
- Storage requirements (space and types of facilities).
- Communication requirements based on the area and terrain.
- · Real estate and facility requirements.
- . Bulk fuels required by type per day.
- Supply priorities.
- · Highway network required.
- · Availability of rail network.
- · Water support requirements.
- USAF lift capability.
- . Positions that require linguists.
- HSS to include hospitalization, medical evacuation, and medical logistics.
- Mortuary affairs evacuation flow and detailed responsibilities at each point where remains change custody.
- Mortuary affairs materiel with which all units need to deploy.
- Transition to war.
- Transition from war to peace.
- The availability and skills of local labor.
- Business ethics in the contingency area.

To prevent shortages or uncontrollable excesses, that historically impair contingency force missions, support operations staff officers need to plan how to –

- Provide for a phased expansion of the initial contingency force.
- Keep sea ports clear of incoming cargo. This prevents tying up ships and delaying transport of supplies to users.
- Establish inventory control of supplies. This
 prevents port congestion due to submission of
 duplicate requisitions to CONUS for supplies already on hand but unidentified in port locations.

- Acquire real estate and facilities in the contingency area.
- Establish a timely requisition system to CONUS to prevent supplies being pushed into the contingency site.
- Tie in with advance lines of communication.
- Interface with automation management systems.

ALERT PHASE

During the alert phase, COSCOM elements assigned to the contingency force disengage from CONUS installation responsibilities and prepare for movement, Reserve component elements then mobilize and complete all administrative functions prior to deployment.

MOVEMENT PHASE

During the movement phase, COSCOM transportation support branch personnel and the CMCC coordinate the transportation of contingency force elements. COSCOM support operations section staff and the CMMC coordinate the movement of supplies from CONUS installations to the contingency area.

Contingency plans need to designate the units responsible for preparing loads for sling loading, Plans should

specify the quantity of slings that units need to bring with them. They should also cover sling return responsibilities and procedures.

OPERATIONS PHASE

Operations phase activities include the establishment of operations in the contingency area. They also include development of operating relationships with elements of the task force organization and HN officials.

PHASED CONTINGENCY OPERATIONS

The contingency force organizes into an assault force echelon and a follow-on force echelon. Since logistics support remains austere, it is important to plan for and deploy sufficient assets to support each deployed increment. Depending on the situation in the AO, the contingency force usually conducts the following phased operations.

DEPLOYMENT PHASE

The assault force moves into the objective area by air or sea. Initial assault objectives might include ports or airfields. This facilitates the landing of followon forces during the lodgment phase. The assault force establishes security within the area of influence to protect the airhead or beachhead from direct or indirect

fire. It also acquires information on the enemy.

LODGMENT PHASE

The lodgment phase begins with the introduction of follow-on forces. Follow-on forces reinforce the assault force, establish the lodgment area, and begin buildup of the lodgment logistics base.

EXPANSION OF THE LOGISTICS BASE

The logistics base expands once the security area has been stabilized and the lodgment area firmly established. This supports a further buildup of forces to initiate or continue offensive action. To limit taxing the supply system, command policy needs to clearly state the level of base development.

PROCUREMENT

Local procurement reduces logistics dependence for CONUS furnished supplies and services. It provides improved response time, while freeing airlift and sealift assets for other priority needs. Depending on the area, available local resources might include —

- Bulk fuel and packaged products.
- Ration enhancement items.
- Bulk supplies.
- Services.
- Labor.
- Utilities.
- Maintenance.
- Transportation.
- Health services support.

CSG contracting and procurement personnel ac-

company the division. Contracting management officers and procurement NCOs assigned to the COSCOM'S procurement support branch and CMMC as well as a finance support element accompany the CSG or CSB jump element into the AO. Upon deployment, COSCOM contracting personnel establish an area procurement section. CSG contracting personnel then become field agents of the COSCOM. They prepare contracts in support of COSCOM and CMMC taskings. They coordinate with the HNS coordination team (TOE 63500LA), if fielded. The finance element provides funding support and payment of contract procurement actions.

During the initial phase, the contracting management officer and procurement NCOs focus on buying rather than contracting. They focus on direct hire and small purchase by ordering officers. They –

Provide initial technical assistance to unit ordering officers.

Table D-2. Criteria for local purchase of supplies.

The supply item might be purchased locally if it is -

- A non-NSN item.
- An item identified by the acquisition advise code of "L" as authorized for local procurement.
- An item cleared for local purchase by the corps G4.
- An item not readily available for issue through normal supply.
- A normal supply item but, due to the need for the item and time and distance criteria to obtain
 the item through normal supply channels, the CMMC decided to order the item purchased
 through local purchase.
- Distribute industrial resource folders on the AO to the ordering officers.
- Assist ordering officers in obtaining funds.
- Ensure that ordering officers comply with the limits imposed by the appointment order. This may be modified by the COSCOM OPLAN or directive.

Unit ordering officers coordinate all purchases with the area procurement section in their area. This prevents competition for local resources. The contracting management officer, with CA personnel, determines fair market value and administers the lease/contract. In coordination with the CSG support operations officer, COSCOM procurement NCOs use the procurement criteria in Table D-2 to determine whether supplies will be purchased locally or requisitioned through the supply system.

The COSCOM contracting management officer and procurement NCOs establish the corps procurement section in theater. They –

- Establish a relationship with the local US State Department office.
- Coordinate with HN officials on local procurement of supplies.
- Coordinate with the finance support element for funding support of procurement actions.

- Work with COSCOM ACofS, G5 staff to develop and distribute industrial resource folders for the AO.
- Coordinate with the corps G4 on interservice support requirements that might be filled through local purchase actions.
- Coordinate with engineers on real estate requirements above the scope of the ordering officer limitations.

In coordination with the COSCOM's procurement support branch staff, CMMC procurement branch personnel locate sources. They purchase or rent supplies, services, and real estate following corps resource allocation priorities.

Related local procurement responsibilities are performed by –

- The ACofS, G1 who establishes policies and procedures for daily hire of local civilian labor.
- The comptroller office that provides budgetary authorizations for local procurement.
- The corps' finance group which provides funding support and payment of contract procurement actions.
- Engineer staff officers who plan for the acquisition of real estate.

LOGISTICS UNIT DEPLOYMENT

The COSCOM commander coordinates deployment of logistics units with the contingency force commander. As necessary, he recommends changes in the deployment sequence.

TIME-PHASED TRANSPORTATION REQUIREMENTS LIST

ACofS G3 force design/plans branch personnel use

the TPTRL to plan, organize, and phase the deployment of the force, its materiel, and its arrival in the contingency area. The CMCC and task force commander's transportation staff refine the TPTRL into a series of time-phased programs for the contingency area. These programs provide a complete movement schedule. They cover from the time of arrival in the area to final receipt of all units and shipments at their ultimate destination.

ADVANCE UNITS

Though based on requirements and METT-T the following teams, elements or units might be required early in the operation:

- MCTs and MRTs.
- DS supply company or elements.
- DS ammunition company elements (ASPS and ATP) and habitual supporting truck companies.
- Cargo transfer unit.
- GS petroleum supply platoon(s) and supporting truck platoon(s).
- DS maintenance company elements and MSTs.
- CEB teams.
- Mortuary affairs collection platoons.
- Airdrop supply company or teams.
- MP company, for area security to advance party units.

A CSB headquarters element deploys with early increments to provide effective C2 of these units, platoons, or teams.

CONUS DEPARTURE AIRFIELD

A logistics officer thoroughly familiar with the contingency plan needs to remain at the CONUS departure airfield. He determines which items cause the lease impact if removed from loads to meet USAF weight limitations. He ensures that the owning unit is notified about the items removed from loads. This officer also prioritizes 01 air resupply shipments.

The Army and Air Force need to develop joint procedures for reporting frustrated cargo. For COSCOM units, the disposition of mission loads either not dropped within the drop zone or air landed at an air base needs to be reported to the COSCOM support operations officer.

FOLLOW-ON UNITS

The heavy materiel supply company, GS supply company, repair parts supply company, and field services companies are not normally required in the early stages of deployment. The need for these units depends upon the nature of the contingency and its environment. The CMMC deploys prior to these follow-on units to manage their GS stocks.

ESTABLISHING A LOGISTICS BASE

If the situation permits, logistics elements deploy ahead of tactical elements to prepare for their reception and support. In any event, logistics elements deploy into the area as soon as combat forces secure a lodgment area.

PREPLANNED/PACKAGED SUPPORT STOCKS

Theater war reserves, project stocks, and safety level stocks to support contingencies in specific areas of the world have been consolidated in container-six packages. The CMMC maintains a listing of container contents. These packages possess a project code or other means that identifies their intended purpose.

Documentation required to cause issue and movement of stocks from storage may have been prepared at t he time of contingency planning. Upon receipt of directions to support an initial deployment, stocks are withdrawn from storage, palletized or packed in container inserts, and loaded in containers.

Units need to provide ASL and PLL tapes to the CMMC. Tapes should include weight and cube data for contingency shipping computation. The CMMC monitors the ASLs and PLLs to ensure that they contain only those items essential for the anticipated contingency. It ensures that the ASLs, PLLs, and essential repair parts and quantities to replace those consumed through combat, are available upon deployment.

The CMMC also initiates action to acquire critical items. For example, portable piers, off-loading barges, cranes, construction materiels, and security equipment might need to be available during the early stages of the contingency operation.

MINIMUM STOCKAGE LEVELS

The CMMC develops combat ASLs that closely

reflect contingency requirements. Since approximately 20 percent of all stocks is required 80 percent of the time, performing an analysis of DS unit ASLs helps indicate what to stock. However, weight and cube constrain stockage policy. Units need to limit ASLs to combat-essential items.

The CMMC transmits requirements for NSL items to CONUS for supply support. The COSCOM support operations officer helps reduce the ASL by enforcing compliance with the list of authorized noncombat-essential items.

Shipping practices that emphasize daily shipment of cargo for ALOC designated units help to minimize stockage levels. They also help to ensure that large stockpiles do not accumulate in the contingency area.

The CMMC maintains close coordination with NICPs to ensure that the push system does not take control. Both the CMMC and CMCC maintain strict controls to ensure that the most essential items receive priority shipping.

