FM 4-02.1

COMBAT HEALTH LOGISTICS

HEADQUARTERS, DEPARTMENT OF THE ARMY

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FIELD MANUAL
NO. 4-02.1

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 28 September 2001

COMBAT HEALTH LOGISTICS

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PREFACE

Combat health logistics (CHL), to include blood management, is one of the major Army Medical Department (AMEDD) functional areas. Under the Medical Force 2000 (MF2K) concept, CHL in a theater of operations (TO) is provided by the medical battalion, logistics (forward), the medical battalion, logistics (rear), the theater medical materiel management center, and the medical detachment (logistics support). These organizations were designed based upon the North Atlantic Treaty Organization (NATO) scenario and workloads. Current MF2K CHL doctrine is articulated in Field Manual (FM) 8-10-9.

Under Force XXI and the medical reengineering initiative (MRI), theater CHL will be provided by five new tables of organization and equipment (TOEs) organizations and a table of distribution and allowances (TDA) element from the United States (US) Army Medical Materiel Agency (USAMMA) (see Chapter 3). These new TOEs organizations were designed based on lessons learned from Desert Shield/ Desert Storm and recent contingency operations.

The purpose of this publication is to describe the CHL in support of a Force Projection Army into the 21st Century. It embodies doctrine based on the MRI and the A-edition TOE. The organizational structures presented in this publication reflect those established in the A-edition TOE in effect on the date of this publication. For a copy of your modified TOE, contact the Authorizations Documentation Directorate, 9900 Belvoir Road, Suite 120, ATTN: MOFI-FMA, Fort Belvoir, Virginia 22060-2287.

This publication is in concert with FM 8-10. Other FM 8- and FM 4-02 series publications will be referenced in the manual. Users should be familiar with FM 3-0 and FM 100-10.

The use of the term *echelon of care* in this publication is synonymous with *level of care* and *role of care*. The term *echelon of care* is the old NATO term. The term *role of care* is the new NATO and American, British, Canadian, and Australian (ABCA) term.

In this manual, the term *trauma specialist* is used in place of *combat medic*. This change is in line with the AMEDD's transition to the 91W military occupational specialty (MOS) which will replace MOS 91B and 91C when new modified TOEs take effect.

The proponent of this publication is the US Army Medical Department Center and School (AMEDDC&S). Send comments and recommendations directly to the Commander, AMEDDC&S, ATTN: MCCS-FCD-L, 1400 E. Grayson Street, Fort Sam Houston, Texas 78234-5052.

This publication implements and/or is in consonance with the following NATO International Standardization Agreements (STANAGs) and ABCA Quadripartite Standardization Agreements (QSTAGs):

NATO STANAG	ABCA QSTAG	TITLE
2931		Orders for the Camouflage of the Red Cross and the Red Crescent on Land in Tactical Operations
2939		Medical Requirements for Blood, Blood Donors, and Associated Equipment
2961		Classes of Supply of NATO Land Forces
	289	Minimum Essential Characteristics of Blood Products Shipping Container
	815	Blood Supply in the Area of Operations
	850	Blood, Blood Donor and Transfusion Equipment Requirements

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

Use of trade or brand names in this publication is for illustrative purposes only and does not imply endorsement by the Department of Defense (DOD).

CHAPTER 1

INTRODUCTION TO COMBAT HEALTH LOGISTICS

1-1. General

The end of the cold war, Operations Desert Shield/Storm, Somalia, Rwanda, and Haiti have left us facing a different enemy, different threats, and changing missions. To perform these new missions, the medical logistician must plan for more frequent deployments of shorter duration. These deployments may be to undeveloped theaters anywhere in the world. Therefore, the medical logistics (MEDLOG) support structure must be prepared to support medical task-force-sized elements during deployment and immediately upon arrival into the area of operations (AO). It must then support the medical elements until they are redeployed. These tasks will not negate the responsibility of the medical logisticians to provide support to its continental United States (CONUS) customers.

1-2. Scope of Combat Health Support Operations

a. Today's Army must focus on preventing aggression through strength with a smaller force primarily based in the CONUS. Future battlefields will be established based upon regional conflicts, most likely in areas where there are no forward deployed US forces. Combat health support (CHS) assets of the AMEDD must be tailorable for specific missions to support the Army's role of *force projection* in deterring the threat of global war and future uncertainties.

b. Combat health support will be required to support the US Army across the full spectrum of military operations:

- Offensive operations.
- Defensive operations.
- Stability operations.
- Support operations.

For a detailed discussion on military operations, refer to FM 3-0.

c. The mission of the AMEDD is to maintain the health of the Army and conserve its fighting strength. The AMEDD has responsibility for all medical services provided within the Department of the Army (DA). The AMEDD is a functionalized, Armywide system that includes all services related to the health of the Army and to the care and treatment of patients. These services include the following functional areas:

- Patient evacuation and medical regulating (FMs 8-10-6 and 8-10-26).
- Hospitalization (FM 4-02.10).
- Combat health support logistics, to include blood management.

- Dental services (FM 4-02.19).
- Veterinary services (FM 8-10-18).
- Preventive medicine services (FM 4-02.17).
- Combat stress control (CSC) services (FM 8-51).
- Area medical support (FM 4-02.24).
- Command, control, communications, computers, and intelligence (C4I) (FM 8-10-16).
- Medical laboratory services (FM 4-02 series or FM 8-series).

1-3. Medical Threat and Medical Intelligence

a. It is imperative that the medical logistician receives an updated medical threat and medical intelligence report on the AO. The reports should be considered in planning Class VIII requirements. The following paragraphs provide the medical threat elements and where to obtain medical intelligence.

b. The medical threat is a composite of all ongoing or potential enemy actions and environmental conditions that may render a soldier combat ineffective. The soldier's reduced effectiveness results from wounds, injuries, stress-induced performance deterioration, or diseases. The elements of the medical threat include—

- Diseases endemic to the AO.
- Environmental factors (heat, cold, humidity, and high altitude).
- Battle injuries.
- Biological warfare (BW) agents.
- Chemical warfare (CW) agents.
- Directed-energy (DE) sources.
- Blast-effect munitions.
- Flame and incendiary weapons.
- Nuclear weapons.
- Toxic industrial materiel (to include radiological, biological, and chemical).

- Combat operational stress.
- Level of compliance with the Law of Land Warfare and the Geneva Conventions (see Appendix A).

c. Medical intelligence is the product resulting from the collection, evaluation, analysis, integration, and interpretation of all available general health and bioscientific information. Medical intelligence is concerned with one or more of the medical aspects of foreign nations or the AO and which is significant to CHS or general military planning. Until medical information is processed, it is not considered to be medical intelligence. Medical information pertaining to foreign nations is processed by the Armed Forces Medical Intelligence Center (AFMIC). Medical threat information in AOs within the US can be obtained from—

- United States Army Medical Command (MEDCOM).
- United States AMEDD medical centers and activities within the immediate area.
- United States Army Center for Health Promotion and Preventive Medicine (USACHPPM).
- United States Civil Affairs and Psychological Operations Command.
- Local public health officials.
- American Public Health Association (FM 4-02.33).
- Centers for Disease Control and Prevention.
- World Health Organization.

d. Combat health logistics planners must acquaint themselves with the currently existing intelligence products. These products include national-level intelligence products such as the Medical Capabilities Studies, the AFMIC MEDIC CD-ROM, and Disease Occurrence Worldwide and access to Intellink that is located at brigade or higher level. These reports are specifically produced to support US military CHS operations conducted outside continental United States (OCONUS). These reports can be obtained through operational and medical intelligence channels (such as the medical brigade/MEDCOM). (Refer to FM 8-10-8 for specific information.)

e. As CHS plans and operations progress, the requirements for additional medical intelligence will occur. All such requirements should be requested through intelligence channels as soon as they are validated; when required, coordination should be effected with local agencies.

f. In OCONUS operations, the CHS planner must make himself aware of the medical threat posed by the disaster (such as continued flooding, earthquakes and aftershocks, or further explosions) and groups, factions, opponents, terrorists, or enemy forces operating within the AO. This threat also includes the capabilities and potential use of weapons systems and munitions, such as nuclear, biological, and

chemical (NBC) weapons, DE devices, or conventional armaments, toxic industrial material, and the potential for terrorist attacks or incidents, including the use of CW and BW agents or radiological material without weapons delivery systems. Combat health support planning and force survivability necessitates that CHS units remain abreast of the complete intelligence picture.

g. Should CHS personnel gain information of potential medical intelligence value while in the performance of their duties, they are required to report it to their Intelligence Officer (US Army) (S2) or supporting military intelligence element.

h. For additional information on the medical threat and intelligence preparation of the battlefield, refer to FM 8-10-8, FM 8-55, and FM 34-130.

1-4. Force Projection Considerations

a. Force projection is the demonstrated ability to quickly alert, mobilize, deploy, and operate anywhere in the world. Operations Just Cause and Desert Shield/Storm dramatized the ability of CHS units to synchronize assets at all levels of war and respond rapidly to a force projection crisis.

b. The intent and purpose of force projection requires that combat service support (CSS) commanders deploy only those forces necessary to support the task force. Combat service support commanders and planners must tailor units to meet the task force requirements. Only personnel, equipment, and supplies required to support the mission should be deployed.

c. Force projection requires early critical analysis of the tactical commander's intent and the threat. Analyses will be required at every level of logistics—strategic, operational, and tactical—and in stability operations and support operations. The keys are anticipation of requirements and the synchronization of CHS services to the tactical commander's mission.

d. The development of forward logistics bases, intermediate staging bases, and lodgments in a theater may be required. The theater may have full port facilities (air and sea), or it may require over-the-shore or austere airflow operations. Additionally, the CHL planner must consider contract support, host-nation support (HNS), international STANAGs, and other services (if available) as a means to augment and assist military capabilities. This is critical during the initial phases of an operation.

e. Besides supporting task force deployments and combat operations, the CSS planner must plan for and execute post-conflict support. Certain CHS units should plan to be among the first into an AO and the last to redeploy. This is primarily due to the need for CHS and Class VIII supplies before, during, and after operations. Force projection operations will challenge CHL leaders at all levels.

f. To anticipate requirements, the logistics planner must fully understand the commander's intent. He must also know the location of supported units, maintain total asset visibility before and throughout the operation, and maintain a continuous intelligence picture of the AO. Responsiveness is the keynote of the medical materiel management system. The needs of the "patient" are paramount.

1-5. Combat Health Logistics Support

a. The office of the Deputy Chief of Staff for Logistics (DCSLOG) is the proponent office for all Army logistics policy. The Office of The Surgeon General (OTSG) is the executive agent responsible for development and management of CHL (Class VIII). The logistics division, MEDCOM, has primary staff responsibility for developing policies and procedures and providing guidance in the area of medical materiel management. The US Army Medical Research and Materiel Command (USAMRMC) and USAMMA have the mission of implementation and management of medical materiel programs in support of Armywide CHL.

b. Combat health logistics follows the policies of Army Regulation (AR) 700-Series with exceptions provided in AR 40-61. The policies and procedures covered in AR 40-61 are unique to medical materiel and operations which are subject to regulations and standards of the Food and Drug Administration, the Environmental Protection Agency, the Drug Enforcement Agency, and the Joint Commission on Accreditation of Healthcare Organizations. Additionally, Class VIII supplies and equipment are afforded protective status under the provisions of the Geneva Conventions (see Appendix A).

c. Logistics support may be executed by strategic, operational, or tactical logistics systems. These three levels of logistics support correlate to the three levels of war (FM 3-0).

(1) Strategic logistics supports the attainment of broad goals and objectives established by the National Command Authorities in national security policies. It includes special activities under DA control and the national inventory control points; national maintenance points; and depots, arsenals, data banks, plants, and factories associated with the US Army Materiel Command (AMC). Strategic functions are performed in CONUS and in the rear of the theater. See Appendix B for strategic CHL information and points of contact for customer assistance.

(2) Operational logistics support the commander's plan in either a mature or immature theater. Operational logistics link strategic logistics to tactical logistics on the battlefield, ensuring support and success at the tactical level. Operational support attempts to balance the strategic planning requirements with the needs of tactical operations in joint and combined campaigns, major operations, and other military operations within an AO. Operational logistics are conducted by echelons above corps (EAC) and corps and below organizations to support tactical logistics. Chapters 2 through 6 discuss CHL and CHL organizations at the operational and tactical levels.

(3) Tactical logistics support the commander's plan at the operational level of military operations. At this level, the essential functions of supply, maintenance, transportation, technical assistance, human resources support (HRS), CHS, and field services are delivered to soldiers to permit them to accomplish their mission. The medical logistician focuses on CHL to support and sustain the soldier.

d. Combat health logistics encompasses functional areas that are all tied together as a subsystem of the multifunctional CHS system. Combat health logistics support is characterized by goals, policies, procedures, and organizational structures and is directly related to the overall CHS system. It interfaces as a facilitating-type subsystem responsive first and foremost to patient care and secondly to the Army's logistical system. The functional areas include—

- Materiel procurement.

- Materiel management (receiving, shipping, storage, and property accounting).
- Medical equipment maintenance and repair support.
- Prescription optical lens fabrication.
- Blood storage and distribution.
- Arranging contract support.

e. The materiel system has long recognized that certain commodities possess peculiarities or characteristics that make them sufficiently distinctive so that they must be managed by specifically trained personnel. Class III and Class IV are typical examples, as is medical materiel. In this regard, in their decision of 20 July 1967, the Joint Chiefs of Staff directed that medical materiel be removed from Class III and Class IV and be designated as a separate class of supply (Class VIII). See Appendix C for classes of supplies.

1-6. Significance of the Medical Commodity

a. In comparison with some commodities, the approximately 15,000 standard medical items that comprise the management effort are a relatively insignificant number. Medical tonnage is not a significant consideration. The significance of the medical commodity lies in the number of line items shipped.

b. Specific commodity peculiarities include—

(1) Items subject to deterioration (short shelf life and dated items).

(2) Items subject to damage by freezing.

(3) Items requiring refrigeration.

(4) Items that must be frozen for preservation.

(5) Flammable and corrosive items.

(6) Items included under the Drug Abuse Control Amendment.

(7) Security items, to include alcohol, narcotics, and precious metals.

(8) Radioactive materials.

(9) Fragile items requiring special handling and packaging.

(10) Medical gases.

c. Considerations governing inventory management of the medical commodity include, but are not necessarily limited to, the fact that—

(1) Request for, and actual use of, Class VIII is preceded by a professional decision.

(2) Choice of substitution is extremely limited, professionally directed, and controlled and monitored by technical specialists.

(3) Nonstandard items are an integral and significant element of the logistical management effort.

(4) Inherent to medical materiel management are the functions of medical equipment maintenance and repair parts support, as well as optical fabrication and repair services.

(5) Strict adherence to the provisions of the Geneva Conventions precludes the storage of medical materiel with other commodities.

d. Basic to any logistical plan are the principles of anticipated user needs and continued support. These principles imply that the individual directing this support must have a thorough knowledge of the system being supported, as well as an understanding of how and why the particular item being supplied is used. Combat health logistics cannot operate on the basis of historical data alone. Many external factors—the judgment of the physician, environmental factors, and the peculiarities of the patient's condition—affect the demands for an item. The nonavailability of certain pieces of equipment or supply items can cause an interruption in the CHS being provided.

CHAPTER 2

ARMY PRE-POSITIONED CLASS VIII STOCKS

2-1. General

The CONUS support base supports the theater Army (TA). It is composed of numerous elements whose missions are involved in supporting the US forces in the TO. These elements are commonly referred to as wholesale logistics elements since they function as *suppliers to the suppliers*. They have defined lines of command and control (C2). The President, through his Cabinet, directly controls the General Services Administration. The Secretary of Defense directly controls the Defense Logistics Agency (DLA). The Secretary of the Army, through the Chief of Staff, controls the AMC. The DCSLOG is the principal DA staff officer who coordinates and manages internal/external supply, service, and maintenance operations. The AMC is responsible for the operation of the logistical structure (less Class VIII) that supports the operational forces of the Army and directs the activities of its depots, laboratories, arsenals, manufacturing facilities, maintenance shops, proving grounds, test ranges, and procurement offices throughout the world. Class VIII materiel is centrally managed by USAMMA as directed by Headquarters, DA.

2-2. Army Pre-Positioned Stocks

a. Army pre-positioned stocks (APS), formerly known as war reserve stocks, consist of military materiel specifically computed and acquired in peacetime to meet the increased military requirements at the outbreak of war. It constitutes the third leg of the Army's Strategic Mobility Triad (airlift, sealift, and pre-positioning). Army pre-positioned stocks support mobilization requirements and sustain operations until resupply can be established and expanded. Army pre-positioned stocks include pre-positioned brigade and unit sets, operational projects, APS sustainment, and APS for allies. The term *Pre-positioned Materiel Configured To Unit Sets* is no longer used. Army pre-positioned stocks are pre-positioned afloat, in overseas theaters, and in areas within CONUS. Policies and procedures for the management of APS are described in ARs 710-1, 710-2, and 40-61 (Chapter 9). Class VIII requirements are programmed by USAMMA.

b. These APS are strategically located within a potential theater that can best support requirements of the warfighting Commander in Chief (CINC). The AMC has the responsibility for APS (less Class VIII that is managed by USAMMA). They support post D-day combat consumption until supplies arrive from CONUS or other theater storage areas. A maximum of 10 days of supplies, or the number of days as specified by the governing operation plan, is positioned in a theater to support the transition to war. At or near the start of hostilities, they are released to the theater support command (TSC)/support groups where they are stored. In a theater, the CHL planner is responsible to the theater commander for management of pre-positioned Class VIII stocks.

c. Army pre-positioned reserve assets are positioned in the following areas:

(1) Army Pre-Positioned Stocks-1 (CONUS), operational project stocks (OPS) and war reserve sustainment stocks (WRSS).

(2) Army Pre-Positioned Stocks-2 (Europe), Army pre-positioned sets, OPS, and limited WRSS.

(3) Army Pre-Positioned Stocks-3 (Army pre-positioned afloat), pre-positioned sets, OPS, and WRSS.

(4) Army Pre-Positioned Stocks-4 (Pacific), pre-positioned sets, OPS, WRSS, and War Reserve Stocks for Allies-Korea.

(5) Army Pre-Positioned Stocks-5 (Southwest Asia), pre-positioned sets, OPS, and WRSS.

2-3. Host-Nation Support

Host-nation support is the civil and military assistance provided by host nations (HNs) to allied forces and organizations. This support may occur in time of peace, transition to war, or war. The US continues to rely on allies to supplement the organic support capabilities of the US. Host-nation support in wartime may be used in such areas as transportation, maintenance, construction, civilian labor, communications, facilities, utilities, air/seaport operations, rear area security, and the movement of US forces and materiel between the ports of debarkation and combat areas. As a rule, the location of forces on the battlefield determines whether you can use HNS. The rearmost areas are ideal for this support. Corps rear areas and EAC are more static and lend themselves to HNS. However, in an undeveloped theater, HNS may be used wherever needed. Army Regulation 570-9 has DA policies and responsibilities for HNS. In the past, US forces relied on organic support. Today, logisticians must keep abreast of agreements on how their allies can help support the battle logistically.

2-4. Agreements

International agreements document commitments for HNS. Through agreements, the HN sets forth its intent and willingness to support US requirements. For example: Will HN civilians remain at APS sites after hostilities begin? Is the HN to retain territorial responsibility and control of supply ports, rail facilities, and airspace? It may be that the HN will turn over control of main supply routes to another nation or alliance. Host-nation transport could be used to move supplies from seaports to US support organizations and beyond. Support available in a given theater will depend on the HN's political climate; national laws; industrial development; and military, civilian, and commercial resources.

2-5. Logistics Civil Augmentation Program

In the event HNS in wartime is incapable of satisfying all support requirements, the logistics civil augmentation program (LOGCAP) will be initiated to fill the shortfalls. The LOGCAP is a program designed to obtain civilian contractual assistance in peace to meet US crisis and wartime support requirements worldwide through the advanced identification, planned acquisition, and use of global corporate assets.

2-6. United States Army Medical Department Pre-Positioned Stock Roles and Responsibilities

a. The Surgeon General/Commander, Medical Command. The OTSG has Army staff responsibility for assisting the Secretary of the Army and the Chief of Staff, Army in discharging Title 10 responsibility for health services for the Army and other agencies and organizations entitled to military

health services. Inclusive is the executive agent responsibility for the Class VIII portion of non-AMEDD-managed APS logistics programs.

b. The United States Army Medical Materiel Agency. The USAMMA, as a subordinate activity of USAMRMC, was designated by the OTSG as the executive agent for Class VIII materiel and manager of the Class VIII portion of the APS and OTSG contingency programs. The USAMMA provides total item property records for Class VIII as the program manager and ensures coordinated and central materiel requirements determination, acquisition, accountability, and funding of care of supplies in storage and other support costs. The USAMMA provides an annual update of the APS programs in Supply Bulletin 8-75-series and OTSG Contingencies.

c. Release Authority. Release authority for medical APS materiel to designated units/major theaters of war can be granted to USAMMA as directed by the Chairman, Joint Chiefs of Staff, Army per AR 710-1. Release of medical APS materiel that includes medical chemical defense materiel (MCDM), Reserve Component hospital decrement, and potency and dated (P&D) materiel in support of small-scale contingencies will be approved through the OTSG.

CHAPTER 3

COMBAT HEALTH LOGISTICS

Section I. COMBAT HEALTH LOGISTICS SUPPORT

3-1. General

This section provides an introduction to theater CHL. It provides the overall CHL mission and lists the medical organizations to logistically support the conduct of operations under Force XXI. Recent operations in the Mideast, Somalia, Bosnia, Kosovo, and elsewhere have demonstrated the Army's capability to deploy when required. These operations emphasized a logistical system that must be responsive and capable as the forces it supports. Medical materiel must be delivered to the right unit at the right time in the requested amounts in an expeditious manner, especially considering the perishable nature of the recipient (the wounded or ill soldier) and the types of supplies involved.

3-2. Mission

The CHL mission is to provide—

- Class VIII supplies and equipment (medical materiel, to include medical-peculiar repair parts).
- Optical fabrication and repair.
- Medical equipment maintenance and repair.
- A single-integrated medical logistics manager (SIMLM) for joint operations.
- Blood management for Army, joint, or combined operations.
- Arrangement for contract support.
- Patient movement items (PMIs).

3-3. Theater Combat Health Logistics

a. Theater CHL encompasses the planning and execution of medical supply operations, medical equipment maintenance, optical fabrication and repair, contracting services, medical hazardous waste management and disposal, production and distribution of medical gases, and blood banking services for Army, Joint Service, and combined and interagency operations under the technical guidance of the appropriate command surgeon. Combat health logistics is anticipatory with select units capable of operating in a split-based or dual-based mode. See Joint Publication 4-02.1 for CHL considerations in joint operations.

b. During initial deployment, units will rely on authorized basic loads in medical sets, kits, and outfits, prescribed load lists (PLLs), and unit deployment packages. Initial resupply of Class VIII P&D materiel will be provided for high priority echelons above division (EAD) units via initial resupply package

managed by USAMMA through day D+31. The resupply package must be built utilizing contractual resources. Resupply of non-P&D consumable materiel and all consumables beyond day D+31 for other units and selected EAD will be provided by the MEDLOG battalion deployed to the AO. Upon DA approval to use APS, MEDLOG battalions will roll over USAMMA-managed APS in the AO into their operational levels and utilize this stock to support customer requisitions until MEDLOG units establish sustainment channels.

c. Commanders prioritize the mix of forces based on the time-phased force and deployment data to get them into theater where and when required. Active and continuous command involvement in all stages of force projection, coupled with detailed reversed planning, combine to ensure the right forces with the right support are available and ready to conduct operations. See Appendix D for strategic movement data for TOE MEDLOG organizations.

d. The theater CHL consists of the following organizations:

- Medical Logistics Management Center (MLMC).
- Headquarters and headquarters detachment (HHD), MEDLOG battalion.
- Logistics support company.
- Medical logistics company.
- Blood support detachment (BSD).
- Medical logistics support team (MLST) (USAMMA asset).

e. Figure 3-1 shows the connectivity of the CONUS-based AMEDD logistics organizations and the MEDLOG organizations in support of a TO. The organizations are discussed in Section II of this chapter. The division medical supply office (DMSO) will not be an organizational element of the Force XXI division. The DMSO is shown in Figure 3-1 to reflect divisional MEDLOG support. The DMSO will be removed from all Force XXI heavy divisions when the MEDLOG automation systems are mature. Until then all requests, except blood, will continue to go to the DMSO. Requisitions that cannot be filled by the DMSO, including blood, will be passed to the MEDLOG company (corps forward area). Once the DMSO goes away, all requests from the brigade support area (BSA) or division support area (DSA) will go directly to the MEDLOG company (corps forward area). The medical laboratory specialist at the forward support medical company (FSMC) will requisition blood for both the FSMC and the forward surgical team (FST) from the forward cell of the BSD collocated with the MEDLOG company. Also in Force XXI, the FSMC will become a formal supply point and provide resupply for the maneuver battalions. Those requests that the FSMC cannot fill will be forwarded to the MEDLOG company (corps forward area). The purpose of the Medical Materiel Management Branch (MMMB) in the division support command (DISCOM) is twofold. The MMMB monitors the Class VIII status within the division and prioritizes or redirects supplies if it becomes tactically necessary to do so. The MMMB coordinates for transportation assets for throughput distribution of Class VIII via the battlefield distribution system.

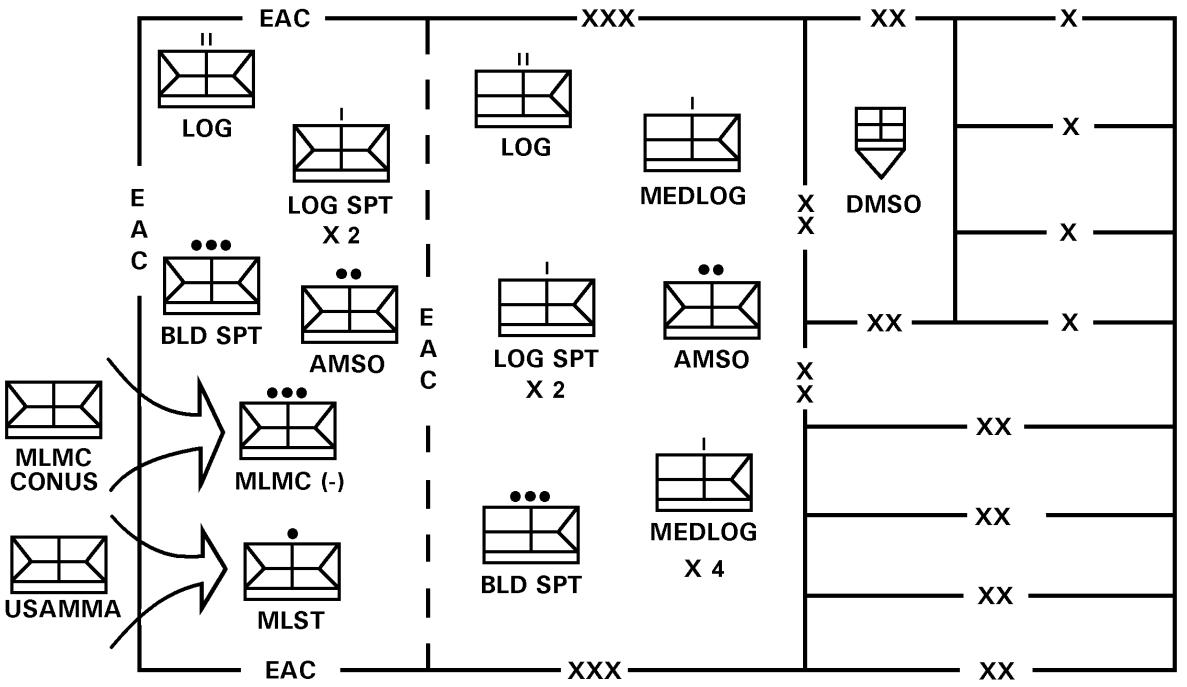


Figure 3-1. Combat health logistics support.

Section II. COMBAT HEALTH LOGISTICS SUPPORT ORGANIZATIONS

3-4. General

This section discusses the theater's CHL organizations and their organic elements. It discusses their assignment, capabilities, and concept of operations.

3-5. Medical Logistics Management Center (TOE 08699A000)

a. The MLMC (Figure 3-2) is responsible for providing management over Class VIII commodity management and medical maintenance within the AO, using split-based operations. The MLMC base will remain in CONUS while deploying a support team into the AO, linking the strategic to the operational level of logistics. The support team will also link Class VIII management with the distribution system within the

AO by collocating a distribution section with the corps support command (COSCOM) or TSC. The MLMC, in conjunction with the MEDLOG battalion, will serve as the SIMLM for joint operations (Appendix E). The MLMC can coordinate Class VIII specific contracting requirements for the theater surgeon with the TSC contracting office. The MLMC is composed of the following elements:

(1) *Headquarters section*. This section provides C2 and administrative support for the MLMC.

(2) *Support division*. This division coordinates staff functions pertaining to CHL. It is responsible for placement and operation of the MLMC and the execution of operational plans.

(3) *Materiel management division*. This division is responsible for monitoring Class VIII materiel management in CONUS and in the theater. It has daily visibility of the theater's asset position for Class VIII materiel and availability of CONUS-based stocks. Requisitions for critical items are monitored and stockage objectives are analyzed. This division interfaces with the strategic and operational level of logistics and performs special studies and analysis of logistical data.