SUPPORT OF CIVILIAN POPULATIONS

The primary sources of support of civilian populations include the –

- Local economy.
- Captured enemy supplies.
- Contributions from national and international welfare and charitable organizations.
- Supplies from allied or US military stocks.

Military support of civilian populations is often limited to supplies required to prevent disease, starvation, or unrest that might interfere with military operations. COSCOM units might issue —

- Food and water.
- Clothing, bedding, and tents.
- Medical supplies.
- Fuel and lubricants.
- Engineer equipment.

CA units attached to the COSCOM's special troops battalion determine humanitarian support requirements for refugees or civilian populations in distress. CA units have surveys on file on the health of civilian populations. Files include dietary factors and the caloric requirements of population categories, such as the elderly and children. CA units estimate requirements based on population size, geographic location, and the technological base of the country. CA teams/units coordinate with volunteer agencies and refugee control personnel in planning relief supplies and the use of local medical personnel.

CA personnel assist purchasing and contracting officers with the local purchase of supplies for civilian relief or economic aid. They recommend the type of supplies to be made available from military stocks. They requisition emergency civilian supplies not locally available through normal supply channels.

The corps service support order and COSCOM OPORD prescribe requisition and issue procedures for humanitarian civilian support. Class X issues are regulated. Supplies intended for authorized civilian agencies or groups require command approval prior to issue.

The COSCOM support operations officer needs to establish procedures to ensure that civilian supplies do not disappear into black market channels. CA teams/units plan and control food rationing. As necessary, they also coordinate with the area RAOC for security for movement of civilian supplies.

CA teams/units also coordinate with the CMCC on the use of civilian and military vehicles to distribute civilian supplies. They submit requirements for military transportation vehicles to the area MCT.

Refugees can be formed into companies to perform their own housekeeping functions. US forces provide supervision. The COSCOM OPLAN identifies a refugee site. It specifies the activities responsible for operating and supporting the site and the supplies required.

APPENDIX E **Supporting Other Operations**

This appendix addresses the COSCOM's responsibility for planning and supporting the other corps operations identified in FM $\,100\text{-}15$.

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LOW-INTENSITY CONFLICT OPERATIONS

LIC operations include political-military confrontations between contending states or groups. They are above routine peaceful competition among states, yet below conventional war. The four major LIC operational categories are:

- Support for insurgency or counterinsurgency.
- Combatting terrorism.
- Peacekeeping operations.
- Peacetime contingency operations.

FM 100-20 prescribes doctrine for military operations in LIC. FM 63-6 provides guidance on how CSS elements support forces engaged in LIC operations. FM 8-42 covers medical operations in LIC.

LOGISTICS SUPPORT STRUCTURE

The logistics support structure and augmentation remain situation dependent. Support for LIC situations may be provided by a task organized CSB or by the normal support structure for units committed to the operation, CSS elements often precede combat or CS units and may be the only military force deployed to the area.

Civilian contracts or the host country augment this support. Situation permitting, local purchase or contracts for HN services, utilities, and transportation assets are obtained. However, use of local supplies and facilities are limited by economics and social and political constraints.

SUPPORT FOR INSURGENCY AND COUNTERINSURGENCY

US military actions in support of insurgency and counterinsurgency range from providing intelligence, materiel, and training support to strategic, operational, and tactical advice. COSCOM elements might be tasked to support –

- Special operations forces.
- Advisory teams.
- Technical training teams.
- Indigenous resistance forces.
- HN civil organizations.

Depending upon the situation and environment, COSCOM assistance could include –

• Humanitarian assistance to civilian agencies.

- Transportation assets to move cargo in support of civic action projects, such as distribution of ration supplements.
- Class X supplies for relief of civilian distress and civic assistance programs.
- HSS teams assigned to the support organization.
- Water purification and distribution teams.

COMBATTING TERRORISM

Combatting terrorism includes protecting installations, units, and individuals from the threat of terrorism. Logistics support might be limited to that carried by counterterrorism teams during the operation. However, if logistics forces are deployed to support this type of LIC operation, they need to take antiterrorism measures, They also need to implement measures to protect supplies and surface LOCs.

PEACEKEEPING OPERATIONS

Peacekeeping operations attempt to maintain a negotiated truce or achieve, restore, or maintain a diplomatic resolution or peace in a potential conflict area. Peacekeeping forces traditionally possess a multinational composition. DA Pamphlet 700-15 covers logistics support of United Nations peacekeeping forces.

The COSCOM maybe tasked to provide a significant amount of logistics support to multinational forces and to support that force for an extended period. The CMMC increases supply stockage levels to support the peacekeeping force for an extended period.

COSCOM elements might be tasked to provide -

- Sundry packs.
- Supplementary rations.
- Class II items.

Logistics support elements need to deploy prior to or with the peacekeeping force. The corps deploys EOD teams early for munitions disposal. If the peacekeeping force employs in a hostile environment or a potential conflict area, sufficient transportation assets need to be allocated to provide for rapid relocation of the peacekeeping force.

Civilian contractors may —

- Provide custodial base maintenance.
- Deliver fresh food supplies.

- Operate the dining facility.
- Maintain vehicles.
- Provide packaged fuels and barrier material.

Contracted services might include —

- Showers.
- Laundry.
- Barber.
- Sewage.
- Trash disposal.
- Electrical power.
- Pest management.
- Fire fighting support.

PEACETIME CONTINGENCY OPERATIONS

Peacetime contingency operations range from

security assistance surges to strike operations and unconventional warfare. They include –

- Operations to restore order.
- A show of force.
- Demonstrations in crisis avoidance or crisis management situations.
- Counter drug operations.
- Disaster relief.

They are normally of short duration, occur in bare base environments, and receive limited HNS. If HNS exists, the logistics support structure is tailored to include that HNS. If HNS does not exist, a US logistics structure needs to be provided. The base development plan sets forth the required logistics functions. Appendix F describes logistics support of contingency operations.

RIVER CROSSING OPERATIONS

In river crossing operations, assault or delaying retrograde forces might be separated from their support elements by the river. COSCOM CSS plans branch personnel analyze how to provide continued support, yet minimize congestion in the crossing area. They need to understand the tactics and techniques described in FM 90-13 for river crossing operations.

OFFENSIVE RIVER CROSSING

In support of offensive river crossing operations, MSTs locate in the crossing areas. MSTs perform emergency equipment repairs to minimize delays in rafting operations and bridge construction. At the earliest opportunity, recovery vehicles with winch position on the far side of the river. Recovery vehicles ensure that immobile vehicles do not block crossing exits or lanes.

CSS plans branch personnel assigned to the COS-COM support operations section and CMMC commodity managers plan for increased requirements for repair parts needed to repair equipment used in swimming and fording operations.

Supply support elements need to echelon forward to provide continuous support. Transportation assets deliver critical supplies to forward distribution points on the exit bank of the river. During the early stages of the operation, helicopters might provide supplies to combat elements. COSCOM CSS plans branch and munitions

support branch personnel plan for increased expenditures of Class V for preparatory fires, air defense, and the assault. The CMMC adjusts minimum supply levels to ensure continued operation if the LOC is disrupted.

The COSCOM provides unit distribution of bridging material to engineer units. Engineer equipment is reserved for the operation. COSCOM transportation support branch personnel plan how to transport bridging material to the bridge site, which is often on secondary roads with no hardstand.

Units cross the river with basic loads intact. However, supplies might need to be airdropped, either to the distribution points, at the bridgehead or forward across the river. An ASP sets up on the exit bank as soon as possible. A Class III supply point sets up in the bridgehead to support fuel tankers crossing the river on rafts or bridges. An alternative is to plan for a hoseline system or a pipeline to transport fuel to the far bank.

Assault boats, rafts, or amphibious vehicles transport less critical supplies across the river. As soon as practicable after the initial assault, preloaded supply vehicles cross the river by bridges, raft, or air.

RETROGRADE RIVER CROSSING

For retrograde river crossings, logistics units echelon to the rear to support delaying, defending and

crossing area forces. Supply points position critical supplies at prestock points for delaying forces to use as they

move to the rear. Aircraft help maintain required supply levels and remove excess supplies across the river.

RETROGRADE OPERATIONS

In retrograde operations, the corps tasks the COSCOM to provide continuous mobile support forward while moving the bulk of its supporting units and supplies rearward. While continuing to provide essential supplies forward to delaying forces, the COSCOM relocates supplies and equipment from forward areas to new rear supply areas in support of forces out of contact moving to the rear.

SUPPLY

The COSCOM support operations officer reduces forward stocks by stopping forward supply. The CMMC diverts resupply shipments entering the corps area to the new rearward positions. Stocks are evacuated to an area where support is needed for subsequent operations.

To continue to provide support to forward units, supply points prestock limited amounts of Class V and III supplies behind selected division delay positions. COSCOM petroleum support branch personnel plan to provide emergency delivery of bulk Class III stocks. Delivery occurs aircraft if ground delivery becomes impractical.

Forward CSGs dry up forward supply points until forward positioned stocks approximate only what is required to support the delaying forces. This avoids a requirement to retrograde excess supplies from forward supply points.

TRANSPORTATION

Corps trucks evacuate supply stocks rearward to successive positions. The movement of units, supplies, and equipment to the rear severely taxes transportation assets of tactical units and the DISCOM. The DISCOM may request corps transportation support during the retrograde.

The CMCC programs all movements throughout the retrograde operation to regulate highway movement. It identifies evacuation routes, publishes movement schedules, and designs a battlefield circulation plan. The CMMC coordinates with the COSCOM weapon systems support branch chief on use of HETs to evacuate priority weapon systems. These priorities are passed to the COSCOM transportation

support branch to ensure that priorities are being met by the CMCC.

To avoid interfering with the rearward movement of combat units, logistics units displace early. Normally they try to displace during periods of limited visibility. To avoid traffic congestion, the CMCC requests that the MP brigade provide battlefield circulation control.

Corps transportation assets transport Class IV materials for obstacles, demolitions, and strengthening battle positions to delay the enemy's advance. If a rail system remains in operation in the area, inoperable equipment can be evacuated by rail. Transportation priority is given to –

- Movement of combat troops and their supplies.
- Movement of items used to impede the enemy.
- Evacuation of casualties.
- Evacuation of reparable materiel.

MAINTENANCE

Only essential maintenance is performed forward. MSTs take replacement modules forward and concentrate on quick fix items.

Unit recovery vehicles move damaged equipment to the nearest MSR or maintenance collecting points set Up in the rear areas. Recovery equipment needs to be marshalled at critical locations to keep routes open and recover all materiel possible. Corps trucks backhaul reparable equipment.

DS maintenance units concentrate on materiel required to conduct delaying operations and withdrawal. COSCOM CSS plans and maintenance support branch personnel develop plans to resolve the problem of evacuating inoperable equipment in maintenance units to the rear. The COSCOM OPLAN contains orders to destroy items which cannot be backloaded or render unusable. This prevents the enemy from repairing captured vehicles or equipment by cannibalization.

MEDICAL

In accordance with the Geneva convention, medical units mark and leave medical supplies and equipment which cannot be evacuated.

The rearward displacement of corps hospital units results in a temporary loss of bed capacity. If temporary facilities cannot be obtained, the corps requests additional aeromedical support. Nonmedical transportation assets move wounded personnel to TA or CONUS hospitals.

ENCIRCLED FORCES

The longer the force remains encircled, the more depleted its basic load stocks become. When all ground routes of evacuation and reinforcement have been cut by enemy action, the corps commander determines whether he wants the force to break out or to defend encircled prior to linkup or exfiltration.

Encircled forces practice strict rationing of supplies and enforce supply economy procedures. The COSCOM support operations officer arranges for aerial resupply of these critical supplies –

- Food and water.
- Medical supplies.

- Bulk fuel.
- Barrier materials.
- Ammunition.

To support a break out, the COSCOM shifts critical ammunition resupply assets so that supporting fires mass at the breakout point. If limited forces, wounded soldiers, and equipment are left behind, sufficient supplies need to be left. Medical personnel remain to attend to the wounded. CSS plans branch personnel assigned to the support operations section prepare plans to support link-up operations and regenerate attrited units.

LARGE UNIT MOVEMENT

Large unit movement places exceptional requirements on the transportation system. The CMCC assists the corps rear CP's CSS cell in planning, coordinating, and supporting tactical movements. Its MCTs and MRTs control traffic movement. MPs provide circulation control. The corps rear CP's operations cell coordinates the rerouting of logistics

movements to prevent congestion on road networks required for the tactical move. Units replenish their basic loads and refuel equipment prior to the move. DS supply units setup refueling sites where units can refuel while on the move. Forward CSGs attach MSTs to the movement columns for rapid repair on site.

PASSAGE OF LINES/RELIEF IN PLACE

A passage of lines occurs when a force moves forward or rearward through another force's positions in order to move into or out of contact with the enemy. The support operations officer's staff coordinates logistics support provided between the two forces.

A relief in place occurs when all or part of a unit is replaced in an area by an incoming unit. The senior maneuver commander determines when support shifts to the relieving force.

Passage of lines and relief operations require that the CMCC coordinate with the corps rear CP's operations cell on priorities for routes. The CMCC coordinates the additional corps transportation assets needed to expedite the passage or relief operation.

The COSCOM support operations officer coordinates priorities for logistics support with the corps rear CP's CSS cell. Plans specify the logistics support provided by the stationary force to the passing force or by the relieved force to the relieving force.

The CSG support operations section informs the passing force or relieving force of supply point locations in the area and their times of operation. The CSG sets up a refuel-on-the-move site. The CSG also attaches MSTs to the passing force to perform repairs on-site.

LINK-UP OPERATIONS

The headquarters directing the linkup between units or forces coordinates logistics support mutually provided to units linking up for subsequent missions. If time exists, ASL levels are adjusted to support the operation. The COSCOM support operations officer directs that the CMMC analyze the PLLs of

the converging units or forces and recommend adjustments in the ASLs of the supporting DS maintenance units. CSG support operations officers recommend revisions to customer support lists to redirect support operations in the AOR.

Appendix F

COSCOM Operation Order

Copy no ____ of copies HQ, 5th Corps Support Command (COSCOM) South Island 07002 09 April 19XX Message reference No.

OPERATION ORDER 28

References:

- a. Map, Series ----, Sheet Numbers: ----- , Edition ----- , Scale 1:50.000.
 - b. 5th (US) Corps OPORD 28.
 - c. 5th (US) Corps Service Support Order 28.
 - d. COSCOM FSOP.

Time Zone Used Throughout the OPORD: ZULU

Task Organization: See Annex A (Task Organization).

1. SITUATION

- a. Enemy forces.
- (1) See Annex B (Intelligence). (Annex B focuses on the threat's capability to interrupt logistics and medical operations. It addresses potential terrorist threat and describes the enemy's most probable course of action.)
 - (2) See current INTSUM.
 - b. Friendly forces.
- (1) 5th (US) Corps defends with two divisions abreast. 6th Armd Div in the southeast, 3d ID (MECH) in the southwest, and the 7th Armd Div in reserve in the north. The 25th ACR is OPCON to the 3d In Div (MECH). Upon completion of covering force operations, the 25th ACR will

(OPORD 28 -- 5TH COSCOM)

fall back to the north. It is anticipated that the threat will direct its main attack in the 3d ID (MECH) sector with primary focus on Resolution Island. The 7th Armd Div is expected to receive a supporting attack focusing on Port Chalmers. Upon completion of the covering force attack, the 25th ACR will locate in the vicinity of Bruce Bay, with priority of commitment to the 3d ID (MECH).

- (2) Elements of the 7th fleet support 5th (US) Corps.
- (3) 6th (US) Corps on North Island conducts supporting attack to defeat enemy forces in the vicinity of New Plymouth to establish new defensive line from Foxton Beach to Albatross Point in sector, then prepares to assist 5th (US) Corps rearward passage of lines.
- (4) 7th Armd Div provides defense in sector; maintains five routes of march for 5th (US) Corps from Richmond staging areas to tactical assembly areas; provides support for forward passage of lines to 5th (US) Corps; prepares to establish a new defense line from Ross to Springs Junction; and prepares to assist 5th (US) Corps rearward passage of lines.
 - (5) 12th AF supports 5th and 6th (US) Corps.
- (6) 48th TAACOM provides reinforcing DS and GS CSS as directed by TA Cdr.
- (7) 49th LSE coordinates support provided by various AMC funded contractors. LSE activities provide GS and depot-level maintenance for selected wheeled, track, and stationary equipment and repair reparable exchange items.
- (8) HN provides and coordinates HNS as requested within host-nation capabilities.
 - (9) 40th ADA Group provides Hawk belt in 5th (US) Corps sector.
- (10) 47th Chemical Bn provides NBC reconnaissance, decontamination, and smoke support on request.
 - (11) 52d Engr Bde provides engineer support.

(Classification))

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- (12) 27th MP Bde provides military police support.
- (13) 20th Signal Bde provides signal support.
- (14) 41st MP Det (CI) provides criminal investigation support.
- (15) 5th Personnel Gp provides personnel services, administrative services, morale support activities, and direct postal support services on an area basis to division/nondivision units, and general support personnel and postal service to the corps.
 - (16) 5th Corps Finance Gp provides financial support.
 - (17) Strengths to be supported are:
 - (a) 6th Armd Div ------6, 590
 - (b) 7th Armd Div ----- 15.970
 - (c) 3d ID (MECH) ----- 14,183
 - (d) 25th Armd Cav Regt (ACR) ---- --4,606
 - (e) 40th ADA (1-470th AD Bn Patriot) 455
 - (f) 5th (US) Corps Troops ---- 34,230
 - (g) 5th Corps Support Command ---- 21,200
- c. Attachments and detachments. On order, 34th, 35th and 37th Chemical Units and 98th and 99th CA units attached to HQ, Special Troops Bn. See Annex A.

2. MISSION

5th COSCOM provides logistics support to 5th (US) Corps operations throughout South Island area to defeat threat operations in the southwest and southeast. Also provides logistics support to 40th ADA Gp units in 5th Corps area and Class III (bulk) support to 12th (US) AF as directed.

3. EXECUTION

Intent: CSG and medical group/brigade commanders provide support within their designated areas of responsibility in a manner that efficiently facilitate the successful accomplishment of the mission of 5th (US) Corps. COSCOM support operations staff coordinate the accompanying slice of support with appropriate Bde S4 staff and supporting CSGs for out-of-sector support.

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a. Concept of operation. Annex C (Operation Overlay).

Provide logistics support by employing the 10th CSG and 20th CSG in the forward sectors (southeast and southwest respectively) and the 30th CSG in the corps rear area in the north. 10th and 20th CSGs each employ a CSB in the 6th AD/3d ID sector to support corps forces operating in the division areas. These CSBs reinforce or augment the FSBs/MSB so that they in turn provide support to corps forces in the brigade and division areas. On order from RTF, 30th CSG units synchronize operations with 48th TAACOM to regenerate a brigade size element.

- (1) Provide 12th AF Class III (bulk), as directed by 5th (US) Corps.
- (2) Provide support to other Services in accordance with interservice support agreements, or as directed by 5th (US) Corps.
 - b. 98th and 99th CA Units.
- (1) Perform area studies, identifying available local resources, facilities, and sources of support.
- (2) Assist and coordinate efforts to identify and acquire HNS through preplanned and ad hoc HNS requests.
- (3) Assist the COSCOM's and CSG's contracting agents in acquisition of local resources.
- (4) Coordinate the distribution of life-sustaining goods and services to civilians on the South Island.
- (5) Assist in minimizing civilian interference with military operations, while assisting 5th corps commanders in fulfilling their legal obligations to the civilian populace.
 - c. 51st NBCE. Provide NBC staff support to 5th COSCOM.
 - d. 5th Corps Materiel Management Center (CMMC).
- (1) Provide GS level integrated materiel and DS level maintenance management in support of 5th (US) Corps. Priority of issue to support combat loss requisition is to 3d ID, 25th ACR, 6th Armd Div, and 7th Armd Div, in that order.

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- (2) Manage Class V assets in accordance with the SAAS, and ensure RSR and CSR are not exceeded.
- (3) Establish procedures and interface directly with the 5th CMCC in programming cargo distribution orders to support the corps movement plan.
- (4) Establish liaison with 83d TAMMC to interface directly with 83d TAMMC pertaining to requisitioning of all high priority items other than Class II and IX items for ALOC units.
- (5) Coordinate with 32d CSB for items of supply to support reconstitution.
- (6) Provide mission tasking through a CLT, located at the HN Petri Sup Bn, to coordinate and manage distribution of bulk fuels.
- (7) Release Class VII items as directed by this HQ/WSM and coordinate with 5th CMCC to secure transportation.

e. 5th CMCC.