(4) *Medical maintenance management division*. This division is responsible for the theater medical maintenance program. It serves as the medical maintenance consultant to the TA surgeon. Analysis of workload data, PLL management, and maintenance programs are part of this division's activities. The division reviews maintenance status and performance reports and manages allocation of maintenance personnel assets and the Medical Standby Equipment Program (MEDSTEP [formally called operational readiness float]). It also provides assistance to units with maintenance backlogs through resource allocation and equipment evacuation policies.

(5) *Medical logistics management center forward teams*. The MLMC has two support teams. A support team will deploy into the AO to provide centralized management of medical materiel, medical maintenance, and coordination of the distribution of Class VIII materiel within the AO. The forward team will collocate with the Theater Distribution Management Center, TSC. The forward team will provide liaison officers (or noncommissioned officers [NCOs]) to each deployed MEDLOG battalion and to the theater surgeon's location (if not collocated with the TSC). The MLMC forward team will provide the "information management" portion of SIMLM while the theater MEDLOG battalion will provide "distribution management" portion of the SIMLM mission, when the Army is designated as the SIMLM by the CINC, for joint operations. The MLMC forward team will still provide the information management portion of the SIMLM mission when the Army is not designated as the SIMLM for joint operations. The support team will be subordinate to the theater MEDCOM or TSC when there is no MEDCOM in the theater. The forward team will collocate with the corps support operations section of the COSCOM when the TSC is not deployed.

(6) *Detachment headquarters*. Personnel of this section will supervise and perform unit and general supply functions, billeting, discipline, security, and training for the MLMC.

b. The MLMC support team is dependent upon elements of the TSC for CHS, food service support, transportation, laundry and bath, finance, personnel and administrative services, legal, religious support, communications, and unit maintenance.

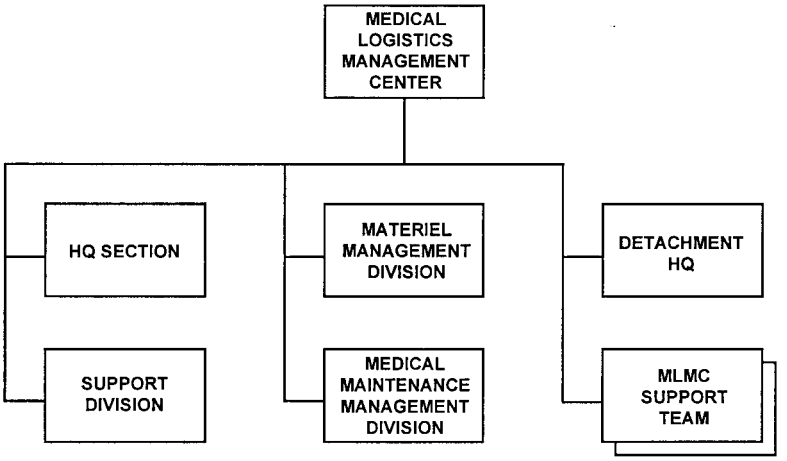


Figure 3-2. Medical Logistics Management Center.

3-6. Headquarters and Headquarters Detachment, Medical Logistics Battalion (TOE 08496A000)

a. The HHD, MEDLOG battalion (Figure 3-3) is assigned to a Headquarters and Headquarters Company (HHC) MEDCOM, TOE 08411A000, or HHC Medical Brigade, TOE 08422A100. It is responsible for providing C2, staff planning, and supervision of operations, training, and administration for a variable number of attached MEDLOG companies, logistics support companies, and BSDs. This overall control covers the whole spectrum of MEDLOG services including Class VIII materiel, single- and multivision optical lens fabrication and repair, medical maintenance, contracting, and blood and blood product collection, processing, storage, and distribution. The HHD, MEDLOG battalion structure is improved under MRI with the addition of a support operations section and a signal support section, and combines battalion organizational maintenance and medical maintenance under a senior medical maintenance warrant officer.

b. The HHD, MEDLOG battalion supports division, corps, and EAC units (depending on area of assignment), and is composed of the following elements:

(1) C*ommand section*. This section provides for the C2 of assigned and attached logistical organizations. Command and specific responsibilities and functions are as in all headquarters elements.

(*a*) *Adjutant* (*US Army*) (*S1*) *section*. The section is responsible for advising the commander on all aspects of HRS. Human resources support encompasses manning the force, personnel services, and personnel support. These activities include personnel accounting and strength reporting, casualty operations management, postal operations management, replacement management, and morale, welfare, and recreation activities. The S1 also has coordinating responsibility for religious, finance, and legal support.

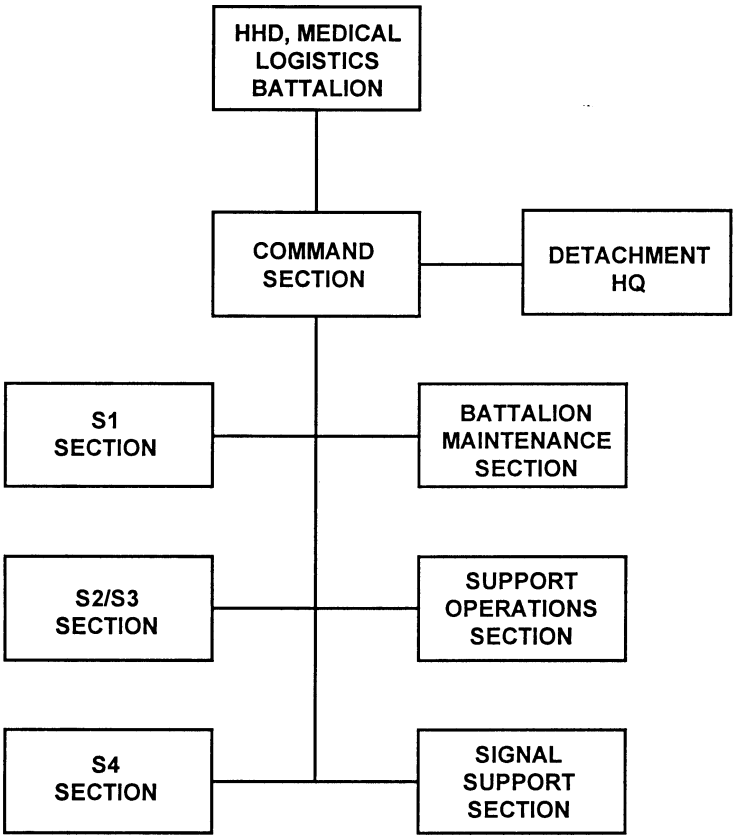


Figure 3-3. Headquarters and headquarters detachment, medical logistics battalion.

(*b*) *Intelligence Officer* (*US Army*)*/Operations and Training Officer* (*US Army*) (*S3*) *section.* This section is responsible for battalion-level communications, security, intelligence, and operations planning. Communications will include both internal and external communication systems. This section coordinates input from staff and commanders in the development of operational plans. Relocation of battalion assets will be coordinated by this section. The section is also responsible to the commander for the battalion's overall readiness.

(*c*) *Supply Officer* (*US Army*) (*S4*) *section.* This section plans, coordinates, and supervises battalion-level unit supply and services and transportation activities for the battalion. It maintains and manages the property book and budget register for assigned and attached units. The section also provides logistical planning input to the S2/S3 for implementation of operations. The S4 will be responsible for the battalion's logistical readiness.

(*d*) *Battalion maintenance section*. This section provides oversight for direct support (DS)/general support (GS) medical maintenance for all units within the MEDLOG battalion's area of responsibility. This section is also responsible for organizational vehicle maintenance, equipment records and repair parts, fuel distribution, power generation repair, and vehicle recovery operations support to assigned or attached units, and provides oversight on the maintenance of organic equipment in the attached companies.

(*e*) *Support operations section*. This section is responsible for all coordination of operational day-to-day customer support and quality assurance functions, to include monitoring supported unit locations and inventory management for Class VIII within the AO. It is responsible for the installation and operation of logistics information processing systems for the battalion. This section also provides liaison for distribution of Class VIII supplies, blood, and blood products to the COSCOM's support operations section. This section, when designated by the CINC, and when augmented with US Air Force (USAF)/Navy personnel, will perform customer support functions of the distribution management portion of the SIMLM mission.

(*f*) *Signal support section*. This section is responsible for the installation, operation, and maintenance of information processing systems for the battalion. This section configures and integrates data processing systems and satellite transmission equipment to facilitate operations.

(2) *Detachment headquarters*. The detachment headquarters provides C2 of the HHD, MEDLOG battalion. Personnel of this detachment will supervise and perform unit and general supply functions.

c. At corps, the HHD, MEDLOG battalion will be under the C2 of the corps MEDCOM or medical brigade. At EAC, the HHD, MEDLOG battalion will be under the C2 of the EAC MEDCOM or medical brigade.

d. The HHD, MEDLOG battalion is dependent upon appropriate elements of the corps and EAC for unit-level CHS; supplemental transportation; unit maintenance; finance, HRS, religious, and legal services, and technical intelligence for captured medical materiel. This unit is also dependent upon corps and EAC transportation assets to provide unit distribution and signal assets for bandwidth communications. This unit requires augmentation in an NBC environment for decontamination.

3-7. Logistics Support Company (TOE 08497A000)

a. The logistics support company (Figure 3-4) provides medical materiel, medical maintenance, and single- and multivision optical lens fabrication and repair to corps and EAC medical units operating within the AO. It also provides backup support to the MEDLOG company (TOE 08488A000). The logistics support company will normally be under the C2 of the HHD, MEDLOG battalion, forming the MEDLOG based for the AO. The logistics support company has no internal automation capability for MEDLOG management. It is dependent upon the HHD, MEDLOG battalion, for their logistics automation. A five-division corps will normally require two logistics support companies under the C2 of a HHD, MEDLOG battalion.

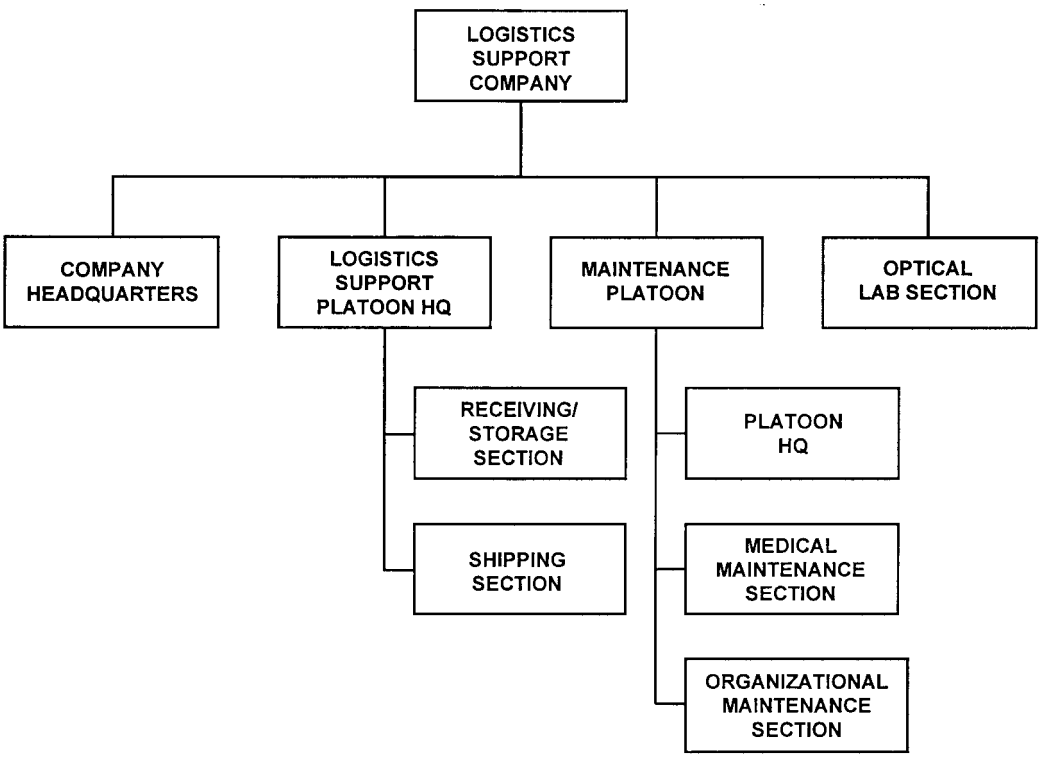


Figure 3-4. Medical logistics support company.

b. The logistics support company is composed of the following elements:

(1) *Company headquarters*. The company headquarters provides C2 of the logistics support company. Company personnel supervise and perform unit plans/operations and general supply functions. This company provides food service for the HHD, MEDLOG battalion, the BSD, and the MLMC support teams.

(2) *Logistics support platoon headquarters*. This platoon ensures that stocks remain in an issuable condition while in storage. This includes the planning prior to receipt of supplies, locating stocks that provides first-in/first-out handling, utilizing space efficiently, and maintaining segregation and disposition of stock as determined by the accountable officer. This platoon consists of a—

(*a*) *Receiving/storage section*. This section prepares and processes receipt documents for incoming shipments. It is also responsible for the storage, preservation, location, and accountability for medical supplies and equipment. This section is capable of deploying a five-person mobile forward cell for dual-based operations.

(*b*) *Shipping section*. This section plans for release of materiel to transportation, coordinates for vehicles, stages shipments for pickup, and prepares movement documents. This section is capable of deploying a five-person mobile forward support cell in support of dual-based operations.

(3) *Optical laboratory section*. This section provides C2 and quality assurance over the optical fabrication mission within the AO. It also provides single lens/multivision lens fabrication and repair. All requisitions for contact lenses for AH-64 aviators only are submitted to and approved by this section.

(4) *Maintenance platoon headquarters*. This platoon is responsible for DS and GS medical maintenance on an area basis and organizational equipment maintenance within the company.

(5) *Medical maintenance section*. This section performs limited intermediate-level (GS) maintenance services to all units within the company's area of responsibility. It also performs unit-level maintenance for units in its AO that do not have organic medial equipment maintenance personnel assigned or attached, or not supported by biomedical equipment repairmen from other units. This section can deploy three mobile support teams.

(6) *Organizational maintenance section*. This section is responsible for vehicle maintenance, equipment records and repair parts, fuel distribution, and power generation repair.

3-8. Medical Logistics Company (TOE 08488A000)

a. The MEDLOG company (Figure 3-5) provides medical materiel, medical maintenance, single- and multivision optical lens fabrication and repair, and PMIs (see Appendix F) to division and corps medical units operating within the division AO. The MEDLOG company has no organic blood support capability. A cell from the BSD may be collocated with the company to provide blood support to the division. The company will normally be under the C2 of the HHD, MEDLOG battalion. The company has the capability for limited self-sustainment during initial operations, meeting the requirement for early entry into the AO, or as part of a task organization.

b. The MEDLOG company is composed of the following elements:

(1) *Company headquarters*. This section provides C2 of the MEDLOG company. Personnel of this section supervise and perform unit plans and operations and general supply functions. Food service personnel will supplement a collocated unit for daily work assignments to support the MEDLOG company.

(2) *Logistics support platoon*. This platoon is composed of—

(*a*) *Logistics support platoon headquarters*. This platoon ensures that stocks remain in an issuable condition while in storage. This includes the planning prior to receipt of supplies, locating stocks that provides first-in/first-out handling, utilizing space efficiently, and maintaining segregation and disposition of stock as determined by the accountable officer.

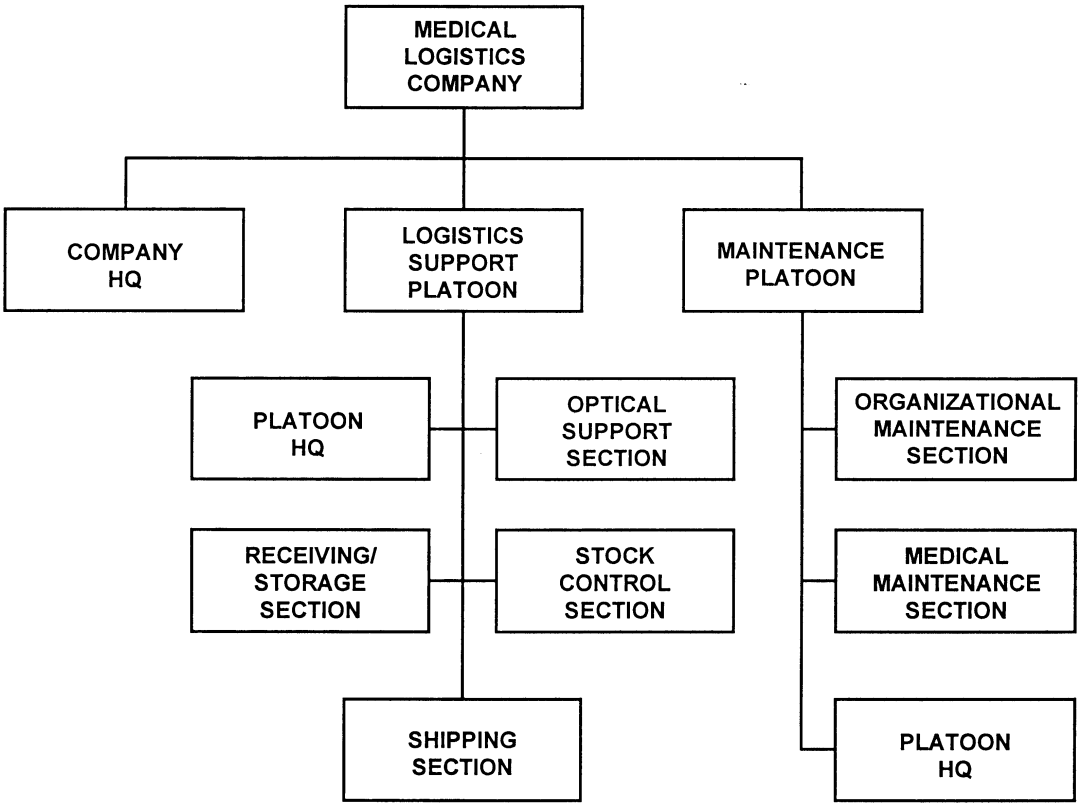


Figure 3-5. Medical logistics company.

(*b*) *Receiving and storage section.* This section prepares and processes receipt documents for incoming shipments. It is responsible for the storage, preservation, location, and accountability for medical supplies and equipment. It is capable of deploying a five-person mobile forward support cell for dual-based operations.

(*c*) *Shipping section.* This section plans for release of materiel to transportation, coordinates for vehicles, stages shipments for pick up, and prepares movement documents. This section is capable of deploying a five-person mobile forward support cell for dual-based operations. This section must stay in close synchronization and communication with the COSCOM and DISCOM distribution management centers (DMCs) in order to utilize theater transportation assets to deliver supplies.

(*d*) *Stock control section.* This section maintains accountability for all medical materiel and coordinates all stock control functions. It also maintains accountability for all materiel received, stored,

and issued in the MEDLOG company. This section is capable of deploying a three-person mobile forward support cell in support of dual-based operations.

(*e*) *Optical support section*. This section performs single- and multivision optical fabrication and repair.

(3) *Maintenance platoon*. The maintenance platoon is composed of a—

(*a*) *Maintenance platoon headquarters*. This platoon performs DS and GS medical maintenance services on an area basis. It also provides organizational maintenance for all vehicles and power generation equipment organic to the company.

(*b*) *Medical maintenance section*. This section performs limited intermediate-level (GS) maintenance services to all units within the company's AO. It also performs unit-level maintenance for units in its AO which do not have organic medical equipment maintenance personnel assigned or attached, or are not supported by medical equipment repairer from other units. This section can deploy three mobile support teams.

(*c*) *Organizational maintenance section*. This section is responsible for vehicle maintenance, equipment records and repair parts, fuel distribution, and power generation repair for organic company assets.

3-9. Blood Support Detachment (TOE 08489A000)

a. The BSD (Figure 3-6) provides collection, manufacturing, storage, and distribution of blood and blood products to division, corps, and EAC medical units and to other operations. See Chapter 7 for information on blood support operations. The detachment is normally attached to the HHD, MEDLOG battalion for C2 and life support. The detachment provides flexibility to shift personnel between collection and distribution missions, as required.

b. The BSD is composed of the following elements:

(1) *Detachment headquarters*. The detachment headquarters provides C2 of the BSD. Personnel of this section supervise and perform unit plans and operations, general supply, life support, and maintenance functions.

(2) *Collection and manufacturing section*. This section is responsible for the collection, manufacturing, and quality control over all blood stocks within division, corps, and EAC.

(3) *Storage and distribution section*. This section is responsible for inspecting incoming blood shipments and preparing and processing receipt documents. It is also responsible for the storage, preservation, location and accountability for blood and blood products. It distributes blood and blood products within the division, corps, and EAC. The section is capable of deploying a five-person forward distribution augmentation cell to the MEDLOG company when required.

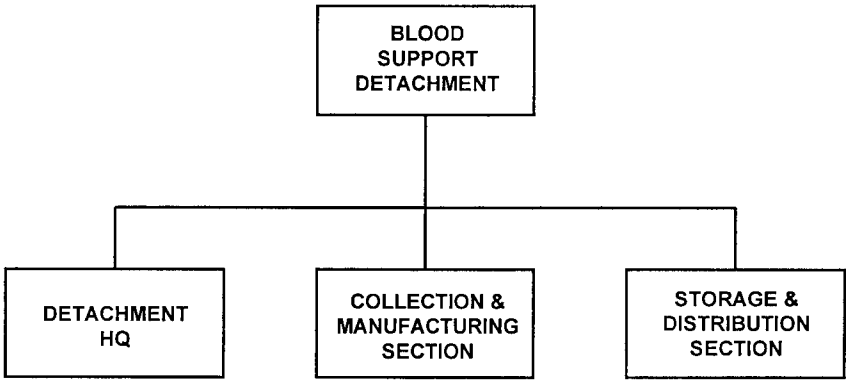


Figure 3-6. Medical detachment, blood support.

c. The detachment is dependent upon appropriate division, corps, and EAC elements for CHS; medical maintenance; supplemental transportation; finance, HRS, religious and legal services, and technical intelligence for captured medical materiel. This unit is dependent upon division, corps, and EAC transportation assets to provide unit distribution and signal assets for bandwidth communications. This unit requires augmentation in an NBC environment for decontamination.

3-10. Medical Logistics Support Team

The MLST is a TDA organization consisting of MEDLOG personnel (military, DA civilians, and contractors) from USAMMA. The MLST will normally deploy with the AMC's logistics support element (LSE). The MLST supports the reception and onward movement issue of APS unit sets and sustainment stock pre-positioned in the AO or pushed in from the AFLOAT program or CONUS. The MLST will provide medical materiel and maintenance capability, equipment accountability, and transfer support of reception operations at aerial and seaports of debarkation. The MLST is a component of the AMC/LSE and is under the operational control of the LSE until the establishment of a TSC. The MLST will transition their mission to the theater MEDLOG battalion or MLMC. When the mission transition is completed, the MLST will be redeployed to CONUS. At the completion of the contingency/operation, the MLST may be redeployed to the AO to support the redeployment of US forces and medical materiel from the AO to follow-on CONUS or OCONUS locations.

CHAPTER 4

CLASS VIII SUPPLY OPERATIONS

Section I. THE FORCE XXI DIGITIZED DIVISION

4-1. General

This section outlines Class VIII supply support at Echelons I and II in the Force XXI division. It discusses the support roles and functions of the medical platoon/battalion aid station (BAS), FSMC, division support medical company (DSMC), FST, forward support medical evacuation (MEDEVAC) team (FSMT), medical logistic company, division surgeon's section (DSS), and the MMMB.

4-2. Combat Lifesaver

a. The combat lifesaver is not a trauma specialist (formerly referred to as the combat medic); he is a combat, combat support (CS), or CSS soldier with an additional duty. Although not a trauma specialist, he is a recipient/consumer of medical materiel. The normal resupply of the combat lifesaver assigned to a battalion with organic medical support is through the medical platoon. The trauma specialist will coordinate supply requests for the combat lifesaver with the medical platoon. Combat lifesavers assigned to units without organic medical support will be resupplied by the medical unit providing area medical coverage; for example, an FSMC or DSMC (see Figure 4-1). Combat lifesavers assigned to units without organic medical support will request medical resupply through the platoon sergeant to the company first sergeant (1SG). The 1SG consolidates and submits the medical requests on the Logistics Situation Report via the Force XXI Battle Command Brigade and Below (FBCB2)/single channel ground and airborne radio system (SINCGARS) through the battalion S4 to the supporting medical unit providing area medical coverage; for example, an FSMC or DSMC.

b. The trauma specialist can provide emergency resupply to the combat lifesaver. This type of resupply should not be practiced on a routine basis as it presents logistical problems for the trauma specialist. It should be noted that the trauma specialist may not carry all of the exact medical items carried by the combat lifesaver.

4-3. Trauma Specialist

a. The trauma specialist requests supplies from the medical platoon (BAS). The requests (as with the combat lifesaver) are not formal; they can be oral or written. The requests are delivered/communicated to the BAS by whatever means are available. Usually this will be accomplished by the ambulance team returning to the BAS with patients. Ambulances may be used to transport the requester's supplies forward from the BAS as the ambulance returns to the maneuver unit. This system is referred to as backhaul. The trauma specialist in the maneuver company should use FBCB2 (platoon sergeant's/1SG's FBCB2 system) to coordinate Class VIII resupply with their supporting medical platoon.

b. The medical platoon leader can enhance the resupply to the trauma specialists by forwarding preconfigured materiel using ambulances whenever possible. This method assumes a proactive standpoint on the part of the medical platoon leader in anticipating requirements to push supplies forward via ambulances returning to the supported units. Ambulances should never go forward empty when medical supplies are needed. However, the medical platoon leader should be careful not to overstock the supported units.

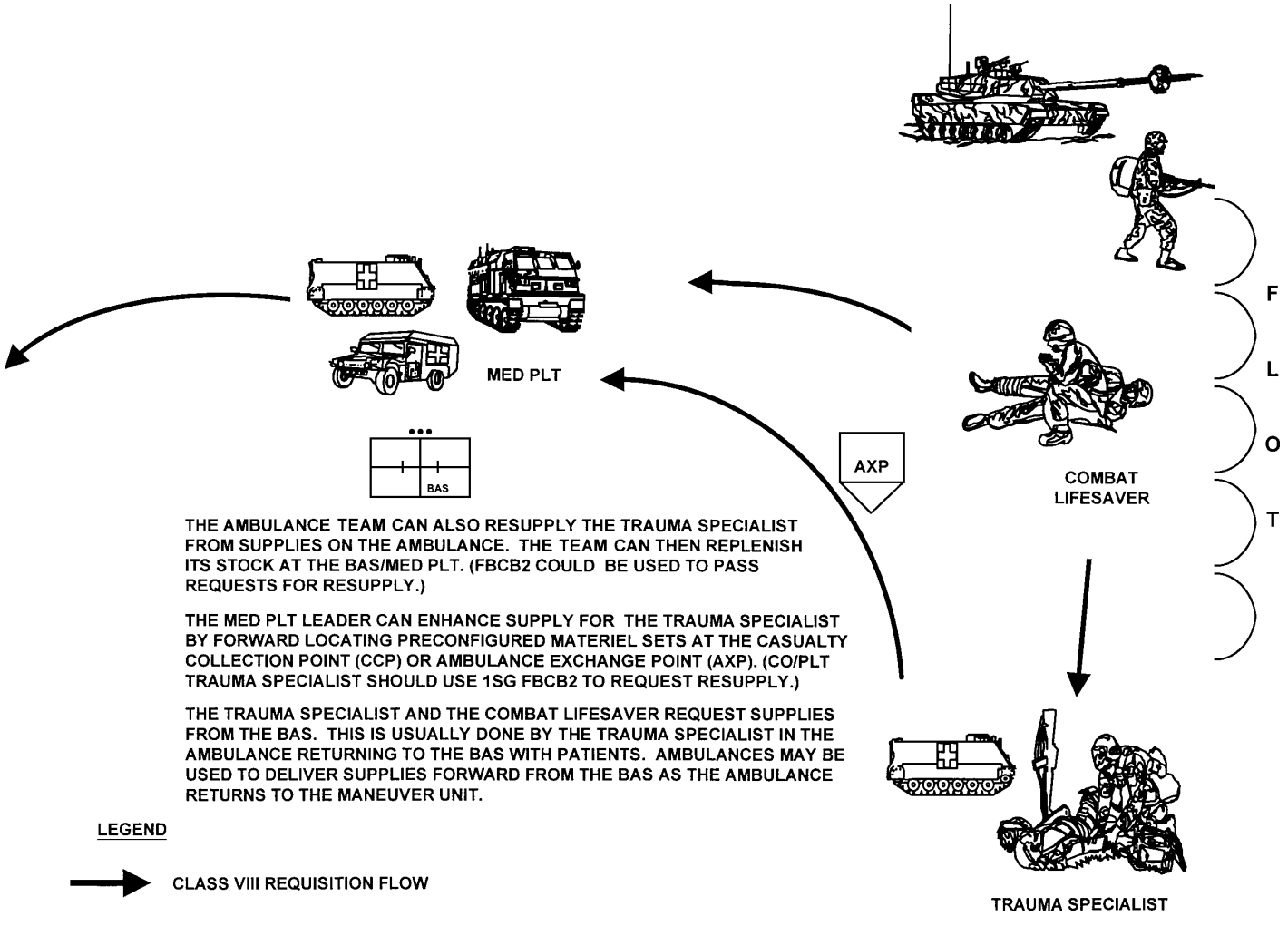


Figure 4-1. Unit-level Class VIII supply operations.

c. The ambulance crew can also resupply the trauma specialist from supplies on board the ambulance. The ambulance crew can then replenish its stock upon returning to the BAS.