- (1) Provide movement control and highway regulation services.
- (2) Coordinate with MCTs and the transportation branches of the 10th, 20th and 30th CSG to ensure truck tasking procedures are properly instituted.
- (3) Coordinate with 5th CMMC for input to the corps movement plan.
- (4) Establish liaison with 46th MCA to ensure compliance with proper movement control and administrative procedures. Priority of movement is to division units, then 25th ACR.
- (5) Establish liaison with the 32d CSB to coordinate transportation requirements to support reconstitution mission requirements.
 - (6) Coordinate with CA units on HNS capabilities.

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- (a) Submit requests for rail transport to South Island's United Pacific Headquarters.
- (b) Submit request for motor (road) transport to South Island's Unified Truck Agency.
- (7) Provide mission tasking through the CLT, located at the 43d HN Trans Bn, to coordinate and manage transportation and terminal transfer operations. MCTs may request support through the CLT.
- (a) MCTs support 5th (US) Corps nondivision and division units. MCTs arrange for transportation services and effect reconsignment and diversion instructions for shipments coming into the rail terminals located in their area of responsibility, or as directed by the 5th CMCC. MCTs have commitment authority over transportation assets as follows:
 - 1. 91st MCT commits the assets of the 10th CSG.
 - 92d MCT commits the assets of the 20th CSG.
 - 93d MCT commits the assets of the 30th CSG.
- (b) 71st, 72d, and 73d MRTs provide highway regulation support to the 5th (US) Corps and regulate highway traffic as directed by the Highway Traffic Division of the 5th CMCC.
- (9) Tab A (Airfield Data) to Appendix 1 (Situation Overlay) to Annex B (Intelligence).
- (10) Tab B (Railhead Data) to Appendix 1 (Situation Overlay) to Annex B (Intelligence).
- (11) Appendix 1 (Road Movement Overlay) to Annex R (Movement).
- $\mbox{\fontsign} (12)$ Appendix 1 (Service Support Overlay) to Annex Q (Service Support).

(OPORD 28 -- 5TH COSCOM)

f. 80th Med Bale.

- (1) Provide health service support on an area basis to nondivision and division units and other forces as directed.
- $\,$ (2) Provide one medical group in the southwest sector supporting the 3d ID, 25th ACR, and 20th CSG.
- (3) Provide one medical group in the southeast sector supporting the 6th Armd Div and 10th CSG.
- (4) Provide 32d CSB with medical platoon and one combat stress control team to support reconstitution mission requirements.

g. 10th Corps Support Group (CSG).

- (1) Provide DS supply and field services and DS maintenance on an area basis for nondivision elements in support of the 6th Armd Div. Provide reinforcing DS maintenance and GS supply support to the 6th Armd Div, as directed by the COSCOM. Be prepared to provide reinforcing DS maintenance and GS supply support to the 3d ID and the 25th ACR, as directed by the COSCOM.
- (2) Locate a CSB in the 6th AD division area to provide direct support to corps forces. Provide reinforcing or augmenting support to FSBs and MSB to enable them to provide support to corps forces operating in the brigade area and division area.
- (3) Provide life support and security for the sector RAOC and MCT operating in the 10th CSG AO.
- (4) Provide customer units with a listing of supporting supply, service, and maintenance activities.
- (5) Obtain time of pending displacement and new location from supported units.

h. 20th CSG.

(1) Provide DS supply and services and DS maintenance on an area basis for nondivision elements in support of the 3d ID and 25th

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- ACR. Be prepared to provide reinforcing DS maintenance and GS supply support to the 3d ID and 25th ACR and to the 7th Armd Div, when committed.
- (2) Locate a CSB in the 3d ID area to support corps forces in the division sector. Provide reinforcing or augmenting stocks, equipment, or personnel to the FSBs/MSB to enable them to provide a nearer source of support to corps forces operating in the brigade area and division area.
- (3) Provide life support and security for the sector RAOC and MCT operating in the 20th CSG AO.
- (4) Provide customer units with a listing of supporting supply, service, and maintenance activities.
- (5) Obtain time of pending displacement and new location from supported units.
 - i. 30th Corps Support Group (CSG).
- (1) Provide DS area support to units in or passing through the 30th CSG AO.
- (2) Provide GS level supply (less Class VIII) to nondivision units on an area basis.
- (3) Provide corpswide transportation support, terminal transfer, and operator trailer transfer points and/or trailer relay systems.
- (4) Provide Class V CSA support to division ATPs and nondivision ASPS and ATP. Priority of issue of Class V is to 3d ID, 25th ACR, and 6th Armd Div. Priority to the 7th Armd Div, when committed.
- (5) Provide reinforcing supply, maintenance, and field services support to the 10th and 20th CSGs.
- (6) Provide GS supply and corpswide transportation and field services support to the 6th AD, 3d ID, 25th ACR, and the 7th AD.

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- (7) Priority of Class III distribution is to the 3d ID (MECH), 6th AD, 25th ACR and the 7th AD; then hospitals and designated aviation units; then nondivision unit DS Class III supply points.
- (8) Provide DS/GS rocket and missile support, less improved Hawk, to nondivision units in the corps rear area. Provide backup DS rocket and missile maintenance support to division units.
- (9) Be prepared to justify requirement and initiate request to COSCOM for authorization to activate emergency offtake point as required. Provide petroleum quality surveillance support to corps units.
- (10) Provide AVIM and reinforcing AVIM to corps assigned aircraft. Provide aviation repair parts supply to corps aviation units, to include aircraft armament and avionics.
 - (11) Provide reinforcing AVIM support to division units.
- (12) Coordinate oil analysis lab support to all corps aviation units.
- (13) On order from RTF, be prepared to reconstitute a brigade size element by positioning forward, or loading for movement forward on call, Class VII and IX and providing forward MSTs. Level of reconstitution will be provided by RTF.
- (14) Provide life support and security for the sector RAOC and MCT operating in the 30th CSG AO.
 - i. 30th EOD Control Team.
- (1) Provide EOD support to the 5 th (US) Corps per directives from the rear corps CP.
 - (2) Support the 5th (US) Corps for ADC.
- (3) Provide command and control of all assigned EOD Detachments and augmentation EOD Response Teams.
 - k. HN Support Battalions.
 - (1) Establish liaison with the 5th CMMC and 5th CMCC.

(OPORD 28 -- 5TH COSCOM)

- $% \left(2\right) \left(1\right) =\left(1\right) \left(1$
- $\mbox{(3)}$ Provide transportation and terminal transfer support to the 5th (US) Corps.
 - 1. Coordinating Instructions.
 - (1) This OPORD is effective upon receipt.
 - (2) Intelligence requirements. ****
 - (3) Antiterrorist actions. ****
 - (4) Air defense weapons status. ****
- (5) MOPP. MOPP 1 for chemical is in effect. MOPP levels are the decision of battalion/company level commanders. Be prepared to change MOPP level on order.
 - (6) Troop-safety criteria. *****
 - (7) Vehicle recognition signals. *****
 - (8) Phase line descriptions. *****
 - (9) Counterfratricide measures. *****
- (10) Direct coordination authorized between subordinate command staffs and COSCOM staffs.
 - (11) Frequency of relocation *****
- (12) The 5th CMCC provides advance notice to the 5th CMMC concerning arriving cargo.
- (13) Movements are coordinated with the DISCOM CP/division rear CP or FSB CP/brigade rear CP before crossing division/brigade boundaries.
- (14) Units located within base/base clusters comply with defense and area damage control procedures established by the BDOC/BCOC, RAOC, and corps rear CP. Units/battalions designated a base/base cluster operate a BDOC/BCOC.

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- (15) Coordinate with HN on reconnaissance, surveillance, recognition signals, refugee control and evacuation, and use of privately owned goods and materiel.
- (16) Friendly use of smoke is encouraged. Allow 24 hours in contingency planning for notification, approval, and transit of smoke generator companies. No smoke mission should be permitted without at least one deception smoke mission, unless operational necessity dictates that a risk be taken.
- 4. SERVICE SUPPORT (See Paragraph 4, SERVICE SUPPORT (MATERIEL AND SERVICES) of Annex Q, Service Support)

NOTE: A sample Service Support Annex is provided at Appendix G of this FM.

5. COMMAND AND SIGNAL

- a. Command.
- (1) 5th COSCOM HQ Main CP vic Mayfield (MD 441714). Future location vic Smithville (MD 442938).
- (2) Alternate CP is 30th CSG vic Sefton (MD 431727). Future location vic Jamestown (MD 421229).
 - b. Signal. See Annex J.
 - (1) Current SOI in effect.
 - (2) Current CESI in effect.

ACKNOWLEDGE: Recipient acknowledge receipt and understanding.