4-4. Medical Platoon/Battalion Aid Stations

a. The forward deployed medical platoons/BASs of a division request their Class VIII supply from their supporting FSMC located with the forward support battalion (FSB) in the BSA. The FSMC's MEDLOG element is the direct support unit (DSU) for all Class VIII material for the brigade. This element maintains a small authorized stockage list (ASL) of medical supplies for the brigade. The medical sets, kits, and outfits organic to the treatment, patient hold, and ambulance sections of the FSMC can be utilized as a backup source of supply for emergency resupply to the medical platoon/BAS.

b. Battalion and squadron aid stations of separate brigades/regiments request Class VIII resupply from their supporting FSMC located with the FSB in the BSA. The FSMCs organic to separate brigades/ regiments request Class VIII supplies through their health service materiel officer (HSMO). Requests that cannot be filled by their medical supply office are forwarded to the supporting MEDLOG company. Separate brigades/regiments operating as part of a division will receive Class VIII supply support through coordination with the MMMB, with supplies coming from the supporting MEDLOG company.

4-5. Division Medical Companies

Each medical company maintains its own basic load that includes 5 days of medical supplies. The DSMC and the FSMCs operate as medical DSUs for Class VIII material within the division. Preconfigured anticipatory resupply packages are normally shipped directly to the DSMC and FSMCs until replenishment line-item requisition is established with the supporting MEDLOG company. During this time, organic medical platoons or treatment teams deployed with maneuver elements are resupplied from the DSMC and FSMCs. While resupply by preconfigured anticipatory resupply packages is intended to provide support during the initial phases of an operation, continuation on an exception basis may be dictated by operational needs. Planning for such a contingency must be directly coordinated with the DSS. The HSMO of the DSS and the MMMB will coordinate all Class VIII supply requirements for the division with the supporting MEDLOG company.

4-6. Interim Brigade Combat Team

All interim brigade combat team medical units will deploy with supplies to support a 3- to 5-day self-sustainment operation (based on casualty estimates). Routine and emergency medical resupply will follow the procedures as outlined in this manual, normally through their intermediate staging base.

4-7. Medical Materiel Management Branch

a. The MMMB manages the Class VIII supply system in the division. The MMMB coordinates and recommends the prioritization of medical supplies and blood products. Under the technical control of the HSMO of the DSS, the MMMB monitors and coordinates Class VIII resupply for division medical units/elements.

b. Using the CHL functional module of the Theater Medical Information Program (TMIP)/ Medical Communications for Combat Casualty Care (MC4) system, the Theater Army Medical Management Information Systems (TAMMIS), joint total asset visibility (JTAV), Transportation Coordinators' Automated Information for Movement System II (TC-AIMS II), and/or other automated logistics management systems, the MMMB manages all Class VIII requisitions submitted from the division to the supporting MEDLOG company. The MMMB coordinates shortfalls in throughput distribution with the DSS and division support operation section. The MMMB may update priorities with the MEDLOG company to correct deficiencies in the delivery system.

c. The MMMB provides Class VIII situational understanding to the DISCOM staff and the DSS according to the tactical standing operating procedures (TSOP). The MMMB, in coordination with the CHL cell of the DSS, manages the distribution of blood and blood products for division medical units.

d. The MMMB also coordinates through the DSS with the Assistant Chief of Staff, G5 (Civil Affairs) for disposition of captured enemy medical materiel.

4-8. Division Medical Supply Operations

a. During the initial employment phase, each FSMC receives a preconfigured push-package every 48 hours from the supporting MEDLOG company. During deployment, early build-up phases, and lodgment, supported medical units/elements operate from planned, prescribed loads and from existing APS identified in applicable logistics plans. Initial resupply efforts may consist of preconfigured medical supply (MEDSUP) packages tailored to meet specific mission requirements. Anticipatory logistics will allow for preconfigured push-packages which are shipped directly from CONUS to FSMCs and DSMCs until replenishment line-item requisitioning is established with the supporting MEDLOG battalion. While resupply by preconfigured packages is intended to provide support during the initial phase, continuation on an as-required basis may be dictated by operational needs in accordance with casualty estimates. Planning for such a contingency must be directly coordinated with the DSS HSMO who coordinates further Class VIII resupply requirements with the supporting MEDLOG battalion.

b. Shipment of medical materiel from the MEDLOG company is coordinated through the DISCOM MMMB and the DISCOM support operations section. The primary transportation means of sustainment resupply for Class VIII material is GS transportation assets. The MEDLOG company must coordinate shipment of medical supplies with their supporting movement control team. Usually, corps-level transportation assets will be used to deliver medical supplies from the corps forward area to the BSA/DSA. In some instances, air ambulances from the MEDEVAC battalion may be used to transport Class VIII supplies to requesting units. The MEDLOG company in the corps forward area is the Class VIII DSU to the division (see Figure 4-2). Once requests are received by the MEDLOG company, a materiel release order is printed and the stock is issued to the unit. For items not available for issue, the requests are forwarded to the next higher level of supply. All emergency requests are immediately processed by the FSMC/DSMC/MEDLOG company and issued to the requesting unit. The HSMO of the MMMB has the responsibility to monitor all emergency requirements not immediately filled by the MEDLOG company. The MEDLOG company coordinates with the MMMB for standard and emergency transportation of Class VIII supplies, as required.

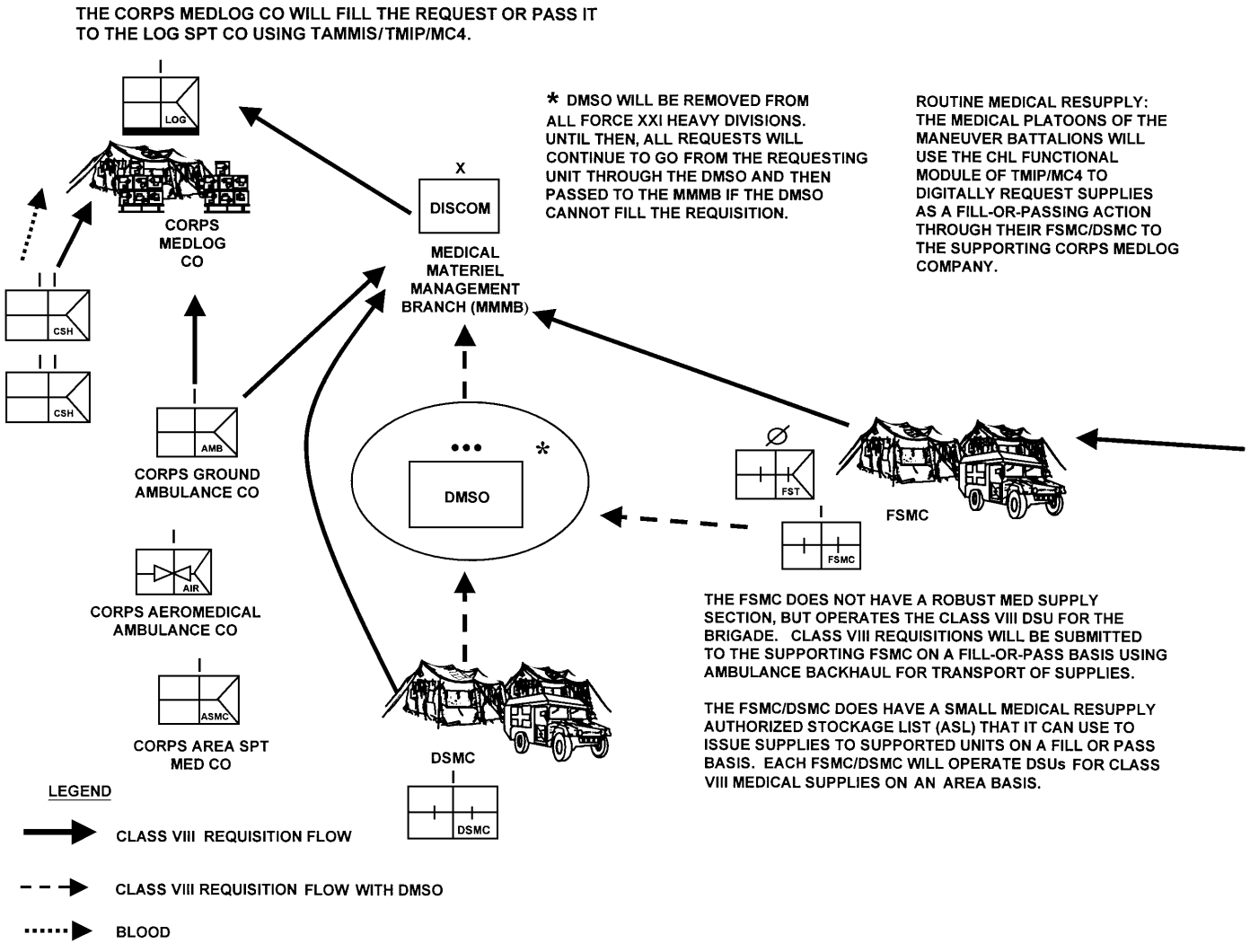


Figure 4-2. Division-level Class VIII supply operations.

c. Medical supplies are either forwarded from the source of supply or are picked up at the source of supply using supply point distribution. The MMMB and DSS coordinate, as required, for the FSMC/DSMC with the MEDLOG company to meet shortfalls in the supply point distribution system by updating priorities. Class VIII resupply for medical units/elements at division and below will use the TAMMIS or TMIP/MC4. The TAMMIS, the predecessor to CHL function module of TMIP/MC4, may still be used in some units in place of TMIP/MC4 to perform the same function. The CHL functional module of TMIP/MC4 provides division medical units/elements a direct link with the supporting MEDLOG battalion's units. This connectivity is accomplished using high frequency, radio frequency, or local area network (LAN). The CHL functional module of TMIP/MC4 is an automated Class VIII requisitioning system used by Echelon II and below medical units found at division, EAD, and EAC levels. The organic medical platoons of maneuver battalions, FSMCs, and DSMC will use this system. The CHL functional module of TMIP/MC4 system is capable of assemblage management, to include replenishment and quality control for all medical equipment sets (MESs) for a medical unit/element. The TMIP/MC4 system can also be used for individual line-item requisitioning and employs automated receipt updating to expedite issue. The reports section of the CHL functional module of TMIP/MC4 can produce equipment-on-hand percentages that are used in unit status reporting.

d. Under the oversight of the HSMO of the DSS, the DISCOM MMMB coordinates Class VIII resupply for division medical units/elements. The MMMB is assigned to the general supply section, along with the other classes of supply. It works directly with the DMC by providing Class VIII supply information pertaining to requisitions, priorities, and their status. Through the DMC and the TC-AIMS II and global transportation network (GTN), the MMMB can maintain total Class VIII visibility including in-transit visibility (ITV) of Class VIII resupply items inbound to the division's AO. The MMMB will also coordinate with the DMC to ship Class VIII resupply to forward deployed medical elements. The MMMB may alternatively use medical ground or air transport vehicles to ship medical supplies to forward deployed units/elements if the situation dictates and permits.

e. The DSS and HSMO (FSBs/division support battalion) are informed by the MMMB of all pertinent management indicators. These indicators include—

- Type/number of stocked lines.
- Zero balances.
- Critical item shortages.
- Nonoperational critical equipment.

Records and reports are maintained as directed by TSOPs. (In the event of an automated systems failure, a backup manual system must be implemented.)

NOTE

Throughput Class VIII resupply will be initiated upon activation of the MEDLOG support elements, division (CHL functional module of

TMIP/MC4 system), and all the required enablers. Throughput distribution will rely heavily on the relationship between the MMMB/ DMC and the MEDLOG company. The systems that work together to provide this management and coordination are TAMMIS and/or TMIP/ MC4, TC-AIMS II, Movement Tracking Systems (MTS), and GTN.

4-9. Medical Logistics Company

The HHD, MEDLOG battalion assigns one MEDLOG company in DS of each division. Once established, the MEDLOG company provides Class VIII resupply for division medical elements and for corps medical elements operating in its AO. See Chapter 3, paragraph 3-8 for a discussion on the MEDLOG company.

4-10. Routine Requisitions of Class VIII Supplies

Maneuver battalions will request Class VIII supplies from their supporting FSMC utilizing the CHL functional module of TMIP/MC4. Those requisitions that cannot be filled will be passed to the corps MEDLOG company using TAMMIS or the CHL functional module of TMIP/MC4. If the requested items are available for issue, a materiel release order is printed and the requested supplies are prepared for shipment. For items not available for issue, the requests are passed to the next higher level of supply. Using TAMMIS or the CHL functional module of TMIP/MC4, the MEDLOG company forwards information to the unit on items shipped and on those requests that were not filled. Shipment of medical materiel from the MEDLOG company is coordinated with the corps support battalion and the corps movement control office(r) (MCO). Shipment may also be achieved through use of the backhaul method using returning directed medical assets when possible. Shipments of Class VIII supplies to medical platoons of the maneuver units will be shipped to the supporting FSMC. The FSMC will coordinate with the FSB forward support operations section for delivery of Class VIII supplies from the BSA to forward deployed medical elements. Class VIII supply delivery may also be accomplished by using returning ambulances to backhaul requested Class VIII supplies to their medical platoons. Figure 4-1 provides an overview of Class VIII requisition and resupply flow at Echelon I; Figure 4-2 provides an overview of Class VIII requisition and resupply flow at Echelon II.

4-11. Emergency Requisitions

Emergency requisitions from medical platoons of the maneuver battalions are submitted to the supporting FSMC. When the supporting FSMC is unable to fill the request, the requisition is forwarded to the corps MEDLOG company and the DISCOM MMMB is informed. The DISCOM MMMB will, in coordination with the MEDLOG company, prioritize all emergency requests for the division. The DISCOM MMMB will also direct cross-level issues between division medical elements. All emergency requests received by the MEDLOG company are processed immediately for shipment by the most expedient transportation available. The MEDLOG company immediately forwards all emergency requests not filled to the MEDLOG support company. The HSMO of the MMMB has the responsibility of monitoring all emergency requisitions not immediately filled by the MEDLOG company.

Section II. THE CORPS

4-12. General

This section outlines Class VIII supply support for the corps. It discusses roles and functions of the logistics support company and the area support medical battalion (ASMB) operating in the corps area.

4-13. Corps Combat Health Support Logistics System

a. The logistics support company, under the operational control of the HHD, MEDLOG battalion, is responsible for receiving, storing, and distributing medical materiel; single- and multivision optical fabrication and repair; medical maintenance; medical gas production and distribution; and building of medical assemblages/ push packages. The logistics support company supports the corps. Figure 4-3 provides an overview of Class VIII requisition and resupply flow within the corps area. See Chapter 7 for detail blood support operations.

b. Echelons I and II medical units within the corps area will receive Class VIII supply support from the ASMB, the HHD, MEDLOG battalion/logistics support company or MEDLOG company on an area basis. Corps-level hospitals within the corps rear area will receive Class VIII supply support from the HHD, MEDLOG battalion/logistics support company on an area basis. Medical logistics companies will receive Class VIII supply support from the corps-level logistics support company. Area support medical battalions (or their subordinate elements) will receive support on an area basis from either a logistics support company or a MEDLOG company. Corps-level hospitals within the corps forward area will receive Class VIII supply support from the MEDLOG company. All other organizations (Army, USAF, Navy, and Marines) will receive Class VIII supply support from their nearest Army medical supply DSU.

c. Class VIII resupply for EAD units will be accomplished using the TAMMIS and/or TMIP/ MC4. Possible modes of transmitting resupply requests are mobile subscriber equipment (MSE), tactical radio, digital radio, cabled LAN, tactical satellite, and international maritime satellite and other commercial satellite systems.

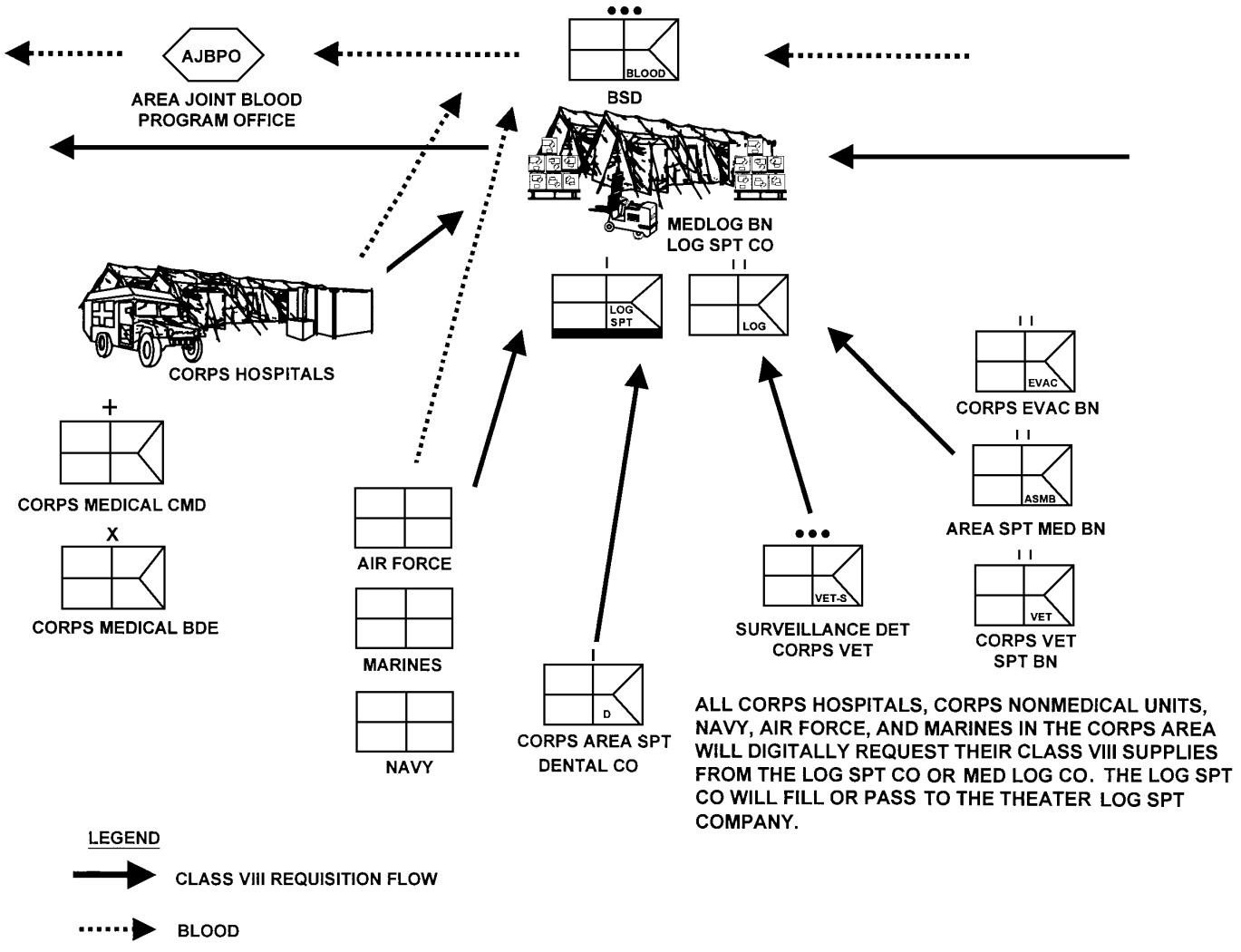


Figure 4-3. Corps Class VIII supply operations.

Section III. ECHELONS ABOVE CORPS

4-14. General

This section outlines Class VIII supply support for EAC. It discusses roles and functions of the EAC logistical support elements and their relationship with CONUS support activities.

4-15. Echelons Above Corps Combat Health Support Logistics System

a. The Headquarters and Headquarters Detachment, Medical Logistics Battalion.

(1) The HHD, MEDLOG battalion, through its MEDLOG support company and the BSD, will provide medical materiel, medical maintenance and repair, optical, blood support, and contracting services to EAC medical units. Figure 4-4 (page 4-12) provides an overview of Class VIII requisition and resupply flow at EAC. The HHD, MEDLOG battalion will use line-item requisitioning to support customers and will have the capabilities of building and maintaining preconfigured push packages in support of forward MEDLOG units.

(2) Class VIII supply requests beyond the capabilities of theater (MEDLOG assets, HNS, contractors, multinational partners, or local procurement) will be forwarded via TMIP/defense medical logistics standard support (DMLSS) to the Defense Supply Center, Philadelphia (DSCP) for action (Figure 4-5, page 4-13). The DSCP will coordinate with strategic support elements (depots/prime vendors/ contractors) to fill the requests. Figures 4-6 through 4-10 (pages 4-14 through 4-18) illustrate Class VIII supply flow from CONUS to theater. The integration of MTS, TC-AIMS II, and Global Combat Support System-Army (GCSS-A) provides ITV to commanders and distribution managers with detailed information on movements tracking, control, and status of distribution.

(3) The HHD, MEDLOG battalion (distribution management) and the MLMC forward team (information management) will perform the SIMLM mission in support of joint and/or combined operations and will have liaison officers (LNOs) from supported Services to assist in coordinating logistics support requirements, when designated by the CINC.

b. The Medical Logistics Management Center Forward Team.

(1) Using split-based operations, the MLMC deploys a forward team into the AO (see Figure 4-11, page 4-19) while maintaining base operations within CONUS. The MLMC forward team will provide centralized, theater-level management of critical Class VIII materiel, PMIs (air evacuation), and medical maintenance.

(2) When required stocks are not available in the theater or stock replenishment is required, the MLMC forward team may pass requirements to the DSCP if the theater medical inventory control point is not yet in theater. The theater medical inventory control point is usually the theater MEDLOG battalion. When practical, arriving shipments are forwarded directly from the port to the requesting medical

organization. Otherwise, shipments are directed to a Class VIII distribution facility. The MLMC forward team will work closely with the theater MEDLOG battalion or MEDLOG element serving as executive agency for medical materiel in theater. The forward team will be collocated with the corps or EAC support operations section of the COSCOM or TSC to coordinate movement of Class VIII supplies within the AO.

(3) The MLMC forward team, using TAMMIS or TMIP/MC4 and TC-AIMS II, MTS, and GCSS-A, will have the capability to prioritize, redirect shipments, and direct theaterwide cross leveling of Class VIII assets. It will provide a LNO (officer or senior NCO) to each of the MEDLOG battalions deployed in theater. It will provide a LNO to the theater surgeon as required, if the theater surgeon is not collocated with the TSC.

(4) The MLMC forward team and HHD, MEDLOG battalion, will perform the SIMLM mission for joint/combined operations and will have LNOs from supported Services to assist in coordinating logistics support requirements during operations.

c. *The Medical Logistics Support Team*. The MLST (see paragraph 3-10) will be deployed from USAMMA in support of reception, onward movement, and integration of APS in the AO. The MLST provides medical materiel and maintenance capability, equipment capability, equipment accountability, and transfer support of reception operations at aerial/sea ports of debarkation. This provides mission-ready equipment to units as they need it without spending their resources on its preparation.

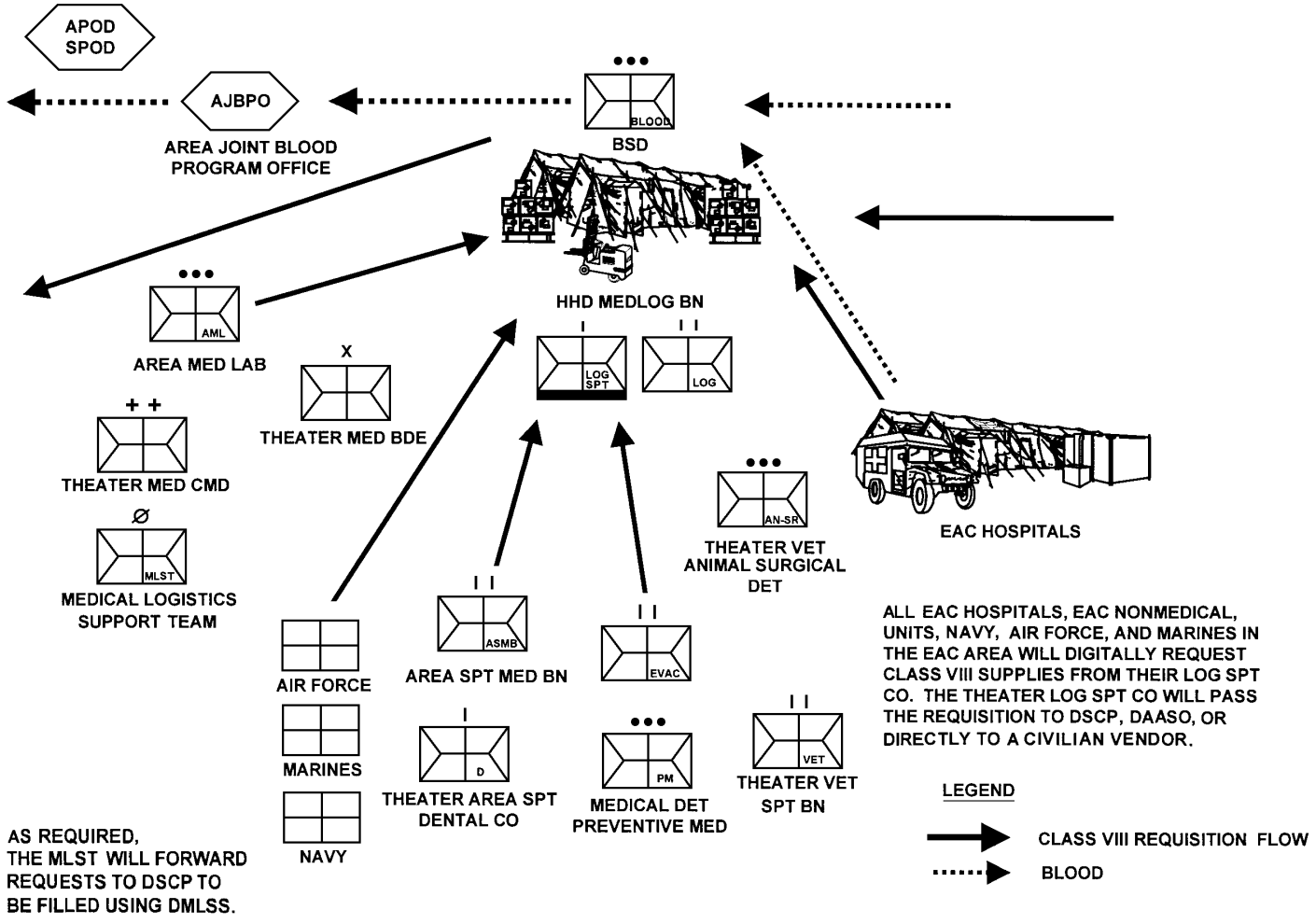
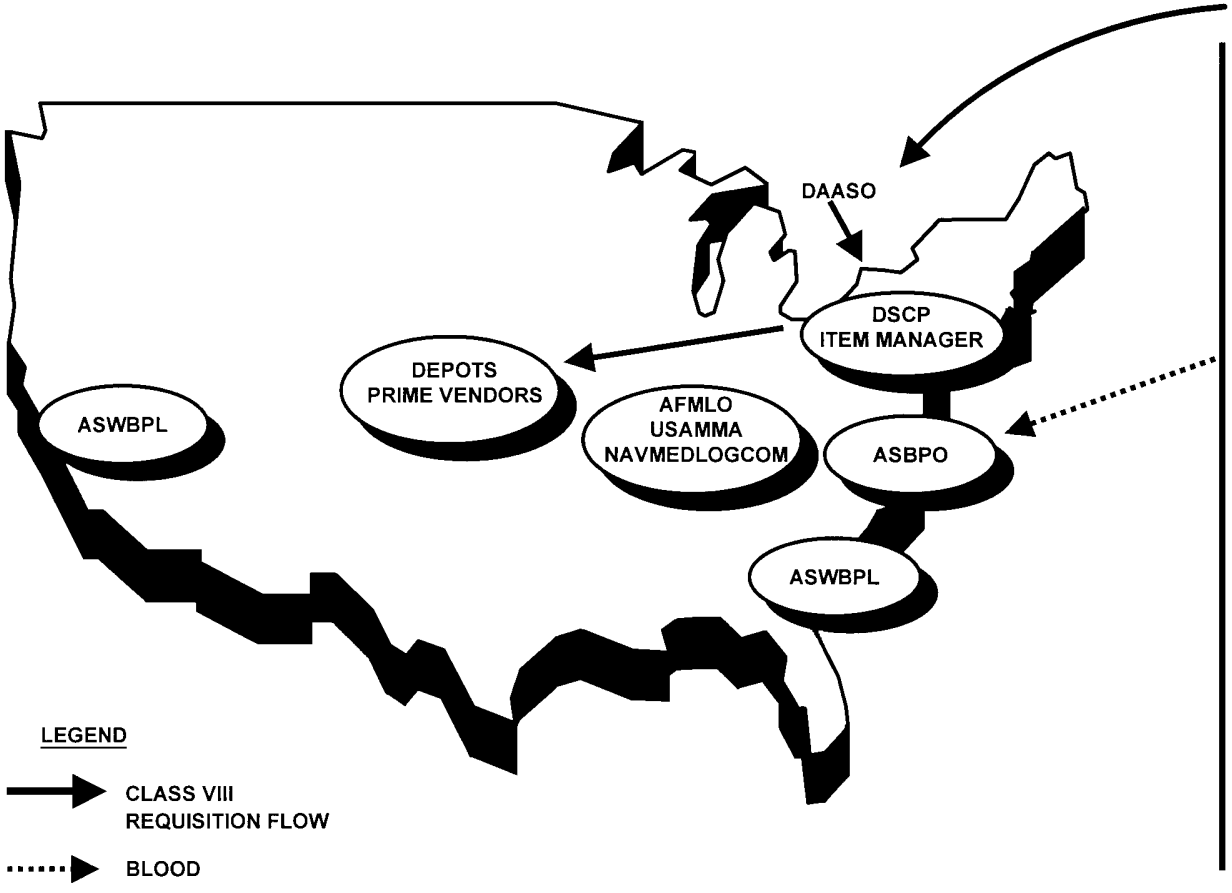
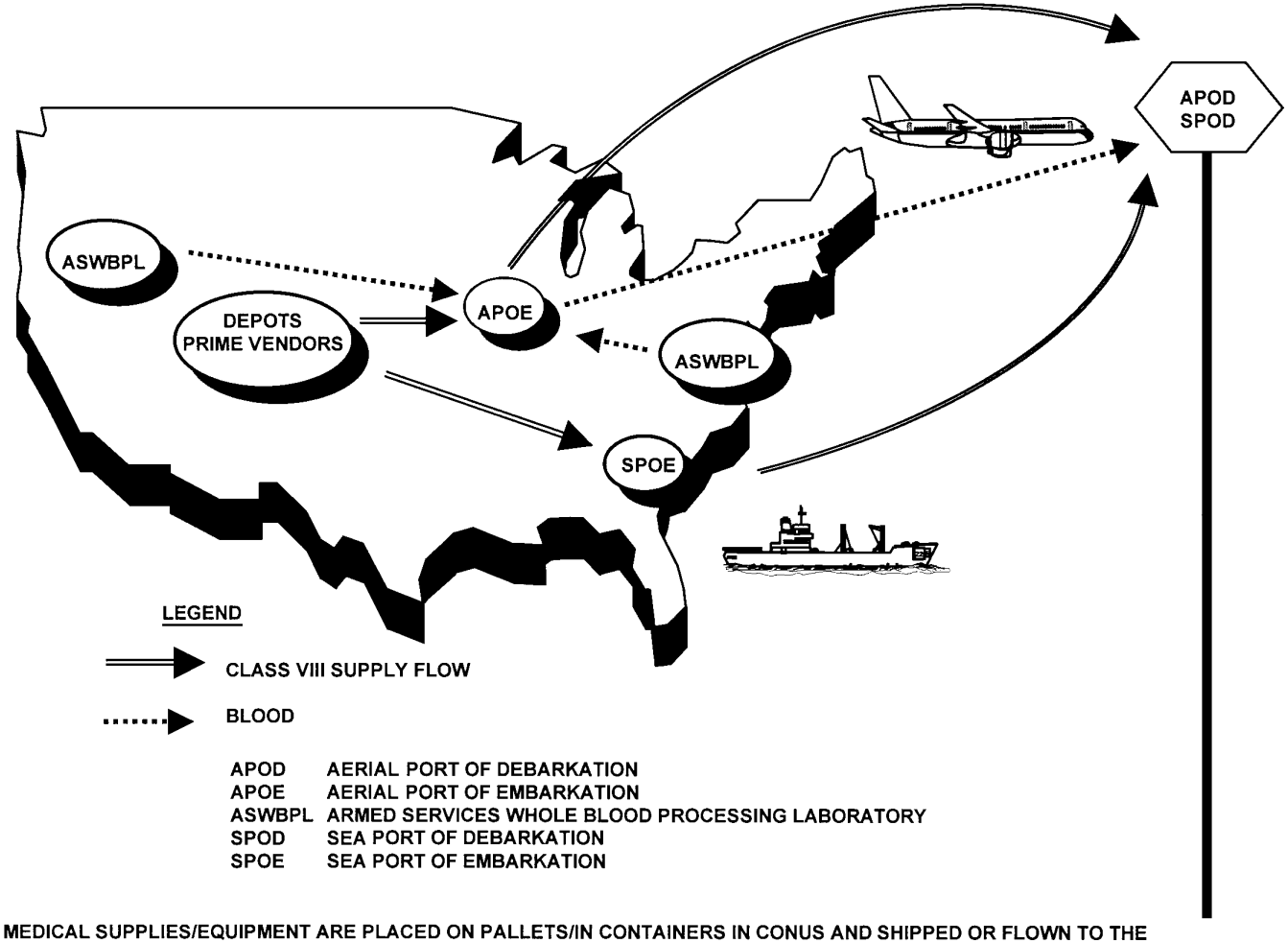


Figure 4-4. Echelon above corps Class VIII supply operations.