OTHINGIA	Commander's RANK	last name
OFFICIAL:		
/s/		
ACofS, G3		
	(6)	

```
(Classification)
(OPORD 28 -- 5TH COSCOM)
DISTRIBUTION:
      5th CMMC
      5th CMCC
      80th Med Bde
      10th CSG
      20th CSG
      30th CSG
      Parent Organizations of attached units
      COSCOM Staff
      Corps G3 and G4
ANNEXES:
Annex A TASK ORGANIZATION
Annex B INTELLIGENCE
      Appendix 1 Situation Overlay
      Appendix 2
                 Reconnaissance and Surveillance
      Appendix 3
                  Signals Intelligence
      Appendix 4
                  Weather
                 Counterintelligence
     Appendix 5
Annex C OPERATION OVERLAY
Annex D ENGINEER
      Appendix 1 Engineer Overlay
Annex E FIRE SUPPORT
      Appendix 1
                  Air Support
                  Chemical Support
      Appendix 2
      Appendix 3
                  Field Artillery Support
      Appendix 4
                  Naval Gunfire Support
      Appendix 5
                  Nuclear Support
                  Air Defense
      Appendix 6
Annex F AIR DEFENSE
                             (Classification)
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Annex G ARMY AVIATION

Annex H ARMY AIRSPACE COMMAND AND CONTROL

Annex I ELECTRONIC WARFARE

Appendix 1 Enemy Electronic Order of Battle Overlay

Appendix 2 Electronic Combat Target List

Appendix 3 Schedule of Jamming

Appendix 4 Overlay of ESM/ECM Grid Zones

Appendix 5 Electronic Warfare Contingency Augmentation

Appendix 6 Restricted Frequency List

Annex J SIGNAL OPERATIONS

Appendix 1 Radio Net Diagram (FM)

Appendix 2 omitted

Appendix 3 Radio Net Diagram (Multichannel)

Appendix 4 Telephone Traffic Diagram

Appendix 5 Teletypewriter Traffic Diagram

Appendix 6 Line Route Map

Appendix 7 Messenger Routes

Annex K OPSEC

Annex L DECEPTION

Appendix 1 Notional Order of Battle

Appendix 2 Deception Overlay

Appendix 3 Deception Implementation Schedule

Annex M PSYCHOLOGICAL OPERATIONS

Annex N NUCLEAR, BIOLOGICAL, AND CHEMICAL OPERATIONS

Annex O MILITARY POLICE

Annex P REAR OPERATIONS

Annex Q SERVICE SUPPORT (See Appendix G of this field manual.)

Appendix 1 Service Support Overlay

Appendix 2 Traffic Circulation and Control

Appendix 3 Personnel

Appendix 4 Legal

(OPORD 28 -- 5TH COSCOM)

Annex R MOVEMENT

Appendix 1 Road Movement Overlay Appendix 2 Road Movement Table Appendix 3 Road Movement Graph

Annex S CIVILIAN AFFAIRS

Annex T COUNTERATTACK PLAN

ANNEX A (TASK ORGANIZATION) to OPORD 28 -- 5th COSCOM

```
HHC, 5th COSCOM
  34, 35, 37th Chemical Units (atchd)
  98, 99th CA Units (atchd)
  51st NBC Element
5th CMCC
  91st MCT
                                               ( SAMPLE)
  92d MCT
  93d MCT
  7lst MRT
  72d MRT
  73d MRT
  HHC 214th Cgo Hel Bn (Atchd)
  2141st Med Hel Co (Atchd)
HHC 80th Med Bde
  850th Med Co Air Amb
  852d Med Co Amb
  800th Med Det Psych Svc
     801st Psych Svc_Tm
     802d Psych Svc Tm
     803d Psych Svc Tm
     804th Psych Svc Tm
805th Psych Svc Tm
  802d Cmbt Stress Con
  860th Hqs Co Vet
    861st Med Plt Vet
    862d Med Plt Vet
    863d Med Plt Vet
HHD 845th Med Bn Log (EWD)
      A Co Log sup
      B Co Distr
HHD 8826th Den Bn
 827th Den Co
 852d Den Det
 853d Den Det
 854th Den Det
 855th Den Det
                                                (SAMPLE)
 856th Den Det
 857th Den Det
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ANNEX A (TASK ORGANIZATION) to OPORD 28 -- 5th COSCOM

858th Den Det 828th Den Co 868th Ento Svc Tm

871st Environ Tm

(SAMPLE)

HHD 830th Med Bn Area Spt

823d Med Co AS

824th Med Co AS

825th Med Co AS

826th Med Co AS 827th Med Co AS

828th Med Co AS

829th Med Co AS

HHD 88th Med Gp

807th Cbt Spt HOSP

8107th Surg Tm

808th Cbt Spt HOSP

808th Surg Tm

809th Cbt Spt HOSP

819th Surg Tm

891st MASH HOSP

HHD 800th Med Evac Bn

855th Med Co Air Ambl

856th Med Co Air Ambl

818th Med Co Ambl

819th Med Co Ambl

HHD 89th Med Gp

805th Cbt Spt HOSP

8105th Surg Tm

806th Cbt Spt HOSP

8106th Surg Tm

810th Cbt Spt HOSP

8110th Surg Tm

812th Cbt Spt HOSP

8112th Surg Tm

813th Cbt Spt HOSP

8113th Surg Tm

894th MASH HOSP

ANNEX A (TASK ORGANIZATION) to OPORD 28 -- 5th COSCOM

HHD 801st Med Evac Bn 857th Med Co Air Ambl 859th Med Co Air til 8121st Med Co Ambl 8122d Med Co Ambl

(SAMPLE)

10th CSG

HHC 10th CSG

HHD llth CSB

901st Maint Co DS

200th sup Co D S

709th Lt/Med Trk Co

501st Ord Co Ammo Conv DS

711th Med Trk Co

201st Fld SVC Co DS

HHD 12th CSB

207th SUP CoDS

332d Petri Sup Plt

336th TMT P1 (Petri)

209th Fld SVC CoDS

202d Gen Sup Co GS

721st Med Trk Co

HHD 13th CSB

202th sup CoDS

903th Maint Co DS

121st Ammo Co GS

715th Med Trk Co

716th Med Trk Co

20th CSG

HHC 20th CSG

HHD 21st CSB

210th sup Co DS

211th Fld SVC Co DS

502d Ord Co Ammo Conv DS

910th Maint Co DS

726th Med Trk Co

723d Lt Med Trk Co

HHD 22d CSB

220th SUP CoDS

503d Ord Co Ammo Conv GS

727th Med Trk Co

728th Med Trk Co

ANNEX A (TASK ORGANIZATION) to OPORD 28 -- 5th COSCOM

```
HHD 23d CSB
     412th sup Co DS
     337th Petri Sup Plt
     338th TMT Plt (Petri)
     913th Maint Co DS
     914th Maint Co DS
     729th Lt Med Trk Co
                                                    (SAMPLE)
     915th Maint Co DS
     920th Maint Teams
30th CSG
      HHC 30th CSG
  HHD 31st CSB
     22d sup Co DS
     92d Fld SVC CoDS
     922d Maint Co DS
     923d Maint Co DS
     916th Msl Spt Co
  HHD 32d CSB (Recon)
     924th Maint Co DS
     739th Lt Med Trk Co
     240th Sup Co DS
  HHD 22d S&S Bn
     224th Hvy Mat Sup Co
     232d Gen Sup Co GS
     49th Airdrop Sup Co
     50th Airdrop Eq Repair Sup Co
     213th Rep Parts Sup Co
     423d MA Coil Co
    HHC 56th Ord Bn DS/GS
     504th Ord Co Ammo Conv GS
     505th Ord Co Ammo Conv GS
     506th Ord Co Ammo Conv GS
  HHC 33d Petri Sup Bn
     330th Petri Sup Co GS
     331 Petri Sup Co GS
     332d Petri Prod Lab
     334th TMT Co (Petri)
```

335th TMT Co (Petri)

ANNEX A (TASK ORGANIZATION) to OPORD 28 -- 5th COSCOM

HHD 71st Acft Maint Bn 711th Acft Maint Co 712th Acft Maint Co 713th Acft Maint Co

HHD 73d TMT Bn
725th TC Det (TTP)
738th Med Trk Co
712th Med Trk Co
722d HET Co
723d HET Co
730th HET Co
731st HET Co
733d Tml Trf Co

(SAMPLE)

HN Petrl Bn
3d Petri Sup Co
4th Petri Sup Co
lst Petri Prod Lab
2d Petri Prod Lab

HN Trans Bn llth Hq & Spt Co 12th Med Trk Co 13th Med Trk Co 14th Hvy Trk Co 15th Tml Trf Co 16th Tml Trf Co

INBOUND UNITS M+49 - M+53

M+51 HHD 29th CSB 290th SUP Co DS 981st Maint Co DS 736th Lt Med Trk Co

M+53 HHD 98th CSB 982d Maint Co DS 291st Sup Co DS 727th Tml Trf Co 716th Lt Med Trk Co

M+57 487th Cml Co GS

(SAMPLE)

ANNEX A (TASK ORGANIZATION) to OPORD 28 -- 5th COSCOM

90th Med Gp M+668892d Med Tm 8100th Med Tm 8106th Med Tm 867th Med Co

M+67341st NBC Element 258th Petri Sup Co 226th Fld Svc Co D S 942d Maint Co DS

HHC 57th CSB

M + 68104th PS Co

> 2-483d AD (Hawk) 2-84th AD (Hawk) HHC 44th Water Sup Bn 441st Water Sup Co 442d Water Sup Co 443d Water Purif Co

444th TMT Med Trk Co (Water) lllth Morale Support Det (MSD)

HHC 313th Sep Bde (MECH) M + 70

2d Bn 41st In Mech 2d Bn 42d In Mech 2d Bn 17th Armd (105)

2d Bn 18th Armd (105) 2d Bn (155, Sp 71st Arty

A Trp 2/31st Cav (105)

313th Engr Co 283d PSYOP Co (DS) 293d PSYOP Co (DS) 295th PSYOP Co (DS) 296th PSYOP Co (DS) 297th PSYOP Co (DS)

Appendix G

Service Support Annex to COSCOM OPORD

Copy of copies
HQ, 5th COSCOM
South Island
Date-time group of signature
Message reference No.

ANNEX Q (SERVICE SUPPORT) TO OPORD 28

References: Maps, Service Support Overlay, FSOP

Time Zone Used Throughout the Order: ZULU

1. SITUATION

Information affecting CSS support includes initial delays in the arrival of repair parts due to ALOC priorities and the likely probability of a persistent chemical attack in the southeast sector. *****

- a. Enemy forces. See Annex B, Intelligence, to OPORD 28.
- b. Friendly forces.
 - (1) See paragraph 1 of COSCOM OPORD 28.
- (2) See Annex A (Task Organization) to OPORD 28 for a list of COSCOM units and inbound units.
- (3) Adjacent COSCOM plans to provide out-of-sector support to 18th FA Bde units as they move in support of 3d Inf Div (MECH).
- (4) 48th TAACOM provides reinforcing DS maintenance and throughputs GS supplies. If required, subordinate ASG units enter the 30th CSG AO to add their support to corps reconstitution efforts.
- (5) Logistics support elements, to include AMC GS/ depot level repair teams and CASCOM automation STAMIS teams will operate throughout the 30th CSG AO.
- c. Attachments and detachments. Attached service support resources include: MSTS **, **, and ** attached to the 29th FA Bde. Effective times of attachment are *****

ANNEX Q (SERVICE SUPPORT) TO OPORD 28

2. MISSION

5th COSCOM provides logistics support to 5th (US) Corps operations throughout South Island. The 10th and 20th CSGs provide support on an area support basis throughout the southeast and southwest sectors. The 30th CSG provides DS area support to units in or passing through the 30th CSG AO in the north sector.

3. EXECUTION

a. Concept of operation. Logistics support is normally provided on an area basis. The 80th Med Bale's medical groups provide health service support on an area basis. The 10th, 20th, and 30th CSGs provide logistics support on an area basis in the southeast, southwest, and northern sectors respectively. Service support overlays, available from the area RAOC or CSG/CSB support operations officer, list supply point/maintenance collecting point locations and hours of operations at supporting supply points, DS maintenance units, and field services units.

Teams/detachments or elements from CSBs or medical battalions providing support in the brigade or division area obtain life support from those units to which they are attached. Arrangements for that support are coordinated between the CSB LO/CSG LO at the FSBs/DISCOM and parent medical battalion/group. Divisions provide food, communications support, and security to teams from corps medical ambulance units and other corps medical elements, as directed by corps G4.

b. Tasks to subordinate service support units.

(1) 10th CSG. 10th CSG provides DS supply and field services and DS maintenance on an area basis to nondivision elements operating in the southeast sector of South Island. The llth CSB provides DS supply, field services, and maintenance support on an area basis to nondivision elements in the 6th Armd Div area. It reinforces or augments the FSBs or MSB so that corps nondivision forces may obtain their support from those battalions when operating in the brigade or division area.

ANNEX Q (SERVICE SUPPORT) TO OPORD 28

- (2) 20th CSG. The 20th CSG provides DS supply and field services and DS maintenance on an area basis for nondivision elements operating in the southwest sector of South Island. The 21st CSB provides DS supply, field services, and maintenance support on an area basis to nondivision elements in the 3d ID area. It reinforces or augments the FSBs or MSB so that corps nondivision forces may obtain their support from those battalions when operating in the brigade or division area.
- (3) 30th CSG. The 30th CSG provides DS area support to units in passing through the 30th CSG AO in the northern sector of South Island. It also provides transportation, airdrop, and mortuary affairs support to units on a corpswide basis.
- (4) 80th Med Bale. The 80th Med Bde provides health service support on an area basis to nondivision units through its medical groups operating in the southeast and southwest sector.
 - c. Coordinating instructions.
- (1) Direct coordination authorized between CSGs and Med Bde staffs and COSCOM staffs.
- (2) Coordinate movements into division/brigade boundaries with the DISCOM CP/division rear CP or FSB CP/brigade rear CP.

ANNEX Q (SERVICE SUPPORT) TO OPORD 28 - - 5TH COSCOM

4. SERVICE SUPPORT (MATERIAL AND SERVICES)

a. Supply. Supply point distribution is in effect, except as noted. Given the restrictions noted below, the normal source of supply is:

Class of Supply	Source of Supply *	See Comment
I - Rations	DS SUP Co - Class I Pt	(1)
II - OCIE, Maps	DS SUP Co - Class II Pt	(2)
III - Bulk Fuel	DS SUP Co Class III Pt	(3)
	Petrl Sup Co, GSClass	III Pt (3)
III - Lubes, Oils	DS Sup Co - Class III Pt	
IV - Construction &	DS Sup Co - Class IV Pt	(4)
Fortification Mat	-	
V - Munitions	DS Ammo Co - ASP	(5)
	GS Ammo Co - CSA	
VI - Sundries Packs	DS Sup Co - Class I Pt	(6)
Health & Comfort	Sales Teams/AAFES	
VII - Major End Items	DS Sup Co - Class VII Pt	(7)
VIII - Medical Logistics	Med Log Bn	(8)(12)
IX - Common Repair Parts	DS Maint Co	(9)
Acft Repair Parts	AVIM Co	
Msl Repair Parts	Hawk DS Maint Co	
Water Potable	DS Sup Co - Water Pt	(10)
Nonpotable	Water Sup Co - Water Pt	

- * Obtain the Service Support Overlay for your AO for exact map location and operation times. FRAGOs announce location changes. S4s notify units of changes in sources of support.
- (1) Class I. When operations stabilize and HN contracted refrigeration support becomes available, A Rations are issued from Class I points supporting units in sectors BC and BD.
 - (2) Class II -- Maps.
- (a) Request unclassified maps from supporting DS Sup Co.

ANNEX F (SERVICE SUPPORT) TO OPORD 28 - 5TH COSCOM

- (b) Request classified maps through appropriate S2/G2 channels.
- (3) Class III. Supply point distribution, except where organic tank vehicles are not available.
 - Unit distribution of JP-8 authorized for the (a)

following users:

All corps hospitals Corps Hq refuel point (Not prioritized)

- (b) Distance factors necessitate that those units operating near the GS Petri Sup Co obtain their fuel from the GS Petri Sup Co.
- (4) Class IV. Submit requisitions for controlled Class IV items through command channels.

Corps controlled Class IV items include:

ITEM 5610-00-250-4676 CEMENT, PORTLAND 5660-00-921-5516 BARBED TAPE

- Class V. Prestockage of an additional basic load is Supply point distribution from nearest ASP or from CSA, if authorized. nearer.
 - (1) CSR for items in critical supply is as listed

below:

DODAAC	NOMENCLATURE	RDS/WPN
1315-C704	4.2" HE	30
1315-C708	4.2" WP	30
141O-PB91	TOW	3

Request EOD support through assigned BDOC/BCOC to (2) the area RAOC.

ANNEX Q (SERVICE SUPPORT) TO OPORD 28 -- 5TH COSCOM

- (6) Class VI. Health and comfort item packs are available at initial reception points.
- (a) Sundry packs and special comfort items approved for South Island operations are issued gratuitously by supply point distribution through Class I channels.
- (b) After D+__, health and comfort items are sold by mobile sales teams. Sales teams set up near battalion field feeding facilities on a rotational basis.
- (7) Class VII. Report all combat losses of Class VII in the daily battle loss report. Submit reports IAW Annex X (Reports), FSOP.
 - (a) PBO provides justification for all noncombat losses.
- (b) Requisition controlled Class VII items through command channels. Corps controlled Class VII items include:

LIN ITEM

5 Ton Forklift 20 Ton S&P Wrecker Truck

- (8) Class VIII. 845th Med Log Bn vic Roxburgh (MD451695) provides medical supply support on an area support basis.
- (9) Class IX. Controlled exchange may be performed down to unit level, at the discretion of unit commanders. Major critical shortages exist in repair parts and replacement components for the following end items:

END ITEMS

REPAIR PART

TRUÇK FORKLIFT 4,000 LB

Cylinder assembly

ANNEX Q (SERVICE SUPPORT) TO OPORD 28 -- 5TH COSCOM

- (10) Water. Water purification tablets are supplied with rations at Class I points.
- (11) Excess supplies. All units report excess supplies through supply channels to the 5th CMMC for disposition instructions.
- (12) Captured rations and abandoned medical supplies are extracted to the maximum extent possible consistent with the tactical situation. Captured rations and abandoned medical supplies are not used for US forces, but are made available for HN or EPW use.
- b. Transportation. Units identifying movement requirements, or needing to move equipment or supplies beyond the capability of organic equipment, request additional transportation support through their supporting MCT IAW 5th COSCOM FSOP.
 - (1) MSR and traffic circulation plan.
- (a) Clear convoy movements through servicing MCTs. (Ten or more vehicles dispatched within an hour from the same origin to the same destination constitute a convoy.)
 Request 27th MP Bde convoy security and escort through the 5th CMCC.
- (b) For tracing, follow-up, or statue of shipments, provide the transportation control number of the shipment to the MCT which originally scheduled shipment.
- (c) Movement regulating points locate vic Springburn (MD431715), Tarras (MD4Q1695), and Riversdale (ND451686).
- (d) See Appendix 2 (Traffic Circulation and Control) to this annex.
 - (2) Rail Terminals.
- (a) General cargo and container handling support are located at identified railheads.

ANNEX Q (SERVICE SUPPORT) TO OPORD 28 - 5TH COSCOM

- (b) 73rd Trans Bn conducts terminal transfer operations at railheads Sedden (MD411742), Ward (MD411744), Clarence (MD421738, Domett (MD421734), and Belfast (MD431727).
- (c) See Tab B (Railhead Data) to Annex B (Intelligence) and Tab A (SR/Railhead Data) to Appendix 2 (Traffic Circulation and Control) of this annex.
 - (3) Movements Control.
- (a) To request clearance to move on SRs, submit a Road Movement Document (Bid), to the 5th CMCC Highway Traffic Division.
- (b) To request rail movements, submit a Surface Transport Request through the supporting MCT.
 - (4) Requests for airdrop or air resupply.
- (a) To requests air movement and air resupply, see Appendix 2 (Traffic Circulation and Control) to this annex.
- (b) Preplanned. Submit requests for routine airdrop through supply channels to the 5th CMMC.
- (c) Immediate. Send request for immediate airdrop to the corps TOC through operations channels by the quickest means consistent with security.
- (d) Airstrips. See Tab A (Airfield Data) to Appendix 2 (Reconnaissance and Surveillance) to Annex B (Intelligence).

c. Services.

- (1) Construction. Forward requests for exception to corps engineer support policy of minimum essential work to the corps engineer for evaluation. See Annex D, Engineer.
- (2) CEB and laundry. S4s coordinate site and times of support from CEB and laundry teams or contracted HN personnel.

ANNEX Q (SERVICE SUPPORT) TO OPORD 28 — 5TH COSCOM

- (3) Mortuary Affairs. Units are responsible for evacuating remains to MA collection points for initial identification. See service support overlay for location of MA collection points in each AO.
- d. Labor. COSCOM ACofS, G1 staff identifies and requests numbers of general labors and/or HN personnel to offset personnel required in field services areas and to fill truck driver shortages.
 - e. Maintenance.
- (1) Equipment maintenance priorities are ERC A mission essential items, radios, and command and control vehicles.
 - (2) DS maintenance repair time limit is 36 to 48 hours.
- (3) Evacuate damaged equipment to nearest maintenance collecting points. See service support overlay for location of MCPs in the AO.
- 5. MEDICAL EVACUATION AND HOSPITALIZATION
 - a. Evacuation.
 - (1) Evacuation policy is -- days.
- (2) 850th Med Co AMB (Air) and 852nd Med Co AMB provide support on an area basis.
- (3) Preplanned patient collecting points, aid stations, and ambulance exchange points are shown on the service support overlay.
 - b. Hospitalization Support.
 - (1) Mobile Army Surgical Hospitals.