AFMLO	AIR FORCE MEDICAL LOGISTICS OFFICE
ASBPO	ARMED SERVICES BLOOD PROGRAM OFFICE
ASWBPL	ARMED SERVICES WHOLE BLOOD PROCESSING LABORATORY
DAASO	DEFENSE AUTOMATIC ADDRESSING SYSTEM OFFICE
DSCP	DEFENSE SUPPLY CENTER—PHILADELPHIA
NAVMEDLOGCOM	NAVY MEDICAL LOGISTICS COMMAND
USAMMA	UNITED STATES ARMY MEDICAL MATERIEL AGENCY

Figure 4-5. Theater to continental United States Class VIII supply operations.



MEDICAL SUPPLIES/EQUIPMENT ARE PLACED ON PALLETS/IN CONTAINERS IN CONUS AND SHIPPED OR FLOWN TO THE THEATER OF OPERATIONS. IF THE PALLET/CONTAINER IS ADDRESSED TO ONE INDIVIDUAL UNIT, IT WILL BE TRANSPORTED DIRECTLY TO THAT UNIT (THROUGHPUT). IF THE PALLET/CONTAINER HAS MORE THAN ONE ADDRESS, THEN IT WILL BE STAGED, SORTED, REPACKED, THEN THROUGHPUT TO THE RESPECTIVE UNITS VIA THEATER/CORPS TRANSPORTATION ASSETS.

BLOOD PRODUCTS ARE FLOWN FROM CONUS TO THE BTCs IN THE EAC OR CORPS.

Figure 4-6. Strategic Class VIII support operations.

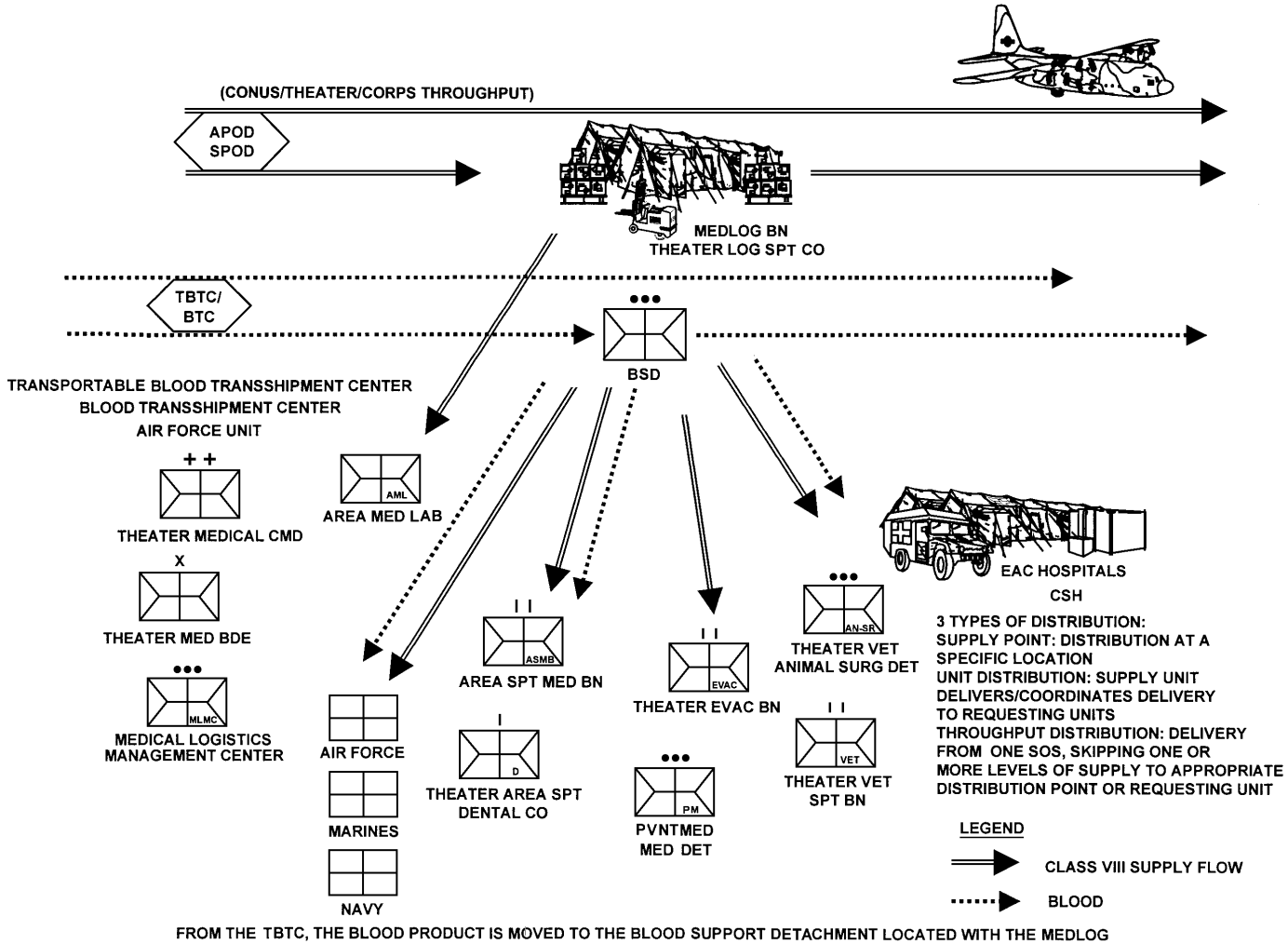


Figure 4-7. Echelons above corps Class VIII support operations.

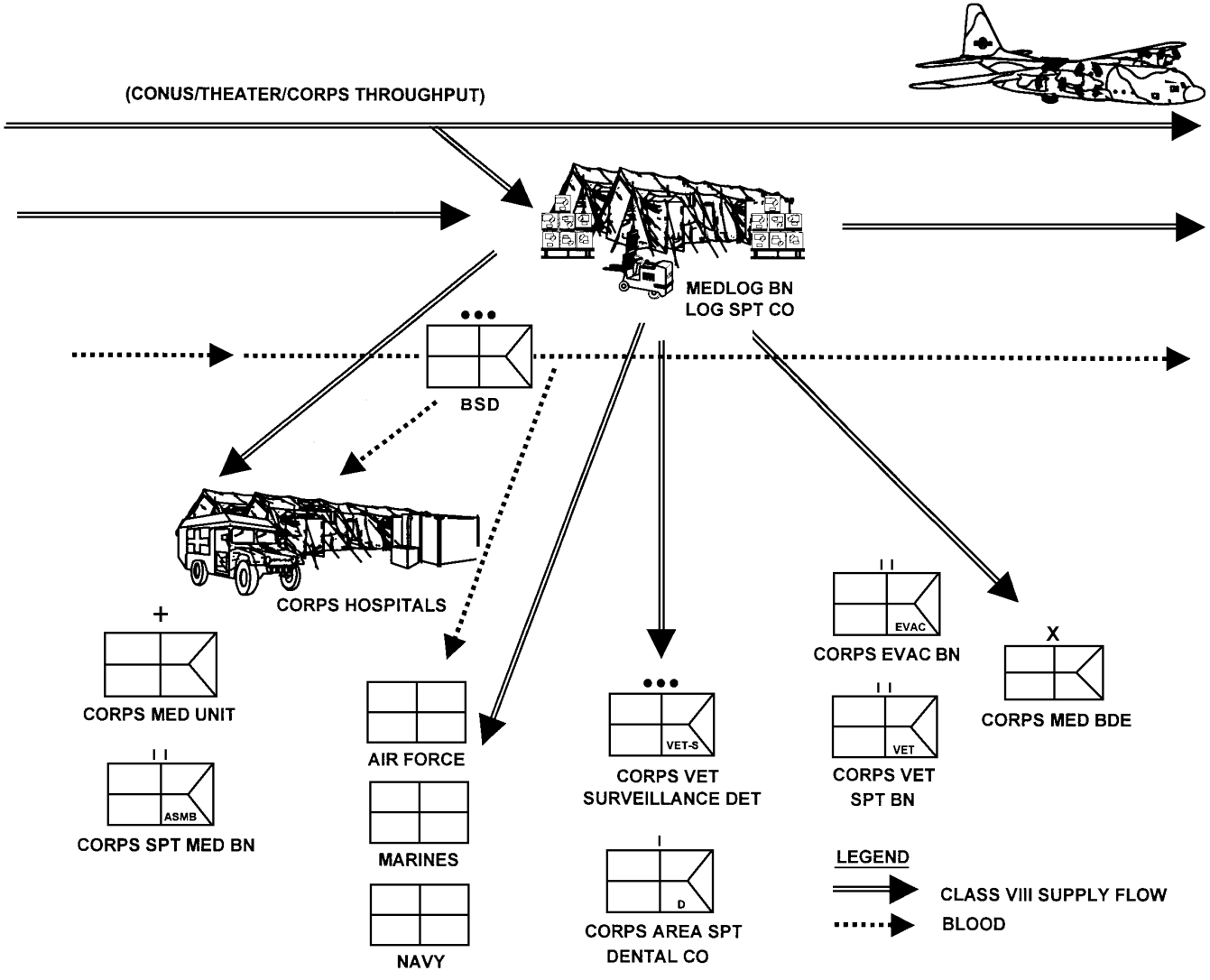


Figure 4-8. Corps Class VIII support operations.

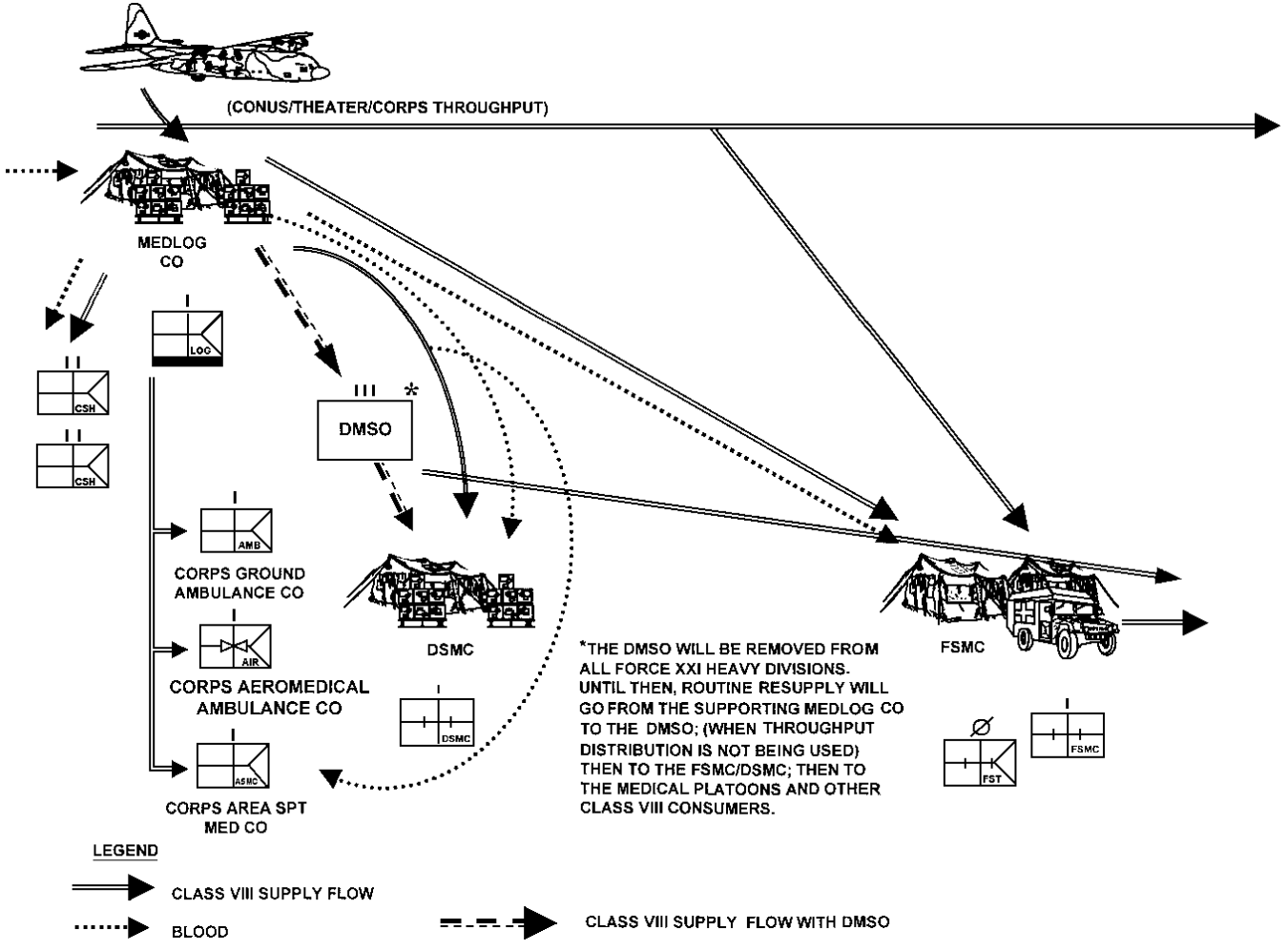


Figure 4-9. Division Class VIII support operations.

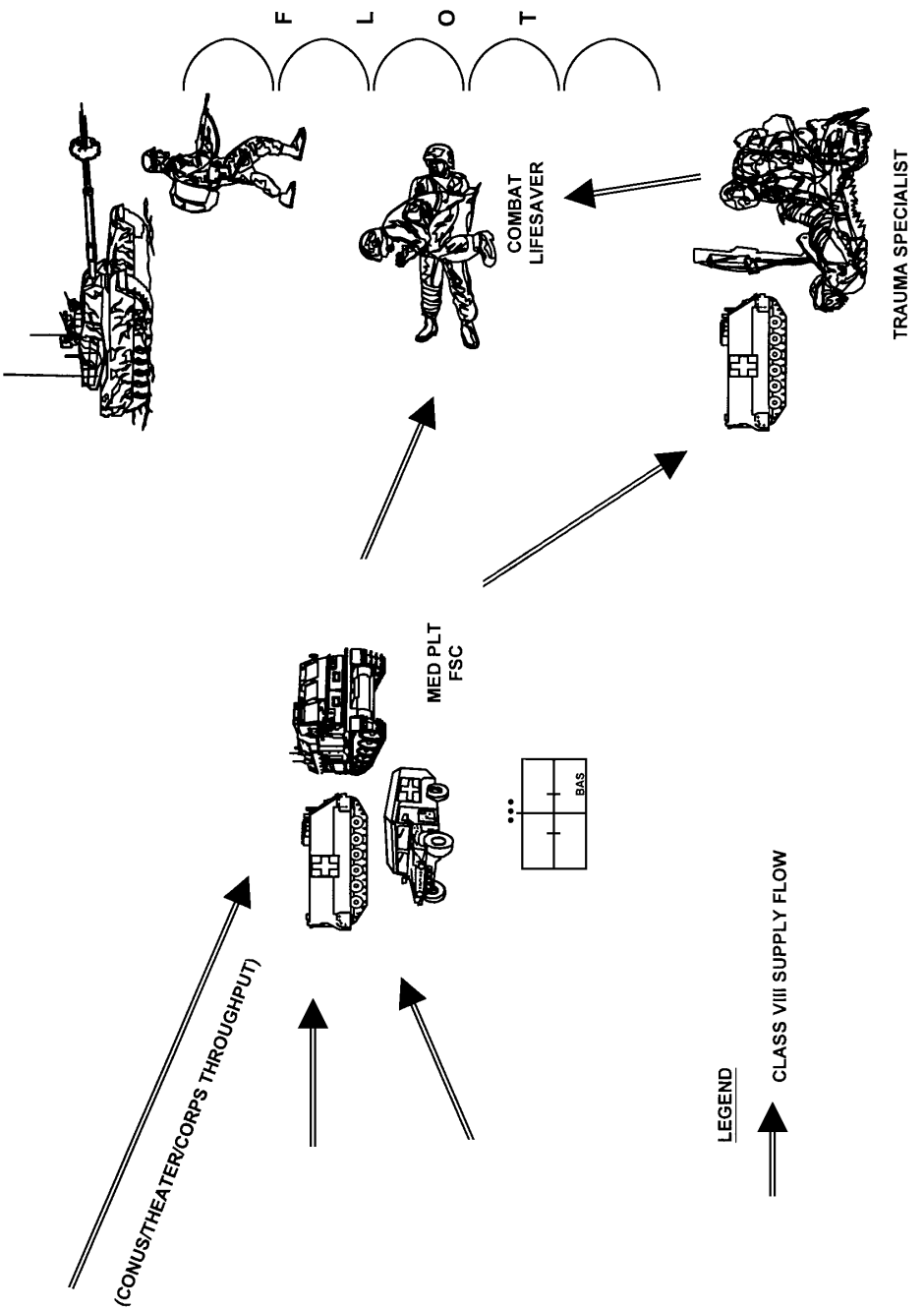


Figure 4-10. Unit Class VIII support operations.

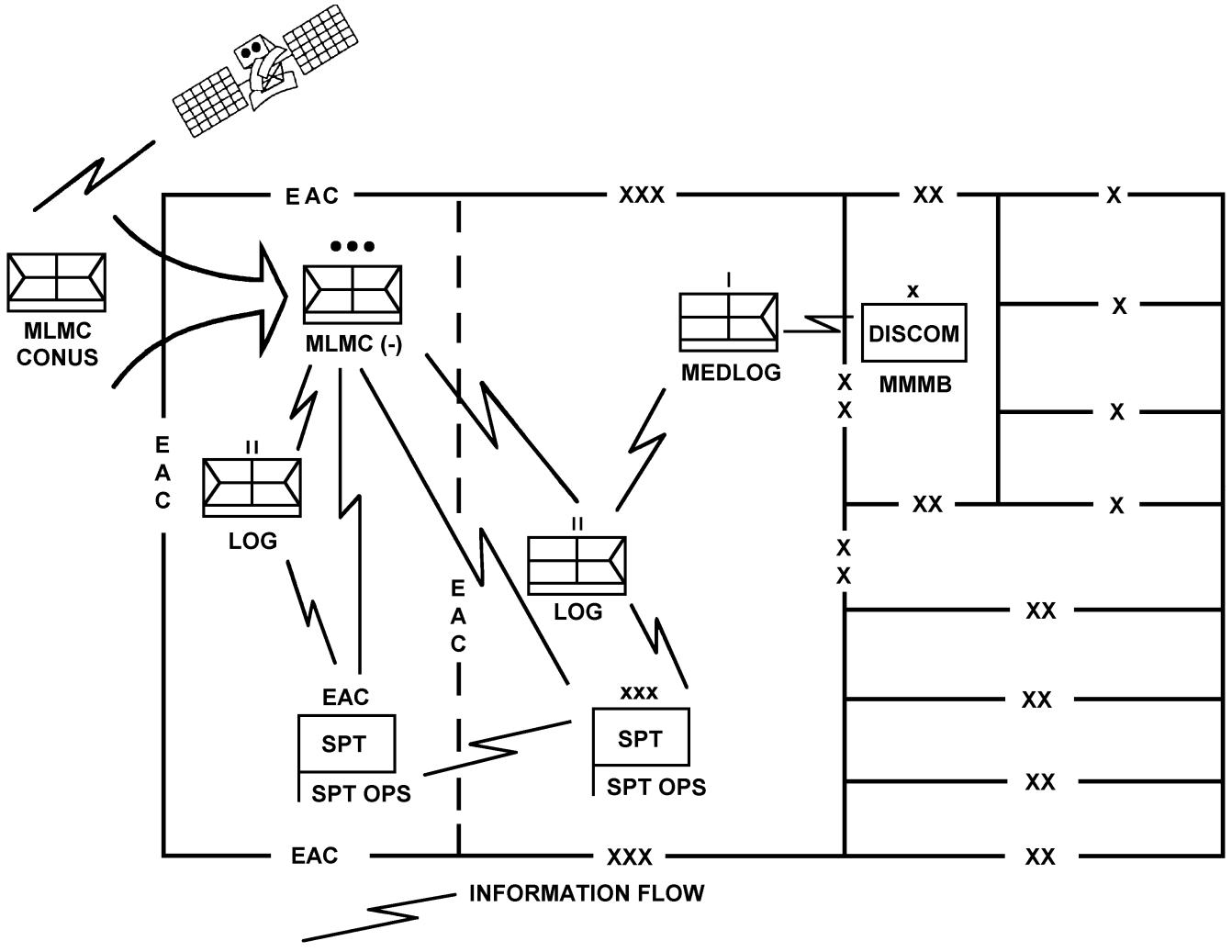


Figure 4-11. Medical Logistics Management Center split-based operations.

CHAPTER 5

MEDICAL MAINTENANCE

Section I. ROLE OF MEDICAL EQUIPMENT MAINTENANCE

5-1. General

a. With current and projected technology advancements, a revolutionary change will occur in medical maintenance operations. Digitization of existing and future medical equipment, combined with the Force XXI enhancement of the existing logistic, C2, situational understanding, and asset visibility automation systems, will support *replace forward and repair in the rear* doctrine. The goal of providing support as close to the customer as possible and supporting all customers within a given area will continue to be the cornerstone of maintenance doctrine. The idea of replace forward and repair in the rear will allow our operating forces to continue with the flow of the battle.

b. Force XXI maintenance relies heavily on highly skilled medical equipment repairers that can accurately and quickly diagnose equipment faults and determine if the equipment should be evacuated or repaired on-site. The automated information systems (AISs) employed provide situational understanding to the MEDLOG management cells across the battlefield, enabling quick and responsive solutions. The MMMB in the DISCOM, HHD, MEDLOG battalion, MLMC support team, and CONUS-based agencies will be able to monitor the workload and equipment status of all medical units in the theater and all medical assets in the pipeline. Total asset visibility, equipment, and workload status, combined with situational understanding of the warfighter's effort, will allow the maintenance managers the ability to provide anticipatory/predictive and responsive medical maintenance support.

5-2. Objectives of the Army Medical Department Maintenance System

a. Maintenance operations are primarily based on the policies contained in ARs 750-1, 750-2, and 40-61. The levels for medical maintenance are as follows:

(1) Unit.

(2) Direct support.

(3) General support.

(4) Depot.

b. Specific objectives of the AMEDD maintenance system (AR 40-61) are to—

(1) Provide a more responsive maintenance system, improve operational readiness, and increase mobility and flexibility at the lowest overall cost.

(2) Establish a vertical maintenance management structure through which maintenance can be performed effectively and economically.

(3) Establish procedures where equipment is supported in peacetime as in war, commensurate with available time and other resources.

(4) Optimize repair by replacement forward of the corps' rear boundary.

(5) Integrate the forward support maintenance concept (AR 750-1) to maximize equipment service time.

(6) Establish equipment design criteria that emphasizes modular design of end items and that will promote the following maintenance priorities: discard, repair forward, evacuate, and replace with MEDSTEP assets, if available.

5-3. Maintenance Factors

Responsive maintenance comes from the combined effort of many individuals. Their actions are guided and influenced by factors common to all maintenance operations. These factors function like a chain; if one area is neglected, the overall system is weakened. The factors include the following:

a. Command Interest. This is the active involvement of commanders and supervisors at all levels in the medical equipment maintenance operations for which they are responsible. The commander is responsible for the readiness of medical equipment assigned to the unit whether it is a reportable end item, subassembly, or component of a medical materiel set (MMS) or MES. To ensure deployable readiness, commanders set goals, objectives, and priorities. They keep informed of maintenance requirements, status, and capabilities. They provide guidance and direction to unit personnel. Commanders should develop training plans that ensure appropriate personnel receive training and licensing on equipment which requires preventive maintenance checks and services (PMCS).

b. Management. Managers use available resources to accomplish the mission in the most efficient manner. Maintenance management involves all members of the chain of command as well as designated individuals who manage the maintenance resources under their control. The manager plans, organizes, directs, coordinates, and controls resources to accomplish the maintenance mission.

c. Supervision. Maintenance supervisors ensure that personnel perform required tasks in a correct, safe, and timely manner. Supervisors also take an active interest in the training and welfare of their personnel. Supervisors should set goals to maximize the training and licensing of section personnel on assigned equipment that requires PMCS.

d. Motivation. Motivation is the willing desire to perform in order to accomplish the mission. The leadership of unit commanders, supervisors, and maintenance managers motivates personnel.

e. Skill. Skill is the technical ability of personnel to perform the tasks required by their duty position. Skill development is important to all personnel but particularly to inexperienced soldiers joining the unit. Commanders and supervisors must provide ongoing training and licensing programs to ensure that learned skills are sustained over time.

f. Resources. Resources include personnel, publications, repair parts, tools, test measurement and diagnostic equipment (TMDE), facilities, training, and time. Commanders and supervisors at all levels must ensure that their subordinates are adequately resourced to accomplish the mission they are assigned.

Section II. LEVELS OF MEDICAL EQUIPMENT MAINTENANCE AND RESPONSIBILITIES OF EACH LEVEL

5-4. General

Maintenance supports readiness and effectiveness of Army elements by sustaining systems and equipment as effectively, responsively, economically, and as far forward as the situation permits. The four levels of the Army maintenance system keep materiel in a mission-ready condition, restore equipment to a serviceable condition, or provide approved equipment modification.