891st MASH vic (ND451694) 894th MASH vic (ND441694)

ANNEX Q (SERVICE SUPPORT) TO OPORD 28 - 5TH COSCOM

(2) Combat Support Hospitals.

805th CSH vic (MD431724). 806th CSH vic (MD421698).

c. Medical Logistics. 845th MED LOG BN (FWD) vic (MD441696).

6. PERSONNEL

- a. Unit strength maintenance. Submit operational immediate requests when Bn-sized or larger units fall below -- percent of authorized strength.
 - b. Morale.
- (1) Postal, personnel, and administrative services provided on an area basis by DS postal units and personnel service units vic
- (2) Finance support provided on an area basis by finance support commands vic \ldots .
 - (3) Force provider equipment will be operational by ------

7. CIVIL-MILITARY COOPERATION

- a. 98 and 99th CS units via Mayfield (MD441714).
- b. Contact with HN government agencies is coordinated through COSCOM ACofS, G5.
- c. Proposed civic action/civil relief projects are coordinated through COSCOM ACofS, G5.

8. MISCELLANEOUS

b. Reports. Submit logistics and personnel reports IAW Annex X (Reports), FSOP.

(SERVICE SUPPORT) TO OPORD 28 - 5TH COSCOM ANNEX Q:

9. COMMAND AND SIGNAL

ACKNOWLEDGE:

COSCOM Cdr's last name ΒG

OFFICIAL:

APPENDIXES:

Appendix 1 Service Support overlay Appendix 2 Traffic Circulation and Control Appendix 3 Personnel

Appendix 4 Legal

DISTRIBUTION:

80th Med Bde

10th CSG

20th CSG

30th CSG

COSCOM Staff

Glossary

Α **ASAS** All-Source Analysis System **AAFES** Army and Air Force Exchange Service **ASG** area support group **AALPS** Automated Air Load Planning System **ASL** authorized stockage list AASLT air assault **ASOC** Air support operations center **abn** airborne **ASP** ammunition supply point acft aircraft **ATCCS** Army Tactical Command and **ACofS** Assistant Chief of Staff Control System ACR armored cavalry regiment atchd attached **AD** air defense **ATMCT** air traffic movement control team **ADA** air defense artillery **ATP** ammunition transfer point ADC area damage control aug augmentation **adj** adjustment auth authorization **admin** administration autmv automotive **ADPE** automatic data processing equipment **AUTODIN** automatic digital network **AF** Air Force (USAF) **AVIM** aviation intermediate maintenance **AFATDS** Advanced Field Artillery Tactical avn aviation Data System **AVUM** aviation unit maintenance **afct** aircraft **AG** adjutant general B **ALOC** air lines of communication **BBP** break bulk point amb ambulance **BCOC** base cluster operations center **AMC** United States Army Materiel Command **BDAR** battle damage assessment and repair AMCO aircraft maintenance company **BDAT** battle damage assessment team **AMDF** Army Master Data File **bde** brigade ammo ammunition **BDOC** base defense operations center **AMO** automation management office **BMMC** brigade materiel management center **anl** analysis **bn** battalion **AO** area of operations **br** branch **AOR** area of responsibility **BSA** brigade support area **APOD** aerial port of debarkation **BSB** base support battalion **AR** Army regulation

 \mathbf{C}

CA civil affairs

armd armored

armt armament

CASCOM United States Army Combined Arms Support Command

cat catalogcav cavalrycbt combat

CCL combat-configured load

cdr commander

C-E Communications-Electronics
CEB clothing exchange and bath
CESI Communications-Electronics
Standing Instruction

cgo cargo **CH** chaplains

CID Criminal Investigation Division

CINC Commander in Chief

CIPEAC Communications Improvement Program Echelon Above Corps

CLT cellular logistics team

CMCC corps movement control center

cmd command
cml chemical

CMMC corps materiel management center

CMO civil-military operations

cntl controlco company

CofS Chief of Staff coll collection

comm communication(s)

COMMZ communications zone **COMSEC** communications security

con control

const construction

CONUS continental United States

conv conventional

COSCOM corps support command

CP command post **CS** combat support

CSA corps storage area

CSB corps support battalion

CSC combat stress control

CSG corps support group

CSH combat support hospital

CSM command sergeant major

CSR controlled supply rate

CSS combat service support

CSSAMO combat service support automation management office

CSSCS Combat Service Support Control System

CT control team

CTA common table of allowances

CTASC Corps/Theater ADP Service Center

CTO corps transportation officer

CUCV commercial utility cargo vehicle

D

DA Department of the Army

DAMMS-R Department of the Army Movement Management System-Redesigned

DAO division ammunition officer

DASPS-EDS Standard Port System - Enhanced

DCDR deputy commander

DCSC Defense Construction Supply Center

DD Department of Defense **DDN** Defense Data Network

decon decontamination

def defensedent dentistdet detachmentDF diesel fuel

DISCOM division support command

disp disposal **div** division

DLA Defense Logistics Agency

DMMC division materiel management center

Glossary-2

FAAD C2I Forward Area Air Defense **DMA** Defense Mapping Agency Command, Control, and Intelligence **DNVT** digital nonsecure voice telephone **FCP** functional command post **DOD** Department of Defense **FEBA** forward edge of the battle area **DODAAC** Department of Defense Activity Address Code **FG** finance group **DODAC** Department of Defense **fin** finance Ammunition Code **fld** field **DODIC** Department of Defense **FLOT** forward line of own troops identfication code **FM** field manual, frequency modulated **DS** direct support **FORSCOM** United States Army **DSA** division support area **Forces Command DSS** direct support system **FRAGO** fragmentary order **DSU** direct support unit **FSB** forward support battalion **DTG** date-time group **FSC** finance support command **DTO** division transportation officer **FSCOORD** fire support coordinator **FSOP** field standing operating procedures E **fwd** forward **EAC** echelons above corps **ECM** electronic countermeasures G **EEFI** essential elements of friendly information **G1** Assistant Chief of Staff, G1 (Personnel) **elec** electronics **G2** Assistant Chief of Staff, G2 (Intelligence) engr engineer G3 Assistant Chief of Staff, G3 (Operations and Plans) **ento** entomology **G4** Assistant Chief of Staff, G4 (Logistics) environ environmental **G5** Assistant Chief of Staff. G5 (Civil Affairs) **EOD** explosive ordnance disposal **G6** Assistant Chief of Staff, G6 (Information **EPLRS** Enhanced Position Location Reporting System Management Officer) **EPW** enemy prisoner of war **gen** general equip equipment gp group **ERC** equipment readiness code **GPM** gallons per minute **ESM** electronic warfare support measures **GS** general support evac evacuation **GSA** General Services Administration **EW** electronic warfare **GSU** general support unit F Н **FA** field artillery **HET** heavy-equipment transporter **HEL** helicopter

JTF joint task force **HHC** headquarters and headquarters company JTIDS Joint Tactical Information **HHD** headquarters and headquarters detachment Distribution System **hldg** holding HMMWV high mobility multipurpose wheeled vehicle K **KP** kitchen police **HN** host nation **HNS** host-nation support L **HNSCT** host-nation support control team **LAAWS** Legal Automation Army-Wide System **hosp** hospital **LCA** Logistic Control Activity **HQ** headquarters **ldry** laundry **HQDA** Headquarters Department of the Army **LIC** low-intensity conflict **hrs** hours **LID** light infantry division **HSC** United States Army Health Services Command LIN line item number **HSS** health service support **lim** limited **HT** highway traffic LO/LNO liaison officer **HTD** highway traffic division **LOC** lines of communication (logistic routes) **hvy** heavy **log** logistics **LOGCAP** logistical civil augmentation program Ι **LOGSTAT** logistics status **ID** infantry division **LPB** logistics preparation of the battlefield **IG** inspector general **LRO** logistics readiness officer **in** infantry **LSE** logistics support element indiv individual **It** light **INTSUM** intelligence summary M **invt** inventory **IPB** intelligence preparation of the battlefield MA mortuary affairs **ISEC** Information Systems Software Engineering Command MACOM major Army command maint maintenance MARC manpower requirements criteria MASH mobile army surgical hospital JA judge advocate mat materiel **JCS** Joint Chiefs of Staff max maximum **JMC** joint movement center MCA movement control agency **JOPS** Joint Operations Planning System **MCC** movement control center **JP** - 4,5,8,10 jet propulsion fuel, type 4,5,8, or 10 **MCO** movement control officer **JPO** Joint Petroleum Office

Glossary-4

MCP maintenance collecting point MCS maneuver control system

MCT movement control team

mech mechanized

med medium, medical

MEDBLD medical blood (management)