5-5. Unit-Level Maintenance

Unit-level maintenance is the first and most critical level of the Army maintenance system. The cornerstone of unit maintenance is operator/crew PMCS. Commanders are responsible for providing resources, assigning responsibility, and training their soldiers to standard on Technical Manual (TM) 10-Series. The basic task of unit maintenance is to perform scheduled periodic services and other maintenance functions required to attain a high level of operational readiness. Responsibilities include:

- Scheduling and performing PMCS.
- Performing electrical safety inspections and tests, calibration, verification, and certification services.
- Providing diagnosis and fault isolation as authorized by the maintenance allocation chart (MAC) prior to evacuation. Emphasis on early consideration of equipment replacement with MEDSTEP assets.
- Replacing unserviceable parts, modules, and assemblies as authorized by the MAC.
- Inspecting by sight and touch external and other easily accessible components per the TM 10-Series.
- Lubricating, cleaning, preserving, tightening, replacing, and making minor adjustments authorized by the MAC.
- Requisitioning, receipting, storing, and issuing repair parts. Managing a PLL for medical equipment.
- Maintaining a technical library for medical equipment.

- Performing technical inspections on new or transferred medical equipment in accordance with AR 40-61.

- Maintaining records and the automated medical equipment management system.

- Requesting DS maintenance support, requesting MEDSTEP assets, and seeking authorization to perform DS maintenance-level repair when the situation dictates.

- Performing limited maintenance functions on PMI located within the operating area.

- Reporting materiel readiness in accordance with AR 700-138.

5-6. Direct Support Maintenance

One-stop service to supported units, highly mobile repair teams, and backup support to unit-level maintenance characterize DS maintenance. Direct support units may grant authority to supported units to perform the next higher level of repair if the supported unit has the capability and capacity to perform the repair. Direct support maintenance includes the following:

- Inspect the item to verify serviceability.

- Determine if unserviceable items were rendered unserviceable due to other than fair wear and tear. If negligence or willful misconduct is suspected, repair will not be made until a release statement is received per AR 735-5.

- Determine economic repairability.

- Repair unserviceable economically reparable end items per MAC. Equipment will be repaired and returned to the user.

- Repair all economically reparable components when MAC F-coded-level repair will return the items to a serviceable condition. These items will be repaired and returned to the requesting maintenance or supply activity.

- Provide proactive materiel readiness and technical assistance of unit maintenance elements including—

  - Visits to supported units on a regular basis.

  - Advice to supported units in proper methods for performing maintenance and related logistics support.

  - Coordination with supported units to perform technical inspections when requested.

  - On-site assistance to supported units.

- Provide backup DS maintenance support to other DS units and request backup support from other DS and GS units, as required.

- Provide fabrication as identified by the appropriate TM.

5-7. General Support Maintenance

General support maintenance is characterized by backup maintenance support to DS units and the capability to task organize to meet special mission requirements. General support units may grant authority to supported units to perform the next higher level of repair if the supported unit has the capability and capacity to perform the repair. Operations assigned to GS level will normally include the following:

- Diagnosis, isolation, and repair of faults within modules/components per MACs.

- Repair of selected line replaceable units and printed circuit boards per the MACs.

- Area maintenance support, to include technical assistance and on-site maintenance as required or requested.

- Collection and classification of Class VIII materiel for proper disposition.

- Operation of cannibalization points, when authorized by major Army command (MACOM) commanders (AR 710-2).

- Evacuation of unserviceable end items and components through the appropriate supply support activity.

- Fabrication or manufacture of repair parts, assemblies, components, jigs, and fixtures when approved by the MACOM.

- Request for backup support as required.

5-8. Depot Support Maintenance

Depot-level maintenance will support both the combat forces and the Army supply system. Depot-level maintenance will provide technical support and backup to DS and GS maintenance units. This mission is characterized by—

- Providing overhaul and rebuild of end items and components in support of the wholesale supply system and as “repair and return” actions.

- Performing special inspections, tests, and modification program actions.

- Performing maintenance services and functions for the wholesale supply system.

- Manufacturing items and parts when required.

- Providing end items, components, and repair parts through established programs in support of both TOE and TDA medical units.

- Providing on-site medical maintenance support teams (MSTs) on an "as-required" basis.

Section III. MEDICAL EQUIPMENT MAINTENANCE SUPPORT

5-9. General

Medical equipment maintenance support is described by echelons from the farthest forward medical equipment repairer (MER) (91A) at Echelon II, FSMC, to Echelon V, CONUS-based operations.

a. Echelon I. Echelon I medical elements are comprised of BASs, treatment teams, ambulance squads, trauma specialists, and combat lifesavers.

- At Echelon I, the platoon leader of the BAS is responsible for ensuring operator maintenance is performed on assigned equipment and that a medical maintenance support plan is established with the FSMC (Figure 5-1).

- When a repair is needed, the platoon leader will report the equipment down via the logistics status report of FBCB2.

- The equipment will be transported to the FSMC by the support platoon or by ambulance.

- Any medical elements operating in the BSA will follow the above procedures.

b. Echelon II. Medical elements in the division area include FSMC, BAS, FST, ambulance squads, treatment teams, telemedicine teams, and preventive medicine and veterinary teams.

(1) *Oversight and management.* The MMMB of the DISCOM will maintain situational understanding via the combat service support control system (CSSCS) and provide support and coordination as needed. Responsibilities of the MMMB include transportation coordination; MST missions; ITV of parts and equipment via GTN; establishing maintenance priorities for repair or exchange of medical equipment (by monitoring workload data); and ensuring a viable maintenance program and training program is in place for MERs in the division.

(2) *Forward support medical company responsibilities and capabilities.* The MER at the FSMC will be responsible for unit-level maintenance, scheduled and unscheduled, on medical equipment within the BSA. The MER will also maintain PMI assets as deemed necessary.

- The MER will troubleshoot the equipment in accordance with the MAC.

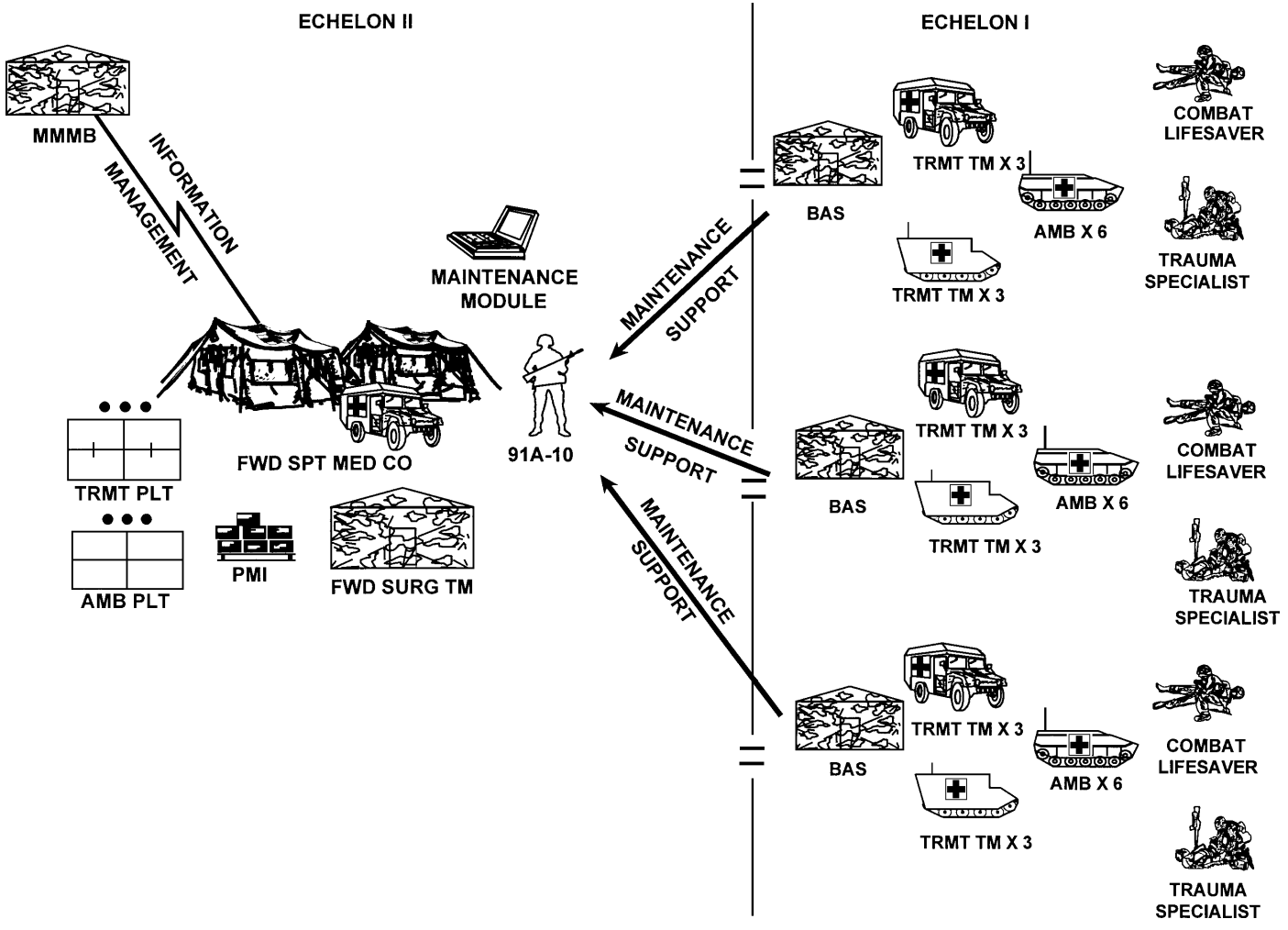


Figure 5-1. Echelons I and II medical maintenance support.

- If the repair is within the scope of unit-level maintenance and the parts are on hand, the MER will repair and return the equipment.

- If the repair exceeds unit-level capabilities, the MER will turn the equipment in to the S4 for evacuation to the MEDLOG company.

- If the equipment is a critical item, a MEDSTEP item will be issued from the supporting MEDLOG company. The MMMB of the DISCOM support operations office will coordinate this effort for units in the division area, while the HHD, MEDLOG battalion performs this function in the corps and EAC area.

- When a part is needed and the equipment is not a critical item, the MER will generate a parts requisition through the MEDLOG channels.

(3) *Automation and communication*. The MER will maintain automated maintenance records on assigned medical equipment and for supported medical units or elements. The MER must be able to communicate directly to the MEDLOG company for telephonic support, advice, or coordination.

c. *Echelon III, Corps Area*. Medical units assigned a medical maintenance mission in the corps area include MEDLOG company (corps forward), logistics support company (corps rear), combat support hospital (CSH), area support medical company (ASMC), and dental company (area support) (Figure 5-2). Medical units or elements operating in the corps area without a MER include blood detachments, area support medical detachments, ambulance company or squads, and preventive medicine and veterinary teams.

(1) *Oversight and management*. In the corps area, the HHD, MEDLOG battalion maintains situational understanding and provides logistic oversight, support, and coordination as necessary. The HHD utilizes AISs such as CSSCS, GTN, TC-AIMS II, JTAV, and joint medical asset repository (JMAR). The HHD, MEDLOG battalion works closely with the MLMC to ensure the maintenance requirements of the corps area are anticipated and met. The HHD, MEDLOG battalion will provide assistance when service contracts, contractors, remote diagnostics, or when obtaining soldiers with specific skills are necessary.

(2) *Medical logistics company responsibilities*. The MEDLOG company is responsible for maintaining MEDSTEP items and PMIs; providing DS maintenance to units within the division and forward corps area and unit-level maintenance to blood detachments and units operating within the area without organic MERs; and providing MSTs to units within the division and forward corps area. Equipment will be evacuated through supply channels to the logistics support company if repairs exceed the DS maintenance level in accordance with the MAC, or as defined in AR 750-1 or AR 40-61. Parts will be requisitioned through the MEDLOG channels.

(*a*) *Capabilities*. The MEDLOG company is staffed with MERs and a 670A, health services maintenance technician. They are equipped with the appropriate tools and TMDE to perform unit-level and DS maintenance in accordance with MAC. The MEDLOG company is staffed and equipped to provide three MSTs.

(*b*) *Automation and communication*. The MEDLOG company will maintain automated maintenance records on assigned medical equipment and on supported medical units or elements.

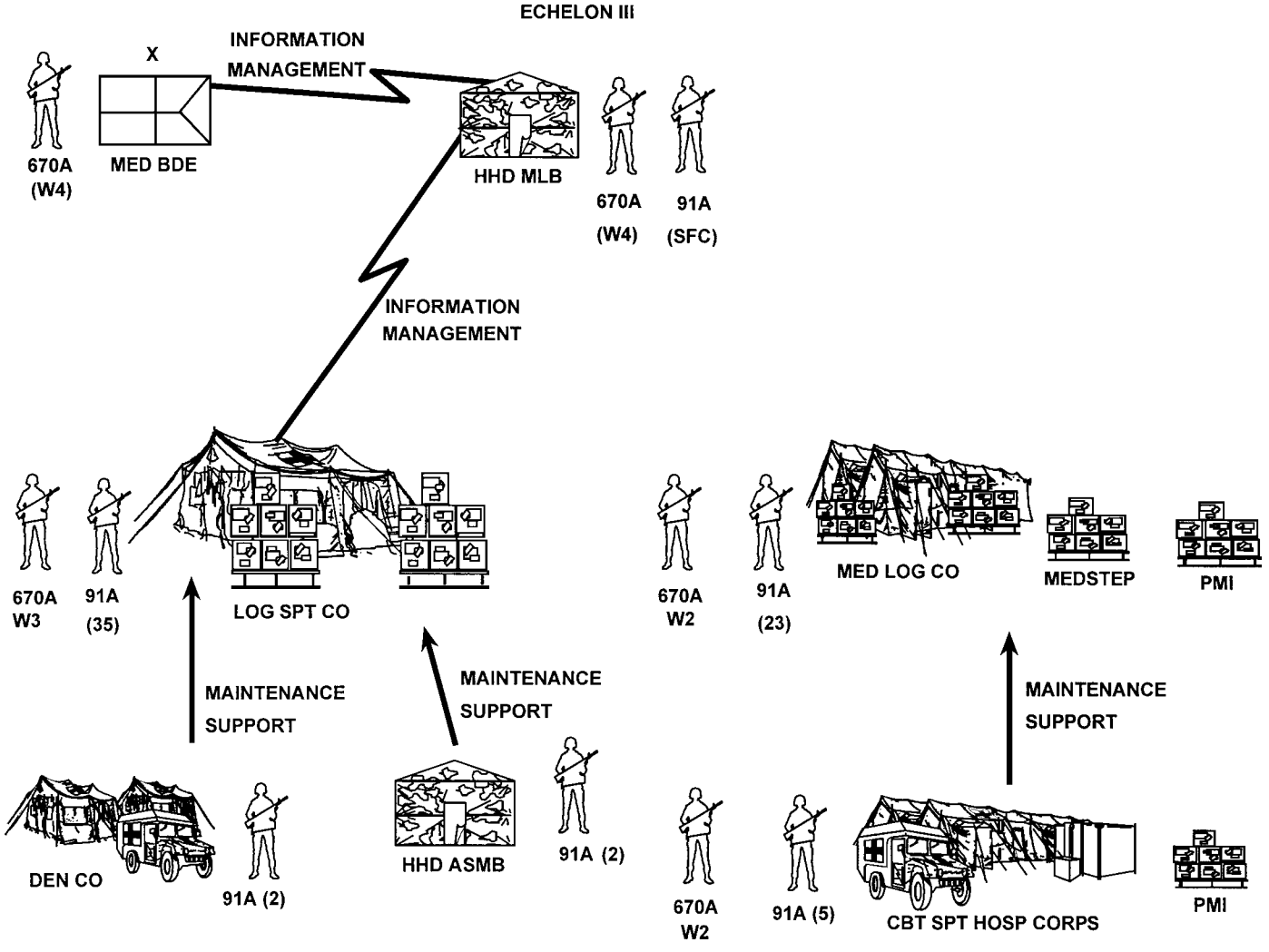


Figure 5-2. Echelon III medical maintenance support.

(3) *Combat support hospital responsibilities and capabilities*. The MERs and the 670A, health services maintenance technician, at the CSH are responsible for unit-level and DS maintenance on medical equipment assigned or attached to the CSH. The CSH, on a limited basis, will provide DS-level maintenance on an area basis. This will be coordinated through the corps MEDCOM medical brigade and HHD, MEDLOG battalion. Medical elements in the CSH area include head and neck teams (computed tomography scan), telemedicine detachment, ambulance squads, treatment teams, specialty teams, pathology teams, and preventive medicine and veterinary teams. The CSH will also maintain PMI assets as deemed necessary.

(*a*) *Automation and communication*. The CSH will maintain automated maintenance records on assigned medical equipment and supported medical units or elements.

(*b*) *Support*. Either a MEDLOG company or logistics support company, depending on where the CSH is located in the corps area, provides DS maintenance.

(4) *Medical companies operating in the corps area*. The MERs at the medical companies will be responsible for unit-level maintenance on medical equipment organic to the medical company and to medical elements operating within their area of support without organic MERs. The MERs will also maintain PMI assets as deemed necessary.

- The MERs will troubleshoot the equipment in accordance with the MAC. If the repair is within the scope of unit-level maintenance and the parts are on hand, the MER will repair and return the equipment.

- If the repair exceeds the capabilities of the MER, he will turn the equipment in to the S4 for evacuation to the MEDLOG company or logistics support company.

- If the equipment is a critical item, a MEDSTEP item will be issued from the supporting MEDLOG company or logistics support company.

- When a part is needed and the equipment is not a critical item, the MER will generate a parts requisition through the MEDLOG channels.

The MERs will maintain maintenance records on assigned medical equipment and supported medical units or elements. The MERs must be able to communicate directly to the MEDLOG company or logistics support company for telephonic support, advice, or coordination through organic communication assets by voice, data, or e-mail.

d. Echelons III and IV. The logistics support company is responsible for maintaining MEDSTEP items, maintaining PMIs, providing GS maintenance support to units within the theater, unit-level maintenance to the blood detachment and units operating within the area without organic MERs, and providing MSTs to units within the theater. If repairs exceed GS maintenance capabilities, the equipment will be evacuated through supply channels to depots or manufacturers, or nontheater assets (DA civilians,

contractors, and specially trained soldiers) will be deployed to repair the equipment. Parts will be requisitioned through MEDLOG channels or local purchased within the theater.

(1) *Capabilities*. The logistics support company is capable of providing repairs to the GS maintenance level and three MSTs for theater support.

(2) *Support*. The HHD, MEDLOG battalion and the MLMC forward team will provide support and logistic oversight to the logistics support company.

e. *Echelon IV*. Medical units operating in EAC are typically area medical laboratory; EAC CSH; HHD MEDLOG battalion; dental company; blood detachment; veterinary teams; medical teams attached to the CSH such as head and neck, specialty care, pathology and telemedicine detachment; and the MLMC forward teams. There will also be medical elements from other Services that may require medical maintenance support (Figure 5-3).

(1) *Combat support hospital and medical units assigned to echelon above corps area.* The CSH and medical units with a medical maintenance mission in the EAC area have the same responsibilities and capabilities as those in the corps area.

(2) *Headquarters and headquarters detachment, medical logistics battalion*. The HHD, MEDLOG battalion provides logistic oversight, to include transportation; MST missions; ITV of parts and equipment; establishing maintenance priorities for equipment repair or exchange; directing cross-leveling of assets (parts or equipment); contracting maintenance support; ensuring viable equipment maintenance; and ensuring that MER training programs are in place in the TO.

(3) *Medical Logistics Management Center support team*. The MLMC support team provides maintenance management functions and advice to the theater surgeon. Responsibilities include maintaining visibility of units and medical assets in the theater, recommending cross-leveling of assets, redirecting shipments, and coordinating contractor support. The maintenance posture of the theater is managed and monitored through AISs such as the CSSCS, GCSS-A, JTAV, GTN, TC-AIMS II, JMAR, and TMIP.

f. *Echelon V*. Continental United States-based agencies include the MLMC base, USAMMA, and the national maintenance point. These agencies provide the strategic to tactical link. They monitor the maintenance posture of the theater and anticipate maintenance requirements. Quick responsiveness by these agencies will ensure the tactical medical units are able to provide quality support to the warfighter. These agencies provide support and coordination in the areas of parts, contract maintenance, equipment fielding, manufacturer support, training, depot maintenance, quality assurance, modification work orders, tools and TMDE, and program management assistance. The USAMMA operates three medical maintenance operations divisions (MMODs) for medical equipment. The MMODs are responsible for overhauling, rebuilding, and refurbishing medical equipment. This can be accomplished with maintenance assets at the facility or by USAMMA establishing contracts with civilian industry.

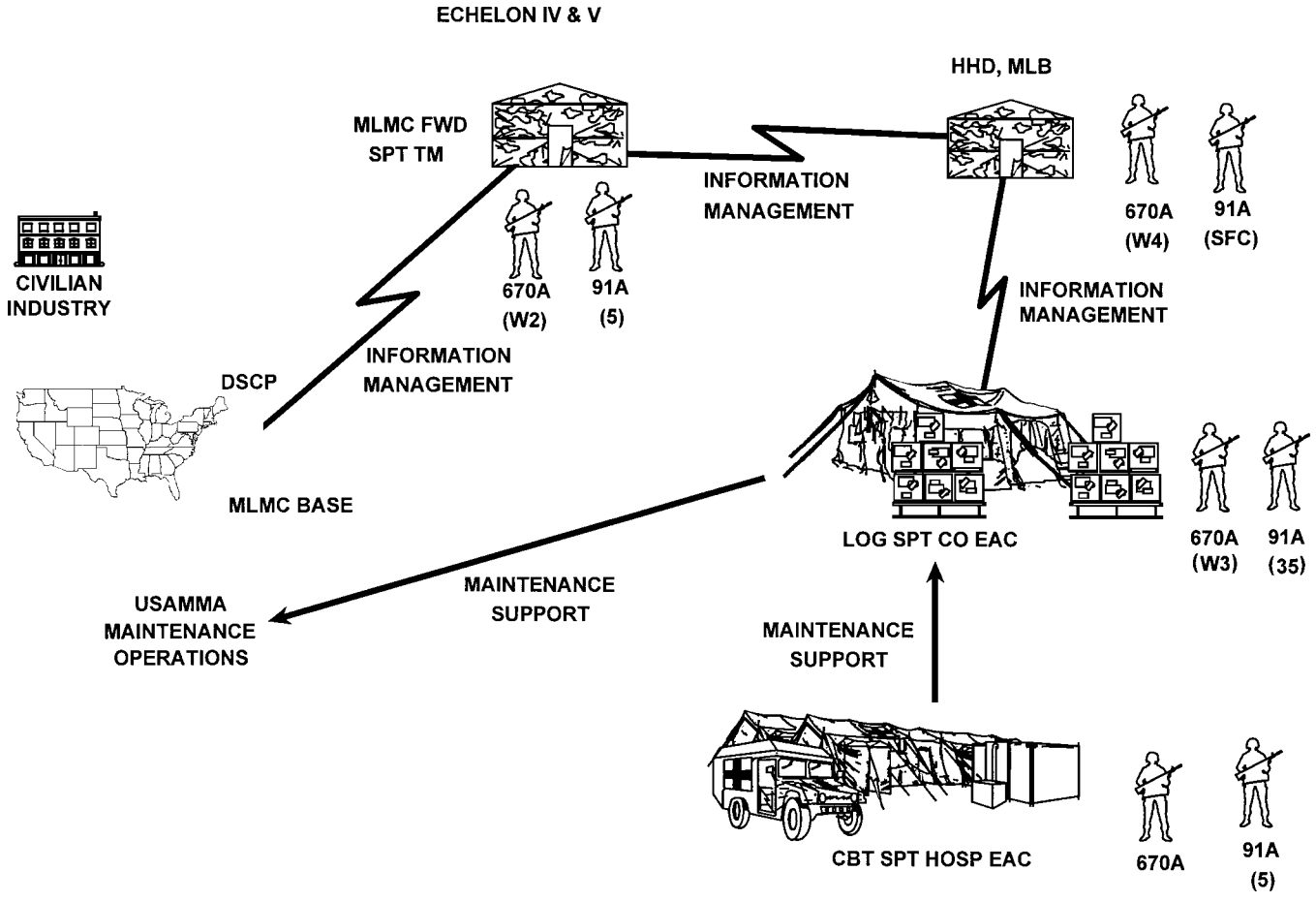


Figure 5-3. Echelons IV and V medical maintenance support.

5-10. Support to Other Services and Joint Operations

Future operations will be joint, interdepartmental, and combined/multinational in nature. The MEDLOG system is based on the principles of focused logistics. This will include joint Service operations, increased use of emerging technologies, information superiority, and shortened response times. Medical maintainers will provide support to other Services or nations. Support will be coordinated through core medical C2 organizations such as HHD, MEDLOG battalion, MLMC base, and forward support teams, theater surgeon, and TSC, or the designated SIMLM service.

CHAPTER 6

OPTICAL SUPPORT

6-1. General

a. This chapter outlines the optical support provided to the TO. Optical support includes—

- Fabrication of single-vision and multivision prescription lenses.
- Fabrication of standard spectacles.
- Fabrication of aviation spectacles.
- Fabrication of protective mask inserts.
- Military standard spectacle frame repair.
- Provision of contact lenses for military personnel on a mission-required basis.

b. Optical fabrication laboratories are responsible for making only those spectacles and protective vision devices that require corrective prescription lenses. Nonprescription lenses are a Class II item and are the quartermaster's responsibility.

c. Commander will ensure that soldiers have the following prior to deployment:

- Two pairs of military spectacles.
- One pair of protective mask inserts or 6-month supply of contact lenses (mission required only).

6-2. Echelons I and II Optical Support

a. There is no organic optical support at Echelon I. Patients requiring optometric services initially report to the BAS. For those patients requiring only routine replacement of spectacles or inserts, necessary information is obtained from the individual's treatment record and forwarded to the supporting optical fabrication activity. The required spectacles are fabricated and returned to the BAS for issue to the individual. For optometry services other than the replacement of spectacles, patients are transported to the optometry section of the DSMC.

b. The FSMC, FSB will request replacement of corrective eyewear for units in the BSA. The FSMC submits replacement requests to the supporting optical fabrication activity via the best communications available with delivery back to the requester.

c. Separate brigades and armored cavalry regiments have optometric support with limited eyewear repair capabilities, but no optical fabrication capabilities. All requests for prescription eyewear are forwarded via data link to the supporting MEDLOG company for fabrication and return to the requester.

6-3. Echelon III Optical Support

a. The optometry section of the ASMB is responsible for providing single-vision fabrication and repair of corrective eyewear for units on an area basis. Prescriptions and/or replacement requests which cannot be filled from on-hand stock or which exceed the ASMB capability are passed to the MEDLOG company via the best communications available with delivery back to the requester.

b. The MEDLOG company provides single-vision/multivision optical fabrication to the corps area. All prescriptions requested from the MEDLOG company optical section that cannot be filled are passed to the logistics support company with delivery back to the requestor.

6-4. Echelon IV Optical Support

a. As in the corps, the optometry section of the ASMB is responsible for providing single-vision fabrication and repair of corrective eyewear on an area basis for units in the EAC. All medical units, except Echelon IV hospitals, are supported by the supporting medical company of the ASMB. Prescriptions and/or replacement requests which cannot be filled from on-hand stock or which exceed the ASMB capability are passed to the supporting logistics support company via the best communications available with delivery back to the requester.

b. Echelon IV hospitals request optical support from the logistics support company with delivery back to the requester.

c. The logistics support company provides single-vision and multivision support to EAC and GS (backup) to the corps. All prescriptions requested from the supporting logistics support company optical section that cannot be filled are passed to the CONUS/OCONUS support base. Delivery of the item(s) from the CONUS/OCONUS support base will be to the theater optical fabrication laboratory (logistics support company).

6-5. Contact Lenses

Contact lenses will be provided on a mission-required basis.

6-6. Optical Equipment Sets

a. Currently, there are four optical equipment sets (OESs) in the Army medical supply system with a new system in development. These sets are—

(1) Unit assemblage (UA) 1324 OES, (Line Item Number [LIN] N23712). This OES is used to complete an optical examination.

(2) Unit assemblage 3003 OES, Optical Fabrication Unit Portable Field (LIN N22073). This OES provides single-vision capability.

(3) Unit assemblage 3004 OES, Optical Fabrication Unit Field 1 (LIN 22210). This OES provides single-vision capability.

(4) Unit assemblage 3005 OES, Optical Fabrication Unit Field 2 (LIN 22347). This OES provides the capability to produce single- and multivision optical devices. It is only documented in the MEDLOG battalion (rear) and will be archived when all units have converted to MRI.

(5) Unit assemblage 3006 OES, Multivision Augmentation (National Stock Number 6540-01-457-0913) is in development and will be fielded in fiscal year 2001. This new set will provide a small multivision set for use in the field.

b. Current UA listings and hand receipt copies may be obtained from the USAMMA home page via the Internet. The address for USAMMA is http://www.armymedicine.army.mil/usamma/; once on the home page, click on medical unit assemblage.

CHAPTER 7

BLOOD SUPPORT

This chapter implements and/or is in consonance with STANAG 2939 and QSTAGs 289, 815, and 850.

7-1. General

Blood and blood components are more than just another commodity of supply. Blood is live tissue and, as such, requires special handling. The primary mode for blood distribution is via air transportation.

a. Blood support in an active combat theater is a dynamic and ever-evolving process, heavily influenced by—

- Stringent storage and handling requirements.
- Inventory management constraints.
- Limited potency periods.
- Innovative technology.

b. To be successful, blood support must be a highly organized and cooperative effort on the part of—

- Medical logistics personnel.
- Operations and plans personnel.
- Blood bank personnel.
- Laboratory personnel.
- Transportation personnel.
- Primary medical care providers.

c. Theater blood support consists of CONUS-based resupply of blood components. In a developing theater during the buildup period, immediate blood requirements may be provided by pre-positioned frozen blood components (primarily US Army Pacific Command). These stocks are designed to meet initial blood requirements until the logistical system can deliver blood components to the TO. See FM 8-55 for computing blood requirements.

d. Blood services in a theater consist of a combination of missions. Of primary importance are the following:

(1) Receiving blood components from CONUS.

(2) Storing, issuing, and distributing blood components to medical treatment facilities (MTFs).

(3) Collecting and processing blood in the theater for platelets and other blood components.

(4) Storing, processing, issuing, and distributing frozen blood components pre-positioned within designated theaters.

7-2. Blood Components Available in the Field

a. Blood is managed as fractional portions called components and is used in rather specific quantities based on a patient's injury and condition. The components likely to be present in a theater include packed red blood cells (RBCs), fresh frozen plasma (FFP), and platelets/whole blood (WB) (only if collected in theater).

b. Units of packed RBCs are harvested from WB by centrifugation and removal of most of the plasma. Red blood cells can be stored in either the liquid or frozen state; the primary differences are the storage requirements, shelf life, and the additional processing required to freeze and thaw frozen cells. Plasma removed during RBC processing is promptly frozen and termed FFP. Additionally, platelets (cells involved in coagulation) can be harvested from plasma subsequent to RBC processing.

c. Blood storage requirements are extremely important and present a real challenge to field storage facilities. The conditions required for storing various components have very little tolerance; entire inventories of blood can be lost if conditions are not maintained correctly. See Table 7-1 for the storage temperatures and shelf lives of theater blood components.

Table 7-1. Storage Requirements for Theater Blood Component

BLOOD COMPONENT	STORAGE TEMPERATURE	STORAGE SHELF LIFE
RBC (LIQUID)	1°C TO 6°C	35 OR 42 DAYS
RBC (FROZEN)	≤-65°C	10 YEARS
FFP	≤-18°C	12 MONTHS
PLATELETS	20°C TO 24°C	5 DAYS

d. Conditions for transporting blood components are essentially the same as for prolonged storage; however, when shipping packed RBCs, a temperature range of 1°Celsius (C) to 10°C is acceptable. Specially built containers and packaging methods are prescribed in TM 8-227-3.

7-3. Continental United States-Based Blood Supply

The Army's blood support system is a part of the Armed Services Blood Program (ASBP). Upon mobilization, donor centers and CONUS MTFs increase their blood drawing capabilities as directed by the Army Blood Program Officer. All of these facilities draw, process, and prepare blood and blood components for shipment to one of the Armed Services Whole Blood Processing Laboratories (ASWBPLs). The ASWBPL sends the blood to a USAF Blood Transshipment Center (BTC) located at major airfields in the TO. For information on blood support in joint operations see Joint Publication 4-02.1.

7-4. Theater Blood Supply

a. Theater blood support is provided to US military and, as directed, to allied military and indigenous civilian MTFs. Each unified command maintains individual blood programs to meet their needs. These programs interface with CONUS blood bank services and receive blood components directly from established DOD Joint Service programs.

(1) The Joint Blood Program Office(r) (JBPO) is the—

- Single blood program manager in the TO.
- Single interface with the Armed Services Blood Program Office (ASBPO) in CONUS.

(2) The JBPO requests assistance from the ASBPO when requirements exceed theater resources. The ASBPO requests support from the Joint Services. Blood collected and processed by DOD blood donor centers in CONUS is shipped to one of two ASWBPLs. Blood is then transported via air to USAF BTCs in the TO. Once received at the BTC, blood components are under JBPO control.

(3) The JBPO establishes Area Joint Blood Program Offices (AJBPOs) to—

- Implement TO blood program policies.
- Coordinate blood component use and inventory protocol on a geographical basis.
- Direct the issue of blood components from the BTC to the BSD.

(4) The BSD is the direct issue source for MTFs, medical units, and other users at division, corps, and EAC (see paragraph 3-9). Blood support detachments support other Services' MTFs and

nonmilitary facilities as directed by the AJBPO. The BSD commander may serve as the AJBPO. A schematic diagram of a BSD structure is illustrated in Figure 3-6.

b. Combinations of sources are required to satisfy the theater's initial blood needs. Limited in-theater collections (BSD personnel and hospital-based collections), initial deployed supply, and pre-positioned frozen blood inventories are all necessary to meet requirements during the first few days of a developing theater. Full CONUS-based blood support capability is mature within 10 days of notification. As the theater matures, the primary source of blood components comes directly from the CONUS base. In-theater collection and processing are **not** realistic methods to acquire the tremendous quantities of blood required in a large, active theater. It remains necessary, however, to retain an in-theater collection capability to provide platelets and to satisfy limited emergency needs. Experience has shown in-theater collection to be the only choice for massively transfused patients when platelets and/or FFP are not available in sufficient quantities.

7-5. Echelon Blood Support

a. *Echelon I*. No blood or blood product support is provided at this echelon.

b. *Echelon II*.

(1) The division surgeon determines blood requirements for the division. Blood inventory and supply are functional responsibilities of the HSMO at the MMMB and the AJBPO/JPBO at the corps and EAC level. Only packed liquid RBCs are expected to be available to the division. The forward cell of the BSD (collocated with the medical logistics company) provides blood products to the medical companies/ troops in the division. Shipment of blood from the corps to the division is either coordinated by the MEDLOG battalion's support operations section with the corps movement control center or accomplished by backhaul on medical vehicles (air and ground). Air ambulances from the medical battalion, evacuation, can accomplish emergency resupply. Most of the demands for emergency resupply come from the FSMCs.

(2) The FSMC/DSMC laboratory medical specialist (91K) informs the DSS (HSMO) and DISCOM MMMB of the current availability of blood in the division. The DSS prioritizes the movement of blood products, as required. Air assets should be considered along with ground assets for the transportation of blood.

(3) Blood support at the FST consists of Type O RBCs (liquid) in limited quantities as dictated by the specific contingency and expected casualty rate. The FST has a 60-unit blood storage capability and requires blood resupply on a frequent basis. Blood inventory management and resupply operations are coordinated directly with the supporting medical company/troop.

c. *Echelons III and IV*.

(1) In the corps and EAC CSHs, blood support has evolved significantly with the fielding of the Deployable Medical System (DEPMEDS) blood laboratory and the shelters, tactical expandable (also known as the International Organization for Standardization [ISO] shelters).

NOTE

The ISO shelters are the hard-walled shelters used in the DEPMEDS-equipped corps and EAC CSHs.

The transfusion capability at the CSH has been improved with the implementation of greater storage capacity, basic compatibility testing, multicomponent availability, and staffing with a laboratory officer and NCOs with specific blood bank training. Inventories of up to 480 units of blood can be stored in a DEPMEDS refrigerator.

(2) The CSH blood inventory management and resupply operations are coordinated directly with the supporting BSD. Inventories are managed for Groups A, B, and O blood, and both Rh positive and Rh negative blood types. A small inventory of FFP is available at the CSH. The CSH has the capability to conduct limited emergency collection, but does not have the capability to perform infectious disease testing of the donor units (rapid screening methods for hepatitis, human immunodeficiency virus, and syphilis testing may be available). The decision to transfuse blood collected in a theater is governed by theater policy.

(3) The relatively large quantity of blood maintained at the CSH requires the use of large-capacity, blood bank-type refrigerators equipped with audible and visual temperature alarm systems. Freezers for FFP storage are similarly monitored.

7-6. Blood Reporting System

The blood reporting system has been standardized to enhance blood requirements projection, blood requests, blood inventory reports, and to provide information on the overall blood element operations of all Services, to include Joint Services, in the TO. The ASBPO developed the contingency blood reports and use of the US Joint Message Text Format. The two standard joint message text format reports used to report blood program operations are—

- The Blood Report.
- The Blood Shipment Report.

For a detailed discussion on the blood reporting system, see FM 8-55.

CHAPTER 8

COMMUNICATIONS

8-1. General

This chapter provides an overview of current communications applicable to MEDLOG elements (Chapter 3) in the theater. It is targeted at commanders, staff officers, and NCOs in tactical environments from unit-level operations through EAC.

8-2. Communications Responsibilities and Systems

The success of CHL operations is dependent upon the commander's ability to communicate with his staff, deployed elements, higher headquarters, and supporting and supported units. Combat health logistics units' communications assets include amplitude-modulated (AM) and frequency-modulated (FM) radios, wire and MSE, tactical computer equipment, position/navigation devices, International Maritime Satellite communications systems, and other commercial satellite systems.

a. Staff Responsibilities. Each unit staff element is responsible for adhering to signal support policies, procedures, and standards in their daily operations. The unit's operations section/communications designee coordinates telecommunications interface requirements with higher headquarters and with the supporting signal unit.

b. Communications Support. Communications support for organizations within a TO is based upon a unit's level of operations. Signal support for an EAC unit is provided by the theater signal brigade through the theater Deputy Chief of Staff for Operations and the Deputy Chief of Staff for Information Management. Units assigned to a corps will request signal support through the corps Assistant Chief of Staff, G3 (Operations and Plans) and will be supported by the corps signal brigade.

c. Mobile Subscriber Equipment. Mobile subscriber equipment is the area common-user voice communications system within the corps. It is the backbone of the corps system and is deployed from the corps rear boundary forward to the maneuver battalion's main command post. It provides a secure mobile, survivable communications system capable of passing voice, data, and facsimile (FAX) throughout the corps. Additionally, it provides a direct interface to EACs, other Services, NATO, combat net radios (CNRs), and commercial communications systems. This system is composed of multiple communications nodes with network features that automatically bypass and reroute communications around damaged or jammed nodes. It integrates the functions of transmission, switching, control, and terminal equipment (voice and data) into one system and provides the user with a switched telecommunications system extended by mobile subscriber radiotelephones. Nodes are deployed in the AO based on geographical and subscriber density factors. Node centers are the building blocks of the network. Extension switches permit wire-line terminal subscribers (telephone, FAX, and data) to enter into the total area communications system. Radio access units let the users of mobile subscriber radiotelephone terminals communicate with other mobile and wire telephone users throughout the AO. System control centers provide the processing capability to assist in overall network management. The MSE system lets subscribers communicate with each other using fixed directory numbers regardless of a subscriber's battlefield location. The MSE system is comprised of the following five functional areas:

- Area coverage.

- Subscriber terminals.
- Wire subscriber access.
- Mobile subscriber access.
- System control.

Combat health logistics organizations participate in the first four of the functional areas.

(1) *Area coverage*. The MSE system provides common-user support to a geographic area, as opposed to dedicated support to a specific unit or customer. The hubs of the system are called nodes and are under control of the corps/EAC signal officer.

(2) *Subscriber terminal (fixed)*. The MSE telephone, mobile radiotelephone, FAX, and data terminal, as part of the area common-user system, are user-owned and operated. The using unit is responsible for running wire to the designated junction boxes. These boxes tie the unit's MSE telephones into the extension switches that access the system. The subscriber terminals used by the unit are digital, four-wire voice, as well as data ports (of TA-1042 digital nonsecure voice terminals) for interfacing the AN/UXC-7 FAX, the Tactical Army Combat Service Support Computer System, the Army Tactical Command and Control System with common hardware and software, and the unit-level computer.

(3) *Wire subscriber access*. Wire subscriber access points provide the entry points (interface) between fixed subscriber terminal equipment owned and operated by users and the tri-service tactical communications (at EAC) and MSE (at corps and division) area system operated by the supporting signal unit. The company's switchboard may tie into the area system. See FM 11-43 for definitive information pertaining to an MSE area communications system. The commander will designate the company's wire net system based on the mission.

(4) *Mobile subscriber access*. The MSE terminal is the mobile subscriber radiotelephone terminal (MSRT). It consists of an ultra high-frequency radio and a digital secure voice terminal. It interfaces with the MSE system through a radio access unit, usually located at a signal node center. The primary use of the MSRT is to provide mobile subscriber access to the MSE area network. The MSRTs also operate in the command post to allow access to staff and functional personnel.

d. Combat Net Radio System. The CNR equipment includes the improved high frequency radios (IHFRs), automatic link establishment voice/data high frequency radios, the Enhanced Position Location Reporting System (EPLRS), near-term digital radios, and SINCGARS. The primary use of the CNR system is the voice and data transmission of C2 data. The AM radios come equipped with servers and will automatically tune to the most advantageous frequency; these radios operate mid- to long-range, beyond line-of-sight (LOS). The SINCGARS series FM radios are designed for simple and quick operation using a 16-element keypad for push-button tuning. They are capable of short-range operations within LOS. The EPLRS and near-term digital FM radios are especially designed for data communications and provide short-range LOS coverage.

e. Radio Nets. Combat health logistics organizations and their staff depend on both AM and FM radios and area communications systems for mission accomplishment. The allocated radios consist of AN/VRCs 88A, 90A, and 92A and the AN/GRCs 106, 193, and 213 (the AN/GRC-246 [V1, V2] may be used in place of these other AM radios). These radios allow the commander(s) to operate in the battalion command net, his company's command net, the supporting higher command net, and the supported operations net.

f. Signals Security. As part of the overall security program, CHS logistics units must practice signals security. The unit operations officer is responsible for signals security and communications security. Some considerations include—

- Using terrain features, such as hills, vegetation, and buildings, to mask transmissions.
- Maintaining radio-listening silence; using the radio only when absolutely necessary.
- Distributing codes on a need-to-know basis.
- Using only authorized call signs and brevity codes.
- Using authentication and encryption codes specified in the current signal operating instructions.
- Keeping transmissions short (less than 20 seconds, if possible).
- Reporting all communications security discrepancies to appropriate authorities.

CHAPTER 9

MEDICAL LOGISTICS INFORMATION SYSTEMS

9-1. General

a. This chapter describes the current Army-unique systems, the planned replacement tri-service systems, and the TAMMIS (see Table 9-1).

b. The TAMMIS, which is the current information management system used by the MEDLOG organizations at division, corps, and EAC. The replacement for the logistics portion of TAMMIS will be a joint system known as the TMIP. The logistics modules of TMIP are DMLSS created applications. The medical maintenance portion of TAMMIS will be replaced by GCSS-A maintenance for all TOE units at some time in the future.

c. The TAMMIS supports selected Echelon II—V (division, corps, and EAC) units. For Echelon II, TAMMIS is limited to the DMSO section in the DSMC. The TAMMIS' use in Echelon III is limited to the ASMB, CSH, and the MEDLOG battalions. The three logistics modules of TAMMIS are medical assemblage management (MEDASM), medical maintenance (MEDMNT), and MEDSUP (discussed in paragraph 9-3 through 9-5).

d. Over the next few years, advancements in technology will replace TAMMIS MEDLOG modules with logistics modules of the TMIP. The TMIP will integrate tri-service clinical and logistics applications in a common user environment (hardware and software). The logistics modules will be created by the DMLSS Program Office. Those modules are—

(1) *Assembly management—stand-alone*. Assembly management—stand-alone (AMSA) automates the management of medical set components, small storage Class VIII management, small storage blood management, PMIs tracking, and spectacle/insert optical requisitioning. The system is designed to operate at BAS, FSMC, DSMC, selected corps, and EAC levels.

(2) *Customer area inventory management*. Customer area inventory management automates the management of customer stockage levels in our Echelon V activities. The system is envisioned to support customer areas within our deployable and fixed hospitals in the corps and EAC levels.

(3) *Stockroom and readiness inventory management*. Stockroom and readiness inventory management (SRIM) is the TAMMIS MEDSUP replacement that will automate the comprehensive inventory and supply management of medical materiel. The system is designed to operate within the MEDLOG units, and both the deployable and the fixed hospitals in the corps and EAC levels.

(4) *Equipment and technology management*. Equipment and technology management (ETM) is the Army Medical Department Property Accounting System (AMEDDPAS) replacement that will automate the comprehensive property and medical maintenance functions within the fixed hospitals.

e. Additionally, TMIP will integrate clinical systems that are of logistics interest. Those applications are—

(1) *Defense Blood Support System.* Defense Blood Support System (DBSS) automates the blood bank operations and is currently fielded to MEDLOG units and both the deployable and the fixed

hospitals with a blood bank/donor center support mission. This application will be modernized and integrated on the TMIP server to FSMC, DSMC, and MEDLOG units, and deployable hospitals in the corps and EAC levels.

(2) *Spectacle Request Transmission System-II.* Spectacle Request Transmission System-II (SRTS-II) automates the patient record portion of the optical prescription and order transmission process to MEDLOG units and optical fabrication laboratories in the corps and EAC levels.

f. Lastly, there are Standard Army Management Information Systems (STAMIS) that will exist in selected medical units. Those applications are—

(1) *Global Combat Support System-Army* (*Maintenance*). The Global Combat Support System-Army (Maintenance) GCSS-A (MNT) is the replacement for the Unit Level Logistics System (ULLS) Ground (ULLS-G). The ULLS-G will be the system used to manage and track all medical maintenance specific equipment in all TOE units to include FSMC, DSMC, ASMBs, CSHs, and dental companies. Maintenance will be used in all medical units authorized a company- or battalion-level motor maintenance operation in the division, corps, and EAC levels.

(2) *Global Combat Support System-Army* (*Supply and Property*). The Global Combat Support System-Army (Supply and Property) (GCSS-A [SPR]) is the replacement for the ULLS S4 and Standard Property Book System-Redesigned (SPBS-R) systems, that will be used in all medical units, battalion and higher, to maintain all TOE property and requisition most nonmedical supplies.

Table 9-1. Software Applications

FUNCTION	CURRENT SYSTEMS	REPLACEMENT SYSTEMS
ALL TOE MEDICAL MAINTENANCE	MANUAL/MEDMNT	GCSS-A (MNT)
ALL TDA MEDICAL MAINTENANCE	AMEDDPAS	DMLSS (ETM)
AM/SUPPLY ECHELON I, II	MANUAL	TMIP (AMSA)
AM ECHELON III	MEDASM	TMIP (SRIM)
SUPPLY ECHELON II	MEDSUP	TMIP (AMSA)
SUPPLY ECHELON III	MEDSUP	TMIP (SRIM)
SUPPLY TDA	MEDSUP	DMLSS/SRIM
BLOOD ECHELON II	MANUAL	TMIP (AMSA) (DBSS)
BLOOD ECHELON III	DBSS	TMIP (DBSS)
OPTICAL ECHELON I, II	MANUAL	TMIP (AMSA) OR TMIP (SRTS-II)
OPTICAL ECHELON III	SRTS	TMIP (AMSA) OR TMIP (SRTS-II)
VEHICLE MAINTENANCE	ULLS-G	GCSS-A (MNT)
NONMEDICAL SUPPLY	ULLS-S4 AND SPBS-R	GCSS-A (SPR)
ALL TOE PROPERTY	ULLS-S4	GCSS-A (SPR)
PROPERTY TDA	AMEDDPAS	DMLSS (ETM)

9-2. Theater Army Medical Management Information System

a. The TAMMIS supports the current information management requirements of field medical units in peacetime and wartime. It is not present in divisional units except for the DMSO section of the DSMC. The TAMMIS is an automated, on-line, interactive microcomputer system designed to assist commanders and staff by providing timely, accurate, and relevant medical information in the following areas:

- Medical assemblage management.
- Medical maintenance.
- Medical supply.

b. Controlled accessibility is a TAMMIS feature included both to simplify the system and to increase security. During system setup, the local manager establishes each user's accessibility to the system through system setup files; the user may review only the portion of the system that pertains to his job responsibilities. The local manager can also adjust his unit's system to accommodate local requirements and the operating environment.

c. The TAMMIS has flexible communication capabilities and can relay information between units in various ways. The preferred medium is via modem; however, direct communication between computers through a LAN or an MSE system may be utilized. When direct electronic communications links are not available, users may pass information by courier via floppy diskette, tape, or hard copy.

9-3. Medical Assemblage Management

a. The TAMMIS-MEDASM automates the management of medical assemblages for facility commanders. The system provides the commander with the capability to track overages, shortages, quality control information, and locations for each assemblage, as well as the readiness status of the individual assemblages. This module is used primarily in corps- and EAC-level deployable hospitals.

b. The TAMMIS-MEDASM provides the user with automated capabilities in the following areas:

(1) *Assemblage management processes*. The system provides a grouping of individual processes that are used for item, allowance, and quality control management. Collectively, these individual processes allow accurate predictions of hospital readiness based on asset availability.

(2) *Request, receipt, and due-in management*. The system includes separate processes that expedite ordering of shortage items, recording receipts, and managing aged orders for required items.

(3) *System setup procedures*. This system includes a group of processes that define the operating environment to the medical assemblages. These procedures describe the parent department/ section, its supported assemblages, sources of supply support, and ordering processes.

(4) *User designed reports*. This process allows the user to create, modify, delete, and print reports of the user's own design. The TAMMIS-MEDASM will also provide the user with the capability to prepare reports listing subhand receipt durable items and nonexpendable pieces of equipment within assemblages.

9-4. The Medical Maintenance System

a. The TAMMIS-MEDMNT supports the scheduled maintenance and repair of medical equipment essential for treating patients. The system is designed to operate at the DMSO within the US Army divisions, at the MEDLOG battalions, and at TOE hospitals within the corps and EAC. The system is used at each of these locations to manage equipment maintenance and repair for equipment owned by the supporting and supported units. The TAMMIS-MEDMNT will operate on commercial-off-the-shelf (COTS) automation equipment.

b. The TAMMIS-MEDMNT provides the user with automated capabilities in the following areas:

(1) *Work order processing*. Work order processing allows the scheduling, assigning, tracking, and reporting of medical equipment maintenance work orders. It also allows the user to identify and track the status of equipment directly supported by local medical maintenance personnel.

(2) *Supply management*. Supply management allows the unit to maintain information on stockage of items required to support the medical maintenance mission. It also allows the maintenance unit to interface with the supply system through the ULLS to requisition nonmedical repair parts.

(3) *Periodic processing and reporting*. This action generates a monthly performance report that provides scheduled and unscheduled maintenance service information to be used by local management or higher commands. A C2 report provides the commander with up-to-the-minute status of all readiness-significant items of medical equipment. It also provides a Materiel Condition Status Report (DA Form 2406) which passes unit readiness information through the command.

(4) *Maintenance system setup procedures*. These procedures define the local environment used to control system processing by identifying supporting activities and supported customers and by processing default data.

(5) *User designed reports*. This process allows the user to create, modify, delete, and print reports of their own design.

9-5. The Medical Supply System

a. The TAMMIS-MEDSUP automates the comprehensive management and requisitioning of the medical materiel required to support medical units. It is designed to operate at the DMSO within US Army divisions; at the MEDLOG battalions; and at TOE hospitals within the corps and EAC. The TAMMIS-MEDSUP will operate on COTS automation systems. The TAMMIS-MEDSUP interfaces with the CSSCS

and the STAMIS, specifically the Department of the Army Movement Management System-Redesigned (DAMMS-R), CSSCS, Standard Army Retail Supply System (SARSS), and SPBS-R.

b. The TAMMIS-MEDSUP provides the user with automated capabilities in the following areas:

(1) *Customer processing*. Customer processing enables the user to—

- Enter routine and emergency customer requests for medical materiel.
- Enter, approve, reject, or receive customer turn-ins.
- Maintain a customer request file where requests can be reviewed, modified, or canceled, and supply status can be provided to the customer.
- Build and maintain an automated customer reorder list.
- Produce various customer supply and financial reports.
- Prepare files for customers.
- Load and process files from customers.

(2) *Supply requisitioning, receiving, and due ins*. This allows the user to—

- Generate, review, and enter replenishment requisitions.
- Review, modify, or cancel due-in records.
- Generate follow-up requests and print the due-in items report.
- Enter, process, review, and reverse receipts.
- Prepare files for the supplier.
- Load and process files from the supplier.

(3) *Local stock maintenance, quality control, and reporting*. This—

(*a*) Enables the user to—

- Maintain local stock records and levels by adding or changing stock record files and processing stock number changes.
- Review the item request history for stockage of an item.

- Recompute the requisitioning objective or reorder point (ROP) for stocked items.
- Review contingency versus active stocks.

(*b*) Allows the user to—

- Maintain a stock location file.
- Produce location reports.
- Conduct more efficient physical inventories.
- Perform inventory adjustments.
- Produce inventory reports.

(*c*) Allows the user to perform quality controls and destruction actions by—

- Processing quality control alert messages.
- Scheduling quality control surveillance inspections.
- Entering quality control data for materiel received.
- Entering or updating destruction records.
- Adjusting the stock record file for destruction.
- Printing quality control and destruction reports.

(*d*) Enables the user to—

- Obtain information for current stock status and process catalog changes.
- Perform monthly summary purge and create the Standard Financial System file.
- Perform periodic and special purpose reporting, such as C2 and numerous supply management reports.
- Perform excess stock management and reporting.

(4) *Query by the national stock number, due in or due out, or transaction history*. A query allows the user to—

- View current stock status, due in or out transaction history, and demand history on the screen.
- Modify or cancel customer requests.
- Review, modify, or cancel due-in records.

(5) *Setting up and maintaining system procedures*. This enables the user at initial system setup or during normal system operation to—

- Build or update the supported customer file.
- Build or update the supporting activity file.
- Build or update the environmental data file by entering and updating local destruction date, financial description data, requisitioning objective or ROP calculation data, and processing default and control data.
- Update month and cut-off dates.
- Update reporting, printing, and display options.
- Perform file archiving.
- Build an updated cost file.
- Update the elements of expense file.

(6) *Reviewing exceptions referred to manager*. This allows the user to review and process exception records from the due-in exception file, customer demand exception file, receipt exception file, and replenishment exception file.

(7) *User designed reports*. These reports allow the user to create, modify, delete, and print user-designed temporary reports.

9-6. Theater Medical Information Program

a. The TMIP will be the clinical and MEDLOG system to support the Army's Force XXI requirements. The hardware, training, and system deployment of the TMIP within the Army will be completed by the MC4 program office. The TMIP lays the foundation for CHS of Force XXI and the Army, 2010 and beyond. The MRI units were designed to use the enhanced communications and digital enablers that will be available on the Force XXI battlefield. As the Army moves to the future and as long as soldiers are involved, the following CHS ten basic functional areas must still be accomplished:

- Patient evacuation and medical regulating.

- Hospitalization.
- Combat health logistics/blood management.
- Dental services.
- Veterinary services.
- Preventive medicine services.
- Combat stress control services.
- Area medical support.
- Medical laboratory services.
- Command, control, communications, computers, and intelligence.

b. The TMIP will be achieved by the integration of emerging information management technologies with existing and emerging digital communications technologies. This new medical information management system will start with the individual soldier and continue throughout the health care continuum. The best way to visualize the TMIP capability is as a piece of the Army digital computer network where all ten CHS functional areas (or business systems) have been digitized and this CHS information is freely shared with everyone in the Army network with a need to know. In fact, not only will the TMIP provide Army commanders with CHS information, but it will also provide commanders with a seamless transition to the joint CHS environment. The TMIP is the software program that will deliver CHS-specific software for MC4 hardware fielding within the Army, along with standardizing software business practices DOD wide.

c. The TMIP will be a worldwide, automated CHS system, which provides commanders, health care providers, and medical support providers, at all echelons, with integrated medical information. The system will provide digital enablers to link, both vertically and horizontally, all ten CHS functional areas. The TMIP will receive, store, process, transmit, and report medical C2, medical surveillance, medical treatment, medical situational understanding, and MEDLOG data across all echelons of care. This will be achieved through the integration of a network of medical information systems linked through the Army data communications structure. The TMIP will be developed incrementally through rapid prototyping and the spiral development process, which will expand the system from limited functional capabilities to fully integrated objective capabilities.

d. The TMIP will consist of three basic components—software, hardware, and telecommunications systems.

(1) *Software systems*.

(*a*) The TMIP will provide government off-the-shelf/COTS software to support joint TO. The software provides an integrated medical information system that will support all echelons of care

in a TO with links to the sustaining base. Medical capabilities provided to support commanders in the theater will address medical C2 (including medical capability assessment/sustainability analysis and medical intelligence); MEDLOG (including blood product management); casualty evacuation; and health care delivery.

(*b*) The MC4 implementation of the TMIP software will support Army-unique requirements and any software needed to interface with Army and DOD information systems. Figure 9-1 illustrates the systems effecting logistical support.

(2) *Hardware systems*. The hardware systems will consist of automation equipment supporting the above software capabilities. Examples include, but are not limited to, computers, printers, networking devices, and the personal information carrier.

(3) *Telecommunications systems*. The TMIP will rely on current and proposed Army solutions for tactical, operational, and strategic communications systems to transmit and receive digitized medical information throughout the theater and back to the sustaining base. The TMIP will include the hardware or software required to interface with current and emerging technologies supporting manual, wired, and wireless data transmission. At end-state, Army TMIP users will exchange data electronically via the Warfighter Information Network architecture. In the interim, until the WIN architecture is fully fielded and can support the requirement, the MC4 program will provide, to selected medical units (for example, Medical Detachment, Telemedicine or C4I units), a solution (such as commercial satellite and/or high frequency radio) to transmit digital medical data.

9-7. Theater Medical Information Program Operational Concept

a. Echelon I Medical Logistics. The present MEDLOG system at Echelon I is a totally manual system. Under TMIP, the trauma specialist will utilize FBCB2 to request medical supplies from the BAS. This request will be a built-in report on the FBCB2 system. At the BAS, requests for medical resupply will be made utilizing the TMIP logistics module. This automation will not only speed the resupply process, but will also allow the combat commander to maintain visibility of his unit's MEDLOG status, either through FBCB2 or through TMIP's link to CSSCS through GCSS-A.

b. Echelon II Medical Logistics.