MEDCOM medical command MEDLOG medical logistics

MEDPAR medical patient account and reporting

METT-T mission, enemy, terrain, troops and time available

MFFIMS Mass Fatality Field

Information Management System

mgt management

MHE materials handling equipment

MI military intelligence

mil military

MKT mobile kitchen trailer

MLRS multiple-launch rocket system

MMC materiel management center

MOADS maneuver-oriented

ammunition distribution system

MOGAS motor gasoline

MOPP mission-oriented protection posture

MOS military occupational specialty

mov movementMP military policeMRE meal, ready-to-eat

MRO materiel release order

MRT movement regulating team

MSB main support battalion

MSE mobile subscriber equipment

msl missile

MSR main supply route

MSRT mobile subscriber radio-telephone terminal

MST maintenance support team

MTF medical treatment facility

MTOE modification table of organization and equipment

mun munitions

MWO modification work order MWR morale and welfare

N

NA not applicable

NATO North Atlantic Treaty Organization

NBC nuclear, biological, chemical

NBCE nuclear, biological, chemical element

NCO noncommissioned officer

NEO noncombatant evacuation operation

NICP national inventory control point

no number

nondiv nondivision

NSL nonstockage list

NSN national stock number

0

OCIE organizational clothing and individual equipment

OCONUS outside continental United Stated

ofc office

OPCON operational control

OPLAN operation plan **OPORD** operation order

ops operations

OPSEC operations security

ord ordnance

ORF operational readiness float

P

PA public affairs

PAO public affairs office(r)

pam pamphlet

PBO property book officer R **pers** personnel **RAOC** rear area operations center petri petroleum **RAU** radio access unit **pl** pipeline **RDD** required delivery date **PLL** prescribed load list **rds** rounds **PLS** palletized loading system **recon** reconstitution **plt** platoon rep repair **PM** preventive maintenance **repl** replacement **PMO** personnel management officer **RO** requisitioning objective **POC** point of contact **ROM** refuel-on-the-move **POD** port of debarkation **RMCC** regional movement control center **POE** port of embarkation **RMCT** regional movement control team **POM** preparation for oversea movement (units) **RMMC** regiment materiel management center **POMCUS** pre-positioning of materiel ROWPU reverse osmosis water purification unit configured to unit sets **rqmt** requirement **pos** position **RSP** religious support plan **PP&O** plans, programs, and operations **RSR** required supply rate **prevent** preventive **RTD** return to duty prgm program **RTF** regeneration task force **pro** procedure **RTOC** rear tactical operations center **proc** procurement **prop** property S **PRS** prepackaged resupply set **S1** Adjutant (U.S. Army) **PSNCO** personnel staff noncommissioned officer **S2** Intelligence Officer (U.S. Army) psych psychology **S3** Operations and Training Officer (U.S. Army) **PSYOP** psychological operations **S4** Supply Officer (U.S. Army) **pts** parts S&P stake and platform **PUL** preconfigured unit loads **S&S** supply and service PW prisoner of war SAAS Standard Army Ammunition System **PWRMS** pre-positioned war reserve **SAAS-DAO** Standard Army Ammunition materiel stocks System - Division Ammunition Office **SAMS** Standard Army Maintenance System 0 sani sanitation QM quartermaster SARSS Standard Army Retail Supply System **QSTAG** Quadripartite Standardization **SB** supply bulletin Agreement **SEALOC** sea lines of communications

T sec section **sep** separate **TA** theater army serv service **TAACOM** theater army area command **SGS** Secretary of the General Staff **TAADS** The Army Authorization Documents System **SIDPERS** Standard Installation/Division Personnel System tac tactical sig signal **TACCS** Tactical Army Combat Service Support Computer System **SIGSEC** signals security **TACSATCOM** tactical satellite communications SINGARS single-channel ground and airborne radio subsystem **TAMCA** theater army movement control agency **sit** situation **TAMMC** theater army materiel management center **SITREP** situation report TAMMIS Tactical Army Medical Management Information System **SJA** staff judge advocate **TAMMS** The Army Maintenance **SOI** signal operation instructions Management System **SOP** standing operating procedure **TC** training circular **SOUTHCOM** Southern Command TCF tactical combat force **SP** self-propelled, special purpose **TDA** tables of distribution and allowances SPBS-R Standard Property Book techs technicians System-Redesigned term terminal **SPOD** sea port of debarkation TM technical manual spt support TMDE test, measurement, and **sqdn** squadron diagnostic equipment **SR** supply route **tml** terminal **STACCS** Standard Theater Army Command and **TMMMC** Theater Medical Materiel Control System Management Center **STAMIS** Standard Army Management **TMR** transportation movements release **Information System TMT** transportation medium truck **STANAG** Standardization Agreement **TOC** tactical operations center **STRIRWARN** strike warning **TOE** table(s) of organization and equipment **STON** short ton **TPFDL** time-phased force deployment list **subs** subsistence **TPTRL** time-phased transportation **sup** supply requirements list surg surgeon **TRADOC** United States Army svc service Training and Doctrine Command **svcs** services

sys system

trans transportation

T Ration tray ration

TRANSCOM transportation command

trf transfertrk trucktrp troopTSA theater storage areaTTP trailer transfer point

US United States (of America)

U

UCMJ Uniform Code of Military Justice
ULC unit-level computer
ULLS Unit-Level Logistics System
ULLS-Avn Unit-Level Logistics System - Aviation
ULLS-PLL Unit-Level Logistics System - PLL
ULLS-S4 Unit-Level Logistics System - S4
UMMIPS Uniform Materiel Movement and
Issue Priority System
UMT unit ministry team

USA United States Army
USAF United States Air Force
USAREUR United States Army, Europe

V

veh vehiclevet veterinarianvic vicinity

W

WHNS wartime host-nation support wpn weapon
WSM weapon systems manager wtr water

References

Army Regulations (ARs)

	inity west attended to the state of the stat
1-201	Army Inspection Policy
20-1	Inspector General Activities and Procedures
25-1	The Army Information Resources Management Program
27-1	Judge Advocate Legal Service
40-5	Preventive Medicine
115-11	Army Topography
190-8	Enemy Prisoners of War Administration, Employment and Compensation
310-49	The Army Authorization Documents System (TAADS)
	Documentation Procedures and Processing
360-5	Army Public Affairs, Public Information
360-61	Community Relations
360-81	Command Information Program
380-5	Department of the Army Information Security Program
380-19	Information Systems Security
570-2	Manpower Requirements Criteria (MARC) - Tables of Organization and Equipment
600-20	Army Command Policy
638-30	Graves Registration Organization and Functions in Support of Major Military Operations
700-23	Supply of Health& Comfort Items
700-137	Logistics Civil Augmentation Program (LOGCAP)
702-6	Ammunition Stockpile Reliability Program (ASRP) and Army Nuclear Weapons Stockpile Reliability Program (ANWSRP)
710-1	Centralized Inventory Management of the Army Supply System
710-2	Supply Policy Below the Wholesale Level
725-50	Requisitioning, Receipt, and Issue System
750-1	Army Materiel Maintenance Policy and Retail Maintenance Operations
	Common Table of Allowances (CTAs)
50-900	Clothing and Individual Equipment
50-970	Expendable/Durable Items (Except: Medical, Class V, Repair Parts and Heraldic Items)
2028	Department of the Army Form (DA Form) Recommended Changes to Publications and Blank Forms
	Department of the Army Pamphlets (DA Pams)
600-8-1	SIDPERS Unit Level Procedures

700-15	Logistics Support of United Nations Peacekeeping Forces
	Field Manuals (FMs)
1-500	Army Aviation Maintenance
3-3	NBC Contamination Avoidance
3-5	NBC Decontamination
3-100	NBC Defense, Chemical Warfare, Smoke, and Flame Operations
3-101	Chemical Staffs and Units
5-100	Engineer Combat Operations
8-9	NATO Handbook on the Medical Aspects of NBC Defensive Operations
8-10	Health Service Support in a Theater of Operations
8-10-4	Medical Platoon Leader's Handbook - Tactics, Techniques, and Procedures
8-10-6	Medical Evacuation in a Theater of Operations - Tactics, Techniques, and Procedures
8-42	Medical Operations in Low-Intensity Conflict
8-55	Planning for Health Service Support
8-285	Treatment of Chemical Agent Casualties and Conventional Military Chemical Injuries
8-505	Army Medical Field Feeding Operations
9-6	Munitions Support in Theater of Operations
9-15	Explosive Ordnance Disposal Service and Unit Operations
9-38	Conventional Ammunition Unit Operations
9-59	Unit Operations for Support of Missile and Air Defense Gun Systems
10-23	Basic Doctrine for Army Field Feeding
10-52	Water Supply in Theaters of Operations
10-63	Handling of Deceased Personnel in Theaters of Operations
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10-400	Quartermaster Airdrop and Airdrop Equipment Support Units
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11-30	MSE Communications in the Corps/Division
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19-4	Military Police Team, Squad, Platoon Combat Operations
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41-10	Civil Affairs Operations
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46-1	Public Affairs Operations
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54-30	Corps Support Groups
54-40	Area Support Group
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55-10	Movement Control in a Theater of Operations
55-12	Movement of Units in Air Force Aircraft
55-30	Army Motor Transport Units and Operations
63-1	Support Battalions and Squadron, Separate Brigades and ACR
63-2	Division Support Command, Armored, Infantry, and Mechanized Infantry Divisions
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63-6	Combat Service Support in Low-Intensity Conflict
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100-2-1	Soviet Army Operations and Tactics
100-2-2	The Soviet Army Specialized Warfare and Rear Area Support
100-2-3	The Soviet Army: Troops, Organization, and Equipment
100-5	Operations
100-9	Reconstitution

100-10	Combat Service Support
100-15	Corps Operations
100-16	Support Operations: Echelons Above Corps
100-17	Mobilization, Deployment, Redeployment, and Demobilization
100-20	Military Operations in Low-Intensity Conflict
100-27	US Army/US Air Force Doctrine for Joint Airborne and Tactical Airlift Operations
101-5	Staff Organization and Operations
101-10-1/1	Staff Officers' Field Manual - Organizational, Technical, and Logistical Data (Volume 1)
101-10-1/2	Staff Officers' Field Manual - Organizational, Technical, and Logistical Data, Planning Factors (Volume 2)
	Joint Publications
3-0	Doctrine for Unified and Joint Operations
4-0	Doctrine for Logistics Support of Joint Operations
4-02	Doctrine for Health Service Support in Joint Operations
6-04	Joint Doctrine for Message Text Formatting
	Quadripartite Standardization Agreements (QSTAGs)
516	ABCA Armies Procedures for Supply Transactions
655	Emergency War Burial and Graves Registration
	Supply Bulletin (SB)
10-495-1	Standard B Hospital Rations for the Armed Forces
38-26	Nonnuclear Ammunition Supply Rates
710-2	Supply Control: Combat Consumption Rates for Ground and Aviation-Type Petroleum Products
	Standardization Agreements (STANAGs)*
2002	Warning Signs for the Marking of Contaminated or Dangerous Land Areas, Complete Equipments, Supplies and Stores
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2033	Interrogation of Prisoners of War (PW)
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4214	
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NATO Automatic and Semi-Automatic Interfaces Between the National Switched Telecommunications Systems of the Combat Zone and Between These Systems and the NATO Integrated Communications Systems (NICS) – Period from 1979 to the 1990s

*STANAGs are available for DOD users from Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120. (DD Form 1425 may be used to requisition documents.)

Training and Doctrine Command Pamphlet (TRADOC Pam)

25-30 Consolidated Index of Army Publications and Blank Forms

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8-10-2	Health Service Support in Corps and EAC – Tactics, Techniques, and Procedures
8-51	Combat Stress Control in a Theater of Operations
100-15-1	Corps Operations, Tactics and Techniques

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