(1) At the Echelon II medical units (FSMCs and DSMCs), the TMIP will provide the same augmentations to MEDLOG that will be seen at Echelon I. Additionally, the TMIP will provide limited blood management and optical requisitioning.

(2) The MMMB at the Division Materiel Management Center is the Class VIII commodity manager. It uses many of the same automated tools as the other commodity managers, assists and coordinates Class VIII resupply through the battlefield distribution system. The TMIP will automate linkage of Class VIII supply to the transportation system. The management of the complex medical sets along with the quality control of Class VIII material is also automated, improving efficiency over the current manual system. The joint software design supports the Army support to other Services mission of Army MEDLOG units.

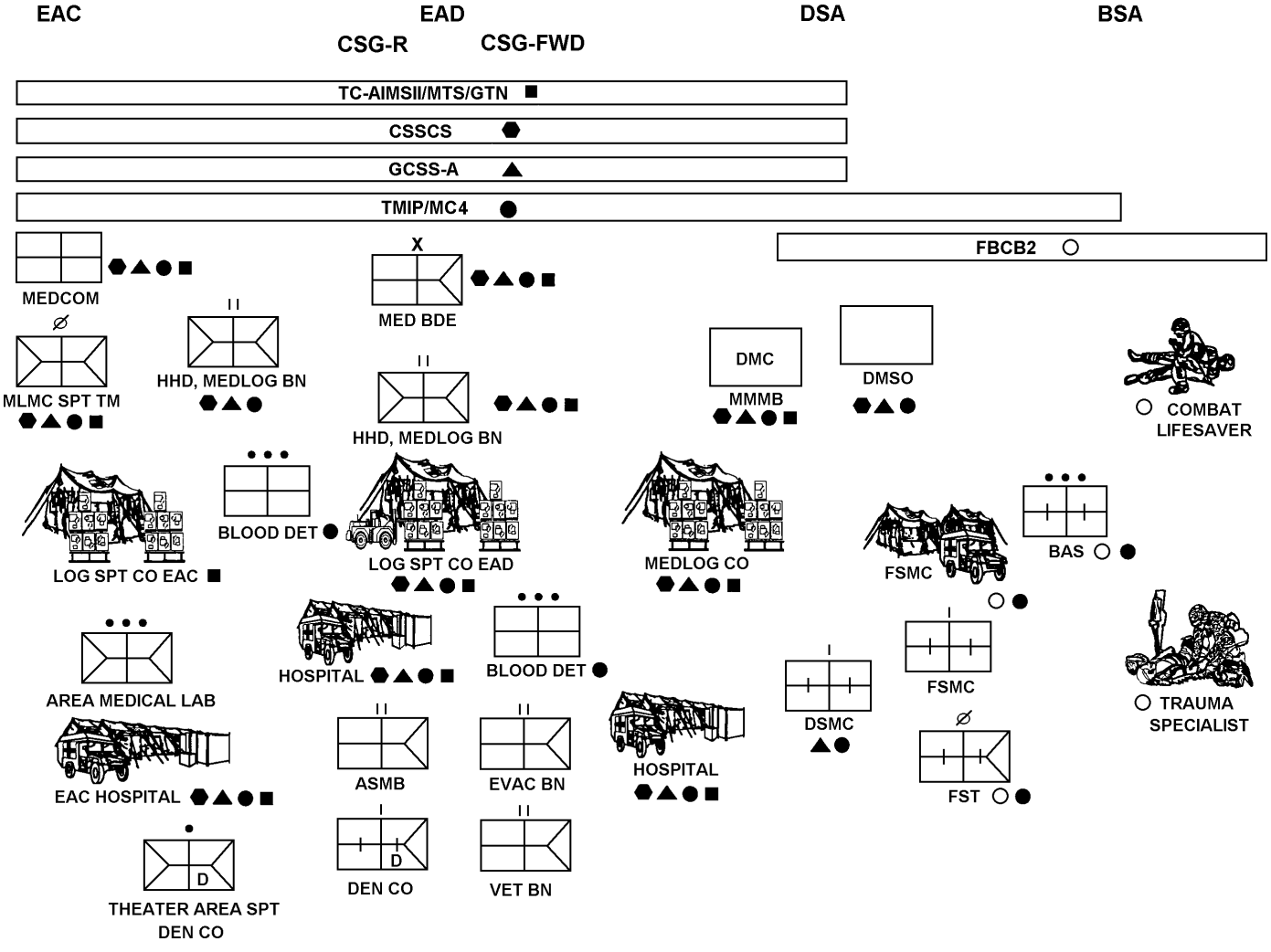


Figure 9-1. Systems effecting logistics support.

c. Echelons III, IV, and V Medical Logistics. These echelons contain hospitals and all of the specialized medical units required to support the theater and the CONUS sustaining base. The TMIP will link all of these medical functions. The TMIP will equip corps treatment and evacuation teams with personally carried and mobile computers for the collection and forwarding of medical information to the forward division or ASMC. Likewise, CSC teams, veterinary teams, dental teams, and preventive medicine teams operating in the brigade rear area will be equipped with personally carried and/or mobile computers. These TMIP-provided devices will be loaded with the appropriate software functionality. A seamless Class VIII (including blood) automated system links the theater to the CONUS sustaining base.

d. Command and Control. At all echelons, the TMIP will automatically provide information, such as MEDLOG status, evacuation status, current unit fitness for combat, and hazard exposure information, to the commander's situational understanding system. This information will be provided to the commander from the TMIP functional digital systems through GCSS-A to CSSCS. Commanders, for the first time, will have a complete picture of the battlefield, which will allow them to accurately influence current operations while synchronizing CHS with other activities.

APPENDIX A

LAW OF WAR OBLIGATIONS FOR MEDICAL PERSONNEL

A-1. Law of War

a. Sources.

(1) Sources for the law of war obligations of the US are treaties ratified by the US. As such, they are part of the supreme law of the land. The US is obligated to adhere to these treaty obligations even when an opponent does not. It is the policy of the DOD and the US Army to conduct its military operations in a manner consistent with these treaty obligations.

(2) In the area of CHS, the law of war source is the Geneva Conventions for the Protection of War Victims of 12 August 1949. Questions regarding implementation and interpretation of these treaties should be directed to the command judge advocate, or to the Office of the Judge Advocate General of the Army.

b. Geneva Conventions. The four 1949 Geneva Conventions are as follows:

(1) Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in the Armed Forces (GWS). This convention provides for the protection of Armed Forces personnel who are wounded and sick on the battlefield. It requires States Parties to a conflict to take all possible measures to search for and collect the military wounded and sick; to protect them against pillage and ill treatment; to ensure their adequate care; and to search for the military dead. It also provides for the protection of AMEDD personnel. The GWS is the primary source for the obligations set forth in this appendix.

(2) Geneva Convention for the Amelioration of the Condition of Wounded, Sick, and Shipwrecked Members of the Armed Forces at Sea (GWS [Sea]). This treaty extends the guarantees of the GWS for wounded, sick, or shipwrecked military personnel at sea. Once those personnel are placed on land, the GWS provisions apply.

(3) Geneva Convention Relative to the Treatment of Prisoners of War (GPW). This treaty provides protection for military personnel who fall into enemy hands. Captured military wounded and sick remain prisoners of war during their recovery from their wounds or sickness, and for the duration of their captivity.

(4) Geneva Convention Relative to the Protection of Civilian Internees in Time of War (GC). The Convention provides for the protection of civilians who are in the hands of enemy military forces, or who are in enemy-occupied territory. It also sets forth standards for their medical care.

A-2. Medical Implications of Geneva Conventions

a. Provisions for Collection of Wounded and Sick. Provisions must be made for the collection and treatment of military wounded and sick personnel, whether friend or foe. Only urgent medical reasons may determine priority in the order of treatment to be administered. This means that military wounded or sick enemy personnel may require treatment before military wounded US or allied personnel. The principle of triage is consistent with this obligation. For military wounded or sick enemy personnel, a dual

responsibility exists—custodial and medical. The custodial activity of guarding military wounded or sick enemy prisoners of war (EPW) should be carried out by assets other than AMEDD personnel. The echelon commander will designate nonmedical units to act as guards when EPW are in medical channels.

b. Accountability and Custody of Enemy Prisoners of War. Enemy prisoners of war or retained personnel (RP) evacuated through medical channels must be identified and their accountability established prior to evacuation per appropriate TSOP. Sick, injured, and wounded EPW or RP may be evacuated through normal medical channels, but segregated from US and allied personnel. They may also be evacuated through dedicated or task-organized evacuation assets, particularly in rear areas where they are likely to be moved in a group.

c. Responsibility for and Handling of Prisoners of War. The US Army is responsible for the care and treatment of EPW and RP that Army units capture and for EPW/RP captured by other US Services or allies upon their transfer to Army custody. Below brigade level, EPW/RP are handled by combat troops who bring them to the forward or brigade collecting points. Subject to the tactical situation and available resources, EPW/RP wounded, injured, or sick will be evacuated from the combat zone (CZ) as soon as possible. Only those injured, sick, or wounded EPW/RP who would run a greater health risk by being immediately evacuated may be temporarily kept in the CZ. When intelligence sources indicate that large numbers of EPW/RP may result from an operation, medical units may require reinforcement to support the additional EPW/RP patient workload. In this case, the care of wounded, injured, and sick EPW/RP becomes a joint matter between the ground combat commander and the medical commander. Procedures for estimating the medical workload involved in the treatment and care of EPW/RP is described in FM 8-55. For a more detailed discussion on the administration, handling, treatment, and identification of EPW/RP, see AR 190-8 and FM 19-4.

d. Identification and Protection of Medical Personnel.

(1) Personnel exclusively engaged in the performance of medical duties in connection with the wounded, injured, or sick in medical units or establishments may wear, affixed to the left arm, a water-resistant brassard/armband bearing the distinctive emblem (a red cross on a white background) prescribed by GWS and GWS (Sea). The wearing of brassards/armbands will be at the discretion of the tactical commander in far forward areas.

(2) Medical personnel (as identified in paragraph [1]) are to carry a special identity card, Department of Defense (DD) Form 1934 (Geneva Conventions Identity Card for Medical and Religious Personnel Who Serve in or Accompany the Armed Forces), issued to all persons qualifying as protected medical personnel. This special identification card will be carried in addition to their regular identification card.

(3) Enemy military personnel meeting the definition of medical personnel contained in paragraph (1) who are captured are considered RP and not EPW. They will receive the benefits and protection afforded them by the GWS and GPW. They may be required to treat injured, wounded, or sick EPW/RP. United States medical personnel or medical units that are captured may be required to do likewise, continuing to provide medical support for injured or sick US or allied prisoners of war/RP while in captivity. In such a situation, this probably would be a primary source of treatment for US prisoners of war and RP, although enemy wounded could be treated also.

(4) Personnel protected as medical personnel under the GWS must be *exclusively engaged* in medical duties or administration of medical units. This includes all military personnel permanently assigned to a medical unit and exclusively engaged in its mission, including cooks, mechanics, drivers, or administration personnel. Performance of any activity inconsistent with this mission removes the protection, and the DD Form 1934 must be withdrawn. For example, if an ambulance driver is tasked with driving an unmarked tactical vehicle forward with ammunition prior to evacuating casualties, he would not be exclusively engaged in medical duties and would not be entitled to continued classification as *medical personnel*.

e. *Self-Defense*.

(1) Medical personnel may carry small arms for personal defense of themselves and defense of their patients. This does not mean that they may resist capture or otherwise fire on the advancing enemy. It means that, if civilians or enemy military personnel are attacking and ignoring the marked medical status of medical personnel, medical transportation or the medical unit, the medical personnel may provide self-protection. If an enemy force merely seeks to assume control of a military medical facility or a vehicle for the purposes of inspection and without firing on it, the facility or vehicle may not resist.

(2) Medical personnel are entitled to carry defensive small arms only. By Army policy, these are defined as service rifles (M16) and pistols (M9 or M11).

(3) An overall defense plan may not require medical units to take offensive or defensive action against enemy troops at any time. If a medical force is part of a defensive area containing nonmedical units, medical personnel may not be responsible for manning part of the overall perimeter. If located in isolation, the medical unit may provide its own local and internal security if other support is not available. However, a medical unit may not be defended from capture or inspection by enemy forces by military police or other soldiers acting as pickets.

(4) If medical personnel fire on enemy troops or otherwise abuse their protected status by engaging in acts harmful to the enemy, they may be attacked. It is also possible that such an action could result in an allegation of violation of the law of war by the capturing force. For example, if an enemy force was advancing on a marked medical facility and medical personnel within the facility then took advantage of their protected status to fire at the enemy, the enemy forces would be entitled to return fire and medical personnel subsequently captured may be charged with a violation of the law of war. Under the law of war, this action would constitute an act of perfidy. It would be akin to firing on enemy soldiers while bearing a flag of truce.

This paragraph implements STANAG 2931.

f. *Marking of Medical Units/Facilities and Transportation*.

(1) *Medical units and facilities*.

(*a*) The distinctive emblem (red cross on a white background) provided in the GWS and GWS (Sea) for medical units, facilities, and transportation shall be displayed only over such medical

units and facilities (except veterinary) as are entitled to be respected under the Conventions, subject to the authorization of the tactical commander of a brigade-sized or larger unit. The marking of facilities and the use of camouflage are incompatible and should not be undertaken concurrently. The camouflage of medical units is regulated by ARs and also, in the European theater, by NATO STANAG 2931. It is not envisioned that fixed, large medical facilities will be camouflaged. The medical commander must be aware of who has the authority to order camouflage and its duration. The camouflage of medical facilities is one of the more difficult issues to reconcile with operational necessities. The problem has been present in past wars but now is more critical due to the ability of intelligence assets to see deep into the rear AO. If the failure to camouflage endangers or compromises the tactical mission, the camouflage of medical facilities may be ordered by a NATO commander of at least brigade level or equivalent. Such an order is to be temporary and local in nature and is rescinded as soon as circumstances permit.

(*b*) The camouflage of a medical unit does not deprive it of its protected status. However, an enemy force is not required to forego an attack on a camouflaged facility unless it recognizes it as a medical facility. The use of defensive arms by medical personnel at a camouflaged site attacked by ground maneuver forces is not authorized unless the actions of the attacking forces clearly are illegal rather than the result of mistaken identity. Medical personnel should attempt to make the attackers aware of their status rather than fighting back.

(*c*) If medical facilities are used to commit acts harmful to the enemy, the protection of those facilities may be withdrawn if the acts are not stopped after warning. This might be the case where a facility is used as an observation post or if combat information was reported or relayed through the facility.

(2) *Medical transportation*.

(*a*) Standard air and ground ambulances should be marked with the distinctive emblem when performing medical missions. Medical transportation may not bear the distinctive emblem if and so long as it is used for nonmedical missions. Fighting vehicles, such as a tank, are not entitled to bear the distinctive emblem even when used for battlefield evacuation. However, aviators and drivers with status as medical personnel may not perform nonmedical tasks without risk of loss of their medical personnel status. As such, the policy that benefits the mission to the greatest degree is to use air and ground medical transportation exclusively for medical tasks.

(*b*) Crew-served weapons may not be mounted on ambulances or air ambulances, even if mounting brackets are present.

(*c*) Vehicles other than fighting vehicles (such as tanks) may be used in a dual role, moving wounded to the rear while bearing removable distinctive emblems. However, the distinctive emblems must be removed before nonmedical tasks are attempted. Care must be taken so that the protection provided by the distinctive emblem is not abused.

(*d*) The protection provided medical aircraft bearing the distinctive emblem extends only to areas in which it is entitled to operate due to the absence of enemy forces or, if enemy forces are present, with the consent of enemy forces. If the latter, medical aircraft may operate only at such times and on such routes for which there is agreement, and medical aircraft must land to be searched if summoned to

do so by enemy forces. Failure to respond to a summons to land may entitle the enemy to attack the aircraft. Medical aircraft may be used for combat search and rescue (CSAR) missions if all vestiges of its medical aircraft status, such as the distinctive emblem, are removed for the duration of the CSAR mission. In such cases, it would not be operating as a medical aircraft but as a military aircraft. The legal prohibition is not on the use of an aircraft normally dedicated to medical missions, but on use of its status as a medical aircraft during any CSAR mission. If used for CSAR missions, military aircraft are not entitled to protection from enemy attack.

g. *Civilians—Wounded and Sick.* Civilians who are injured, wounded, or become sick as a result of military operations may be collected and provided initial medical treatment in accordance with theater policies. If treated, treatment will be on the basis of medical priority only. If treated, they shall be transferred to appropriate civil authorities as soon as possible. The echelon commander and medical unit commanders jointly exercise responsibilities for custody and treatment of sick, injured, or wounded civilian personnel. Enemy civilians detained by US forces are entitled to military medical care during their detention. Treatment will be on the basis of medical priority only.

h. *Captured Medical Supplies and Equipment*. Because medical supplies and equipment captured from the enemy are considered neutral and protected, they are not to be intentionally destroyed. If these items are considered unfit for use, or if they are not needed for US and allied forces, noncombatants, or EPW patients, they may be abandoned for enemy use. Since captured medical personnel are familiar with their medical supplies and equipment, the captured items are especially valuable in the treatment of EPW. Use of these captured items for EPW and the indigenous population helps to conserve other medical supplies and equipment. When the capture of US medical supplies and equipment by enemy forces is imminent, these items are not to be purposely destroyed. Every attempt must be made to evacuate them. Those items that cannot be evacuated should be abandoned; however, such abandonment is a command decision.

A-3. Compliance with the Geneva Conventions

a. As the US is a signatory to the Geneva Conventions, all medical personnel should thoroughly understand the provisions that apply to CHS activities. Violation of these Conventions can result in the loss of the protection afforded by them. Medical personnel should inform the tactical commander of the consequences of violating the provisions of these Conventions.

b. Outright violations of the Geneva Conventions result when—

- Medical personnel are used to man or help man the perimeter of nonmedical facilities, such as unit trains, logistics areas, or base clusters.

- Medical personnel are used to man any offensive-type weapons or weapons systems.

- Medical personnel are ordered to engage enemy forces in other than self-defense, or in the defense of patients and MTFs.

- Crew-served weapons are mounted on a medical vehicle.

- Mines or booby traps are placed in and around medical units and facilities.
- Hand grenades, light antitank weapons, grenade launchers, or any weapons other than rifles and pistols are issued to a medical unit or its personnel.
- The site of a medical unit is used as an observation post, a fuel dump, or an ammunition storage site.

c. Possible consequences of violations described in *b* above are—

- Loss of protected status for the medical unit and personnel.
- Medical facilities attacked and destroyed by the enemy.
- Medical personnel being considered prisoners of war rather than retained persons when captured.
- Combat health support capabilities are decremented.

d. Other examples of violations of the Geneva Conventions include—

- Making medical treatment decisions for the wounded and sick on any basis other than medical priority, urgency, or severity of wounds.
- Allowing the interrogation of enemy wounded or sick even though medically contraindicated.
- Allowing anyone to kill, torture, mistreat, or in anyway harm a wounded or sick enemy soldier.
- Marking nonmedical unit facilities and vehicles with the distinctive emblem or making any other unlawful use of this emblem.
- Using medical vehicles marked with distinctive Geneva emblem for transporting nonmedical troops, equipment, and supplies.
- Using a medical vehicle as a tactical operations center.

e. Possible consequences of violations described in *d* above are—

- Criminal prosecution for war crimes.
- Reprisals taken against wounded individuals in the hands of the enemy.
- Medical facilities attacked and destroyed by the enemy.
- Medical personnel being considered prisoners of war rather than retained persons when captured.

APPENDIX B

CLASS VIII LOGISTICS SUPPORT

B-1. Class VIII Strategic Operations

The strategic logistics system for Class VIII supplies is operated within CONUS by the USAMMA and the DSCP. The USAMMA, MLMC, and DSCP jointly coordinate Class VIII support of the theater. Initial support consists of preplanned medical supply packages in support of deploying medial units. As the theater matures, as capability is established, and as mission dictates, CHL will transition from a "push" system to a "pull" system with units submitting line item requests for resupply. The USAMMA also controls the management and release of APS to the theater.

B-2. Customer Assistance

a. Customer assistance may be requested from the USAMMA at the following address:

Commander
US Army Medical Materiel Agency
Fort Detrick
Frederick, MD 21701-5001

b. Customer assistance in specific areas may be addressed to the appropriate office. Office titles and symbols and their Defense Switched Network (DSN) and/or commercial (Com) numbers are provided for your information.

Commander
MCMR-MMZ-A
DSN 343-7461 or Com 301-619-7461

Chief of Staff
MCMR-MMZ-B
DSN 343-7461 or Com 301-619-7461

Maintenance Engineering and Operations Directorate

Maintenance Engineering and Operations Directorate
1423 Sultan Drive, Suite 100
Fort Detrick, MD 21702-5001
FAX: DSN 343-7187
http://www.armymedicine.army.mil/usamma/maintenance/

Director
MCMR-MMM
DSN 343-4407 or Com 301-619-4382

AMEDD National Maintenance Point
MCMR-MMM-P
DSN 343-4382 or Com 301-619-4382

Maintenance Operations
MCMR-MMM-D
DSN 343-4365 or Com 301-619-4365

Maintenance Publications
MCMR-MMM-M
DSN 343-4366 or Com 301-619-4366

Depot-Level Maintenance Services

Repair, Calibrations, and Refurbishment Services
MEDSTEP Issue/Loans (End-Items)
Repairable Exchange (Modules/Printed Circuit Boards, and so forth)
On-Site Support Services
Diagnostic Imaging Acceptance Inspections
X-ray Tube Repair/Rebuild Services
Audiometric Equipment Repair and Calibration
Oxygen Regulator Exchange Program
Medical Chest Refurbishment Program
Dental/Surgical Handpiece Rebuild Services

Defense Distribution Region West—Tracy, CA
DSN 462-9556 or Com 209-832-9562

Tobyhanna Army Depot
DSN 795-7744 or Com 717-894-7744

Defense Distribution Depot Ogden
DSN 352-6774 or Com 801-399-6774

Operations and Support Directorate

Director
MCMR-MMO
DSN 343-4308 or Com 301-619-4308

Technical Operations Division
MCMR-MMO-T
DSN 343-4121

TAMMIS Tape Distribution
DSN 343-4319

Acquisition Advice Codes ("W" and "J" Reports)
DSN 343-4321

Method of Destruction Codes
DSN 343-4322

Medical Support Enhancement Program
DSN 343-4314

Medical Cataloging (Data Management)
DSN 343-4311

DA Supply Bulletins (8-75 Series)
DSN 343-4307/4313

DA Supply Catalogs (6545)
DSN 343-4318/4313

USAMMA Newsletter
DSN 343-4313

Quality Control Messages
DSN 343-4121/2045/4305

Chemical Defense Materiel
DSN 343-4300

Safe Medical Devices Act
DSN 343-4121

Unit Assemblages Floppy Disk, Listings, and Hand Receipts
DSN 343-4318/4315

Medical Catalog CD-ROM
DSN 343-4308

Industrial Base Maintenance Contract
DSN 343-4121/2045/4305

Pharmaceutical Consultant
DSN 343-4121

Medical Services Information Logistics System Project
DSN 343-4306

Materiel Acquisition Directorate

Director
MCMR-MMT
DSN 343-4329 or Com 301-619-4329

TDA Acquisition, Medical Care Support Equipment, Capital Equipment Expense Program and Shared Procurement
DSN 343-7403

Technology Support Division
MCMR-MMT-S
DSN 343-4473

Equipment Acquisition Division
MCMR-MMT-E
DSN 343-4363

Applied Medical (Laboratory/Dental)
DSN 343-4357

Assemblages (Laboratory/Dental)
DSN 343-4357

TMDE
DSN 343-4357

Biologicals
DSN 343-4357/4361

Pharmaceuticals
DSN 343-4357/4361/4362

DEPMEDS
DSN 343-4359

Applied Medical (Anesthesia/Optical/Veterinary/X-Ray/General Medical/Preventive Medicine/Chemical Defense Sterilizers)
DSN 343-4361

Assemblages (Anesthesia/Optical/Veterinary/X-Ray/General Medical/Preventive Medicine/ Chemical Defense/Sterilizers/Field Teams (Non-DEPMEDS)
DSN 343-4361

Applied Medical (Training Devices/Chemical Defense/General Medical/Evacuation/ Blood/Non-DEPMEDS Refrigeration/Resuscitation/Special Forces/Optical)
DSN 343-4362

Assemblages (Chemical Defense/General Medical/Evacuation/Blood/Non-DEPMEDS Refrigeration/Resuscitation/Special Forces/Optical/Modular Medical)
DSN 343-4362

Strategic Capabilities and Materiel Directorate

Director
MCMR-MMS
DSN 343-4405 or Com 301-619-4405

Unit Deployment Package
MCMR-MMS-P
DSN 343-4461

Deployment
MCMR-MMS-P
DSN 343-4408

Requisitioning MCDM and Acquisition Advice Code Army (AACA) Regulated Vaccines
MCMR-MMS-M
DSN 343-4421

Reserve Component Hospital Decrement
MCMR-MMS-M
DSN 343-4421

Inventory Management Inquiries APS
MCMR-MMS-M
DSN 343-7451

MF2K
MCMR-MMR
DSN 343-4310

Logistics Assistance Program
DSN 343-7577

DEPMEDS Fielding/Displacement
DSN 343-7577

Materiel Fielding Teams
DSN 343-7577

Materiel Transfer Teams
DSN 343-7577

Command Regulated Items AACA
DSN 343-7161

DEPMEDS Requisition Process
MCMR-MMR-A
DSN 343-7161

Excess Medical Materiel Reported to USAMMA
MCMR-MMR-C
DSN 343-4336

Assembly Management Inquiries
MCMR-MMR-A
DSN 343-7161

Materiel Obligation Validation
MCMR-MMR-A
DSN 343-7161

Requisitioning (RIC-B69), Due In/Due Out
MCMR-MMR-A
DSN 343-7161

Sets, Kits and Outfits Requisitions
MCMR-MMR-A
DSN 343-7161

B-3. Other Customer Assistance

I Corps Surgeon's Office, Fort Lewis, WA
Building 2006B, ATTN: AFZH-MD
Fort Lewis, WA 98433
Phone: DSN 357-3100 or Com 253-967-3100

III Corps Surgeon's Office, Fort Hood, TX
HHC, III Corps Surgeon's Office, ATTN: AFZF-MD
Fort Hood, TX 76544
Phone: DSN 737-1721 or Com 254-287-1721

XVIII Airborne Corps Surgeon's Office, Fort Bragg, NC 28307
Phone: DSN 236-5772/5704 or Com 910-396-5774/5074

CENTCOM, MacDill Air Force Base, FL
Headquarters, U.S. Central Command, ATTN: CCSG
7115 South Boundary Boulevard
MacDill AFB, FL 33621-5101
Phone: DSN 968-6397 or Com 813-828-2129

EUCOM
HQ, USEUCOM/ECMD, Unit 30400, Box 1000, APO AE 09218
Phone: DSN 430-6410 or Com 011-49-711-680-5392

FORSCOM, Fort McPherson, GA
U.S. Forces Command, 1777 Hardee Ave, S.W., ATTN: AFLG-FMMC-E,
Fort McPherson, GA 30330
Phone: DSN 367-6313 or Com 404-464-6313

PACOM, Camp H.M. Smith, HI
U.S. Pacific Command, USCINCPC/J07, P.O. Box 64045
Camp H.M. Smith, HI 96861-4045
Phone: DSN 477-1026 or Com 808-477-1026

SOCOM, MacDill Air Force Base, FL
U.S. Special Operations Command, 7701 Tampa Point Boulevard
MacDill Air Force Base, FL 33621-5323
Phone: DSN 968-2719 or Com 813-828-2719

SOUTHCOM, Miami, FL
Headquarters, USSOUTHCOM/SCSG, 3511 NW 91st Avenue,
Miami, FL 33172
Phone: DSN 567-1328 or Com 305-437-1328

APPENDIX C

MATERIEL IDENTIFICATION

C-1. Classes of Supply (United States)

Class	Description
I	Subsistence, to include potable water.
II	Clothing, individual equipment, tentage, tool sets and tool kits, hand tools, and administrative and housekeeping supplies and equipment. Includes items of equipment (other than principal items) prescribed in authorization/allowance tables, and items of supply (not including repair parts).
III	Petroleum, oils, and lubricants (POL). Petroleum fuels; lubricants, hydraulic and insulating oils, preservatives, liquid and compressed gases, chemical products, coolants, deicing and antifreeze compounds, together with components and additives of such products, and coal.
IV	Construction. Construction materials including installed equipment and all fortification/ barrier materials.
V	Ammunition. All types (including chemical, radiological, and special weapons), bombs, explosives, land mines, fuses, detonators, pyrotechnics, missiles, rockets, propellants, and other associated items.
VI	Personal demand items (Health and Comfort Packages).
VII	Major end items (tanks, vehicles, or aircraft) which are ready for their intended use.
VIII	Medical materiel including medical-peculiar repair parts and equipment. The following subclasses apply to Class VIII:
	1 Controlled substances.
	2 Tax-free alcohol.
	3 Precious metals.
	4 Nonexpendable medical items.
	5 Expendable medical items.
	6 All drugs and related items of Federal Supply Classification 6505 not otherwise restricted.
	7—9 Commander-designated controlled items.
	0 USAMMA-controlled sensitive items.
IX	Repair parts and components, to include kits, assemblies and subassemblies and repairable and nonrepairable items required for maintenance support of all equipment.
X	Materiel to support nonmilitary programs such as agricultural and economic development materials not included in Classes I through IX.

This paragraph implements NATO STANAG 2961.

C-2. Comparative Table

Note the differences between the NATO and US classes of supply.

NATO CLASS OF SUPPLY	DESCRIPTION	US CLASS OF SUPPLY	DESCRIPTION
I	Those items which are consumed by personnel or animals at an approximate uniform rate irrespective of local change in combat or terrain conditions. Examples: rations and forages.	I	Subsistence, to include potable water.
		VI	Personal demand items (nonmilitary sales items).
II	Supplies for which allowances are established by TOEs. Examples: clothing, weapons, mechanics' tools, spare parts, vehicles and equipment.	II	Clothing, individual equipment, tentage, tool sets and tool kits, hand tools, administrative and housekeeping supplies. Includes items of equipment, other than principal items, prescribed in authorization/allowance tables and items of supply (not including repair parts).
		VII	Major end items: A final combination of end products that is ready for its intended use; principal items such as launchers, tanks, mobile machine shops, vehicles.
		VIII	Medical materiel including medical-peculiar repair parts.
		IX	Repair parts and components to include kits, assemblies and subassemblies, and repairable and nonrepairable items required for maintenance support of all equipment.

III	Fuels and lubricants for all purposes, except for operating aircraft or for use in weapons such as flamethrowers. Examples: petroleum products, such as gasoline, kerosene, diesel oil, fuel oil, lubricating oil and greases, and solid fuels, such as coal, coke, and wood. For USAF (III A): aviation fuels and lubricants.	III	POL: Petroleum fuels: lubricants, hydraulic and insulating oils, preservatives, liquid and compressed gases, chemical products, coolants, deicing and antifreeze compounds, together with component additives of such products and coal.
IV	Supplies for which initial issue allowances are not prescribed by approved issue tables. Normally such supplies include fortification and construction materials, as well as additional quantities of items identical to those authorized for initial issue (Class II) such as additional vehicles.	IV	Construction: Construction materials, to include installed equipment and all fortification/ barrier materials.
		X	Material to support nonmilitary programs, such as agriculture and economic development if not included in Classes V to IX.
V	Ammunition, explosives, and chemical agents of all types.	V	Ammunition: Ammunition of all types (including chemical, radiological, and special weapons), bombs, explosives, land mines, fuses, detonators, pyrotechnics, missiles, rockets, propellants, and other associated items.

C-3. Federal Supply Classifications (Medical)

6505 — Drugs, Biologicals, and Official Reagents
6508 — Medicated Cosmetics and Toiletries
6510 — Surgical Dressing Materials
6515 — Medical and Surgical Instruments, Equipment, and Supplies
6520 — Dental Instruments, Equipment, and Supplies
6525 — X-ray Equipment and Supplies: Medical, Dental, and Veterinary
6530 — Hospital Furniture, Equipment, Utensils, and Supplies
6532 — Hospital Surgical Clothing and Related Special Purpose Items
6540 — Optician's Instruments, Equipment, and Supplies
6545 — Medical Sets, Kits, and Outfits
6550 — In Vitro Diagnostic Substances, Reagents, Test Kits and Sets
6600 — Instruments and Laboratory Equipment

APPENDIX D

STRATEGIC MOVEMENT DATA

Table D-1 provides strategic movement data for the TOE MEDLOG organizations. The automated air loading planning system was used to develop the strategic movement requirements. The data was computed based on requirements and not authorizations. Commanders and medical planners should use the modified TOE to compute the unit's specific movement data based on unit loads tailored for the mission. Commanders should ensure that selected staff members attend a unit movement course to enhance strategic deployment. For information on the Unit Movement Officer Deployment Planning Course, contact the Commandant, US Army Transportation School, ATTN: ATSP-TDD-SD, Fort Eustis, Virginia 23604-5001. The telephone number is DSN 927-1575, commercial 804-878-1575.

Table D-1. Strategic/Surface Deployment Data

UNIT	SRC	WEIGHT (LBS)	CUBIC FT	SQ FT	TRANSPORT MODES							PASSENGER (AIR)	
					AIR				SURFACE				
					PURE FLEET TOTAL				SHIP BY % SQ FT		RAIL		
					C130	C141	C17	C5	RORO	LMSR	(STD 89' CAR)	PAX	B747 (400 SEAT)
MEDLOG CO*	08488A000	130,396	26,250	3,680	5.22	2.83	1.45	0.86	0.021	0.012	6	77	0.1925
MEDLOG CO**	08488A000	698,320	87,613	9,751	27.93	15.18	7.76	4.62	0.055	0.033	21	77	0.1925
BLOOD SPT DET*	08489A000	165,271	18,902	3,360	6.61	3.59	1.84	1.09	0.019	0.011	4	30	0.075
BLOOD SPT DET**	08489A000	340,129	40,459	5,732	13.61	7.39	3.78	2.25	0.033	0.019	10	30	0.075
MEDLOG BN*	08496A000	76,101	8,464	1,120	3.04	1.65	0.85	0.5	0.006	0.004	2	59	0.1475
MEDLOG BN**	08496A000	255,703	28,485	3,496	10.23	5.56	2.84	1.69	0.02	0.012	6	59	0.1475
LOG SPT CO*	08497A000	184,917	32,645	4,480	7.4	4.02	2.05	1.22	0.025	0.015	7	116	0.29
LOG SPT CO**	08497A000	692,821	86,445	9,860	27.71	15.06	7.7	4.59	0.056	0.033	21	116	0.29
MEDLOG MGT CTR*	08699A000	57,527	7,601	960	2.3	1.25	0.64	0.38	0.005	0.003	2	64	0.16
MEDLOG MGT CTR**	08699A000	142,348	17,530	2,198	5.69	3.09	1.58	0.94	0.012	0.007	4	64	0.16

NOTE: The percentage figures in the RORO, LMSR, and B747 columns are the SRC space requirements of the ship capacity.

LEGEND:

LMSR	Large Medium-Speed Roll-On/Roll-Off	*	(MRI-OBJ) without vehicles and equipment
PAX	Passenger	**	(MRI-OBJ) with vehicles and equipment
RORO	Roll-On/Roll-Off		
SRC	Standard Requirement Code		
STD	Standard		

APPENDIX E

COMBAT HEALTH SUPPORT LOGISTICS MANAGEMENT IN JOINT OPERATIONS

E-1. Logistics Functions, Support Responsibilities, and Requirements

Logistics functions should be performed in as routine a manner as possible in war and stability operations and support operations. Logistics support responsibilities between CINCs for the various C2 relationships can be found in Joint Publication 4-02.1. Logistics support requirements involve the broad areas of CHS, supply maintenance, transportation, general engineering, and other services. Services consist of various functions and tasks provided by service troops and the logistical community that are essential to the technical management and support of a force. Unless otherwise directed by the National Command Authorities, the implementation and execution of logistics functions remains the responsibility of the Services and the Service component commander.

E-2. Responsibilities

a. Authority and Control.

(1) Under conditions short of crisis or war, combatant CINCs are authorized to exercise directive authority over logistics operations within their area of responsibility. This authority is designed to ensure effective execution of approved operation plans, provide efficiency and economy in operations, and prevent or eliminate unnecessary duplication of facilities and overlapping of functions of component commands. The CINCs' directive authority over logistics operations does not release the Services from their responsibility to man, equip, train, and sustain their Service components.

(2) Under wartime or operations other than war, or when critical situations mandate diversion from the normal logistics process, this authority is expanded to authorize combatant CINCs to use all necessary facilities and logistics resources for the accomplishment of their missions.

b. Single-Service Logistics Support. Each Service is responsible for the logistics support of its own forces except when logistics support is otherwise provided for by agreements with national agencies, allies, or coalition partners, or by assignments to joint operations.

c. Transfer of Functions and Facilities Among Services. The combatant CINC has the authority to issue and implement directives to transfer logistics functions between or among the Service components within the area of responsibility under wartime or operations other than war. This authorization of directive authority is not intended to abrogate Service responsibility for logistics support. Transfer of function coordination will be accomplished through the Service component commands or directly to the headquarters of the appropriate Service. The implementation of such a directed transfer, including administrative and procedural aspects, is the responsibility of the Service component commanders involved. The combatant CINC retains the responsibility for overseeing and resolving issues.

E-3. Single-Integrated Medical Logistics Manager

a. Combat health support logistics is normally a Service responsibility. However, in joint operations, a SIMLM system may be designated to provide central logistical support to all participating

Services in the combatant CINC's area of responsibility. As the dominant user, the US Army has been formally tasked by DOD to perform the peacetime SIMLM mission in the European (through the USAMMA [Europe]) and Korean (through the 16th MEDLOG Battalion) theaters. Under wartime or crisis conditions, the US Army, in all probability, will be the dominant Class VIII user and must plan for the SIMLM mission.

b. The SIMLM system encompasses the provision of medical supplies, medical equipment maintenance and repair, blood management, and optical fabrication to all joint forces within the TO, except Navy gray haul ships. Combat health support logistics can be provided to Navy hospital ships for common, demand-supported medical supplies in the later stages of theater development. The activation of the SIMLM mission is dependent upon the Time-Phased Force Deployment List supporting the contingency. Refer to Chapters 3 through 7 for a discussion on CHL organizations and their theater support roles.

E-4. Planning

a. The combatant CINC is responsible for effective coordination of supply support among the Service components within his area of responsibility. When practical to improve economy of effort, common item support may be assigned to a Service component command, normally the dominant user. The combatant CINC is also responsible for the allocation of critical logistics resources within the command. He ensures that statements of the requirements of the assigned forces are prepared and submitted in accordance with existing directives of the Secretary of Defense, the Secretaries of the Military Departments, and the Chiefs of the Services.

b. As a member of the CINC's staff, the command surgeon has primary responsibility for planning CHS. Planning must be concurrent and in agreement with the contingency operational plans. Field Manuals 8-55 and 8-42 provide an example of those things to be considered when developing the plan. The CHS logisticians must plan to perform the SIMLM functions. Also, CHS logisticians must anticipate that future military operations will be joint operations and conducted from CONUS.

APPENDIX F

PATIENT MOVEMENT ITEMS

F-1. General

This appendix describes PMIs in support of the evacuation process from Echelons II through IV. For the purposes of this appendix, the PMI is the more expensive/low density equipment requiring accountability. The less expensive items such as litters, blankets, and litter straps will not be considered as PMIs. This appendix is consistent with the Army's total asset visibility and JTAV initiatives. The TAMMIS and/or DMLSS will integrate the PMI automated tracking system with the functional module of TMIP/MC4.

F-2. Mission

The mission of the PMI system is to support in-transit medical capability, to exchange in-kind PMIs without degrading medical capabilities, and to provide prompt recycling of PMIs. The PMI system will provide seamless ITV for an equipment management process from initial entry to the patient's final destination. A tracking system will be used ultimately to facilitate the management of PMIs.

F-3. Explanation of System

a. Medical equipment and supplies required to support the patient during patient evacuation are referred to as PMIs. The handling and return of PMIs to the originating medical unit requires a reliable supporting logistics infrastructure to ensure that PMIs are available and serviceable. The intent of the PMI system is to provide a seamless system, which includes a standardized, certified PMI equipment list. Patient movement items used to monitor or sustain a patient would normally stay with the patient throughout the patient evacuation system. In addition, the PMI system will provide the ability to track the location of all PMI equipment. The goal is to prevent depletion of forward units' PMIs through a one-for-one exchange of equipment at the time of patient transfer.

b. It is recognized that there may be exceptions to the standardized equipment list by individual Services based on mission-specific requirements. Substitution would be permitted after individual Services submit justification to and receive approval of the Joint Readiness Clinical Advisory Board (JRCAB). Justification should be based on the unique mission requirements of that Service. If approved, only the requesting Service will be allowed to use the approved substitution equipment. That equipment would not follow the patient back through the patient evacuation system. At the time of patient transfer, the approved substitution equipment will be exchanged for standard PMI equipment. The plan for a PMI exchange system and the ultimate return of PMIs to the originating theater should be addressed in the operation plans and/or unit standard operating procedures.

c. When a patient requires evacuation, it is the originating MTF's responsibility to provide the PMIs required to support the patient during evacuation. The Services will include and maintain initial quantities of JRCAB-standardized PMIs in the appropriate medical assemblages. They should not assume or plan for shortfalls of PMI being satisfied by other Services. The Services, through the JRCAB, will identify and approve PMI equipment. Patient movement items must be certified for use on the appropriate patient evacuation platform (for example, fixed/rotary wing). To reduce medical equipment shortfalls

experienced within the theater, the theater commander/joint force commander must ensure procedures are established to resupply and refurbish PMIs.

F-4. Responsibilities

a. Commander-in-Chief. Intratheater movement of PMIs is the responsibility of the theater CINC. As a theater matures, a SIMLM may be established. If a SIMLM is established, Services will coordinate, as necessary, with the SIMLM to obtain support in the areas of requisitioning, storage, maintenance, and battlefield distribution of PMIs. Forward battlefield distribution and exchange of PMIs will be a SIMLM or Service responsibility. The plan for a PMI exchange system and the return of PMIs to the originating MTF will be addressed in theater operation plans.

b. United States Air Force.

(1) Establishment of USAF PMI centers is the responsibility of the USAF to support worldwide aeromedical evacuation (AE) requirements. Patient movement item centers will be located at ports of embarkation and/or ports of debarkation to match AE support plans. United States Air Force PMI centers are responsible for the overall management, ITV, and tracking of AE PMIs. In the event of surge and sustained requirements, Service liaison personnel may be assigned.

(2) The USAF PMI centers incorporate and support PMI cells. The USAF PMI cells are a flexible subset of the PMI center, capable of establishing a forward PMI equipment exchange location. The USAF PMI cells will support PMI exchange as far forward as theater AE patient movement is approved to operate. The USAF PMI cells will be deployed to forward operating locations to support one or more forward medical elements by pushing PMIs to those locations. These PMI centers and cells will require base operating support supplied by local operational support elements.

c. United States Army.

(1) The PMI system begins with the request for evacuation from the FST, FSMC, or a higher echelon medical unit, depending on the force structure. Patient movement items required to accompany the patient will be identified on the evacuation request. Patient movement item requirements will be forwarded to the MEDLOG company and the MEDLOG support company of the MEDLOG battalion via TMIP/MC4. The movement of the patient will activate two systems. The automated monitoring and tracking system will follow the PMIs throughout the evacuation process and maintain accountability of the items. The MEDLOG system will move PMIs from the supporting MEDLOG element to the original/ requesting unit. Return of PMIs to the MEDLOG system will come from two sources—MTFs when no longer needed by the patient and from the USAF AE system when PMIs stay with patients to CONUS or sustaining base. The MEDLOG support company will be responsible for maintaining accountability, receiving, performing required maintenance, and refurbishing and distributing back into the system. The MEDLOG support company will be required to monitor the PMI demands placed on the system and ensure that push packages are available for movement forward during periods of high casualties.

(2) It is the MTF's responsibility to properly prepare the patient for evacuation. A litter patient should be prepared with two blankets and two litter straps. The attending physicians must ensure that 1- to 3-days supply (except in the CZ) of medications and rations accompany their patients.

(3) Oversight of PMIs within echelons of care (II through IV) rests with the medical unit commanders. Elements of the MEDLOG battalion support Echelons II through IV and have the responsibility for managing, maintaining, and accounting for PMIs. Accountability for PMIs will be automated and employ consolidated electronic records for maintenance and accountability, as well as tagging and sensing monitors for visibility. As patients move through the evacuation system, PMI accountability and replenishment information will activate issue of replacement items to treatment units ensuring them of a basic level of PMIs. During periods of increased usage where demand for items exceeds normal replacement flow, PMI push packages from the supporting MEDLOG element will flow forward. Asset visibility systems will monitor the flow of items from the unit and will be designed to trigger the flow of push packages if unit on-hand levels reach a critical low point. The MEDLOG support company will provide support maintenance and accountability for PMI assets within its support area. This support includes the responsibility for refurbishing and providing required maintenance procedures (calibration, repair, quality control, and expendable replenishment) as PMIs return through the logistic supply system. The MEDLOG support company will coordinate PMI support through the SIMLM, or if no SIMLM is designated, directly to the USAF PMI centers to ensure a seamless flow of PMIs through the logistics supply system. It will be essential for the Army PMI system to interface with the supporting USAF system. The plan for a PMI exchange system and the return of PMIs to the originating unit will be addressed in the CINC's operation plan.

F-5. Execution

a. Forward Surgical Team/Forward Support Medical Company.

(1) The FST or FSMC has the responsibility of preparing a patient for evacuation. In order to support, monitor, and sustain the patient during the evacuation, certain PMIs may accompany the patient. The FSMC commander has overall responsibility for maintaining total asset visibility of the PMIs in his AO. An equipment tracking system enables the total asset visibility. A push package of PMIs (based on mission, enemy, troops, terrain, time available, and civilian considerations) will support the initial PMI requirements of the FST/FSMC. The FSMC commander will issue PMIs to the FST as required.

(2) At the FSMC/FST, the following actions are required to maintain accountability and tracking:

- The FSMC will scan all PMI equipment bar codes and enter as "On Hand."

- The FSMC, when issuing PMIs to the FST, will scan the PMI equipment bar code and enter status as "Out" to the FST. The FST will scan equipment bar code and enter status as "On Hand." These steps should be conducted when issuing/receiving PMIs.

- When preparing patients for evacuation, scan the PMI equipment bar code and enter status as "On Patient," and enter patient's name. This step should be completed when the PMI is attached to a patient.

- When patients are evacuated, scan the PMI equipment bar code and enter status as "Out," enter destination and bumper/tail number of the evacuation mode. This step should be completed when the PMI is leaving your AO.

- When a PMI is declared not operational, scan the PMI equipment bar code and enter status as "NMC" (nonmission capable). Evacuate the PMI to the supporting MEDLOG company for maintenance. For accountability and tracking, scan the PMI equipment bar code and enter status as "Out," enter destination and bumper/tail number of the evacuation mode. This step should be completed when the PMI is leaving your AO.

b. Combat Support Hospital.

(1) The CSH has the responsibility of receiving patients from lower echelons of care and/or from within the AO. Normally, the CSH personnel will remove the PMI from the patient to conduct further treatment. Removal of the PMI will normally be in the emergency medical treatment (EMT) section; however, various treatment protocols could dictate that the PMI accompany the patient to the operating preparation area. Therefore, it is imperative that CSH personnel maintain PMI total asset visibility (via an equipment tracking system) within the hospital. The CSH has further responsibility of collecting and consolidating the PMI, cleaning, and conducting operator PMCS on the PMI. Equipment considered fully mission capable should be placed on a medical evacuation platform and returned to the losing unit as directed by the PMI manager of the supporting MEDLOG element. Patient movement items remaining at the CSH will be moved to the supporting MEDLOG element by the logistical element's transportation assets, generally via backhaul from a Class VIII resupply delivery.

(2) At the CSH, the following actions are required to maintain accountability and tracking:

- The CSH will inventory and scan all PMI equipment bar codes and enter as "On Hand."

- When patients are evacuated to the CSH with PMIs, the EMT section will scan the PMI equipment bar code and enter status as "On Patient." When patients with PMIs are transferred from the EMT section to other hospital areas, the PMI equipment bar code will be scanned and enter status as "On Patient" and enter the patient's name and destination. The same procedures will be used by the receiving element of the hospital for accountability and tracking. When the attending physician determines that the PMI is no longer required by the patient, that hospital element will scan the PMI equipment bar code as "Out" to the hospital Supply and Services Division and deliver the PMI to that location. The Supply and Services Division will scan the PMI equipment bar code and enter as "On Hand."

- When preparing patients for evacuation and the PMI is required to support the patient, the preparing hospital element will scan the PMI equipment bar code and enter status as "On Patient" and enter the patient's name.

- When patients are evacuated, the patient administrator will scan the PMI equipment bar code and enter status as "Out" and enter destination and bumper/tail number of the evacuation mode.

- The Supply and Service Division, when issuing PMIs, will scan the PMI equipment bar code and enter status as "Out" to the gaining element. The gaining element will scan the equipment bar code and enter status as "On Hand."

- When a PMI is declared not operational by a hospital element, that element will scan the PMI equipment bar code and enter status as "NMC" and evacuate the PMI to the hospital Supply and Services Division for maintenance. For accountability and tracking, scan the PMI equipment bar code and enter status as "Out" and enter the destination.

- The hospital Supply and Services Division will prepare unused PMI equipment for transfer to the supporting MEDLOG company. All required maintenance will be completed prior to transfer. For accountability and tracking, scan the PMI equipment bar code and enter status as "Out" and enter the destination and bumper/tail number of the transportation mode. The hospital Supply and Services Division will update the PMI network as required.

c. Medical Logistics Company.

(1) The MEDLOG company provides DS MEDLOG to one division and provides area support MEDLOG to CSHs supporting that division. The MEDLOG company has overall responsibility for the management of PMIs in support of that division and CSHs, to include refitting of PMI expendable components; conducting PMCS; conducting calibration checks and repairing the PMI as necessary; updating and maintaining total asset visibility, meaning current location and status; materiel demand; and processing PMIs for return shipment to the FST/FSMC location. The MEDLOG company is responsible for coordinating/providing the transportation of the PMI to its location for processing, and to the FST/FSMC AO. The PMI is part of the ASL maintained by the MEDLOG company; therefore, ownership of PMI is to the MEDLOG company. The MEDLOG company will provide PMI management information to the MEDLOG battalion's support operations section.

(2) At the MEDLOG company, the following actions are required to maintain accountability and tracking:

- The receiving section will scan all PMI equipment bar codes and enter as "On Hand." For those PMIs requiring maintenance, this section will scan the PMI equipment bar code and enter status as "Out," then transfer the item to the medical maintenance section. The receiving section will update the PMI network.

- The medical maintenance section will scan the PMI equipment bar code and enter status as "Maintenance." When the appropriate level of maintenance is completed, the PMI equipment bar code will be scanned as "Out" and the equipment will be transferred to the storage section. The medical maintenance section will update the PMI network.

- The storage section will scan the PMI equipment bar code and enter status as "On Hand." The storage section will refit expendable Class VIII components, repackage the item for distribution, and store the item in the proper location. The PMI equipment bar code is scanned and status entered as "Ready." When documentation is received for issue of PMI equipment, it will scan the PMI equipment bar code and enter status as "Out," then transfer to the shipping section. The storage section will update the PMI network.

- The shipping section receives PMIs for issue from the storage section. It will scan the PMI equipment bar code and enter status as "On Hand." The shipping section will coordinate transportation requirements. Upon shipment, the shipping section will scan the PMI equipment bar code and enter status as "Shipped" with the destination, bumper/tail number of the transportation mode documented. The shipping section will update the PMI network.

d. Echelons above Corps. At EAC, the MEDLOG support company is responsible for PMI DS to units operating within its AO and GS to the MEDLOG company. The MEDLOG support company will follow the actions identified in paragraph F-4*c* to maintain accountability. The MEDLOG support company will also coordinate PMI support through the SIMLM, or if no SIMLM is designated, directly with the USAF PMI centers to ensure a seamless flow of PMIs through the MEDLOG supply system.

GLOSSARY

ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

AACA acquisition advice code Army

ABCA American, British, Canadian, and Australian

AE aeromedical evacuation

AFMIC Armed Forced Medical Intelligence Center

AFMLO Air Force Medical Logistics Office

AH Army helicopter

AIS automated information systems

AJBPO Area Joint Blood Program Office

AM amplitude-modulated/assembly management

AMB ambulance

AMC Army Materiel Command

AMEDD Army Medical Department

AMEDDC&S Army Medical Department Center and School

AMEDDPAS Army Medical Department Property Accounting System

AML area medical laboratory

AMSA assembly management—stand-alone

AMSO area medical supply office

AN-SR animal-surgical

AO area of operations

APOD aerial port of debarkation

APOE aerial port of embarkation

APS *See* Army pre-positioned stocks.

AR Army Regulation

Army Battle Command System The Army Battle Command System integrates Army battlefield functional area systems to link strategic, operational, and tactical headquarters. It provides commanders and staffs at corps and below a relevant, common picture through improved situational understanding and battlefield digitization. The Army Battle Command System includes three components: the Global Command and Control System-Army; the Army Tactical Command and Control System; and the emerging Force XXI Battle Command Brigade and Below System.

Army pre-positioned stocks (APS) These stocks are specifically computed quantities of materiel acquired in peacetime to satisfy wartime sustainment until procurement or production sources can furnish materiel. The Army stratifies requirements based on Department of Defense policy and direction.

Army Tactical Command and Control System This system has been fielded to meet tactical command and control requirements from brigade to corps. The Army Tactical Command and Control System includes a standard automation architecture that uses tactical communications. The Army Command and Control System consists of the following five automated battlefield functional area control systems: Advanced Field Artillery Tactical Data System; Maneuver Control System; Combat Service Support Control System; All Source Analysis System; and Forward Area Air Defense Command, Control, Communications and Intelligence System.

ASBP Armed Services Blood Program

ASBPO Armed Services Blood Program Office

ASL authorized stockage list

ASMB area support medical battalion

ASMC area support medical company

ASWBPL Armed Services Whole Blood Processing Laboratory

attn attention

automated identification technology A family of technologies that support source data automation through various media to facilitate the rapid collection, consolidation, storage, and retrieval of data to and from Army management systems. It includes process control hardware, application software, and hybrids that provide industry-standard real-time data acquisition to enhance productivity. It includes bar codes, radio frequency identification, magnetic strips, smart cards, and optical memory cards.

AXP ambulance exchange point

BAS battalion aid station

BDE brigade

BLD blood

BN battalion

BSA brigade support area

BSD blood support detachment

BTC Blood Transshipment Center

BW biological warfare

C Celsius

C2 command and control

C4I command, control, communications, computers, and intelligence

CBT combat

CCP casualty collection point

CD-ROM compact disk—read only memory

CHL combat health logistics

CHS combat health support

CINC Commander in Chief

CMD command

CNR *See* combat net radio.

co company

com commercial

combat net radio (CNR) The current CNR architecture includes single channel ground and airborne radio system; amplitude-modulated and high frequency radios; and tactical satellite radio systems. In the future, joint tactical radios will replace each of these CNR systems.

combat service support control system (CSSCS) This system provides critical, timely, integrated, and accurate automated combat service support information to combat service support, maneuver, and theater commanders and to logistic and special staffs. The combat service support control system processes, analyzes and integrates resource information to support evaluation of current and projected force sustainment capabilities. The combat service support control system will be deployed from echelons above corps to battalion.

CONUS continental United States

COSCOM corps support command

COTS commercial-off-the-shelf

CS combat support

CSAR combat search and rescue

CSC combat stress control

CSG-FWD corps support group-forward

CSG-R corps support group-rear

CSH combat support hospital

CSS combat service support

CSSCS *See* combat service support control system.

ctr center

CW chemical warfare

CZ combat zone

D dental

DA Department of the Army

DAASO Defense Automatic Addressing System Office

DAMMS-R *See* Department of the Army Movement Management System-Redesigned.

DBSS Defense Blood Support System

DCSLOG Deputy Chief of Staff for Logistics

DD Department of Defense

DE directed energy

Defense Medical Logistics Standard Support (DMLSS) This is the medical logistics software portion of the Theater Medical Information Program. In its endstate, DMLSS will replace the Theater Army Medical Management Information System and will provide all medical logistics business practice functions for Department of Defense.

DEN dental

Department of the Army Movement Management System-Redesigned (DAMMS-R) This system was developed as a theater cargo movement and mode asset management system. It provides timely and accurate information to movement managers, highway regulators, and mode operators within the area of operations. It provides shipment planning information, such as consignee listings, destination information, and cargo on hand, so the system user can determine priorities, forecast workload and conveyance requirements, and develop appropriate hazardous or local-unique documents. It also serves as the tool to develop a pickup/delivery schedule designed to maximize unit transportation assets. The Department of the Army Movement Management System-Redesigned will be replaced by the Transportation Coordinators Automated Information for Movements System II.

DEPMEDS Deployable Medical System

DET detachment

DISCOM division support command

DLA Defense Logistics Agency

DMC distribution management center

DMLSS *See* Defense Medical Logistics Standard Support.

DMSO division medical supply office

DOD Department of Defense

DS direct support

DSA division support area

DSCP Defense Supply Center, Philadelphia

DSMC division support medical company

DSN Defense Switched Network

DSS division surgeon's section

DSU direct support unit

EAC echelons above corps

EAD echelons above division

EMT emergency medical treatment

Enhanced Position Location Reporting System (EPLRS) The EPLRS provides the wide area network connectivity from platoon level to brigade and between brigade and battalion autonomous systems and routing areas. Operational units are equipped with an EPLRS very high-speed integrated circuit radio sets to establish and maintain a tactical wide area network backbone for the tactical Internet. The radio set provides secure, jam-resistant digital communications and accurate position location capabilities for the user. It also provides retransmission capabilities that are transparent to the user. The maximum distance the EPLRS can cover is based on an average distance of 3 to 10 kilometers between each radio and the maximum number of relays in the link. The interface between single channel ground and airborne radio system, Force XXI Battle Command Brigade and Below, Internet controller, and the EPLRS will be Internet-protocol compliant.

EPLRS *See* Enhanced Position Location Reporting System.

EPW enemy prisoner(s) of war

ETM equipment and technology management

EVAC evacuation

executive agent A term used in Department of Defense and Service regulations to indicate a delegation of authority by a superior to a subordinate to act on behalf of the superior. An agreement between equals does not create an executive agent. For example, a Service cannot become a Department of Defense executive agent for a particular matter with simply the agreement of the other Services; such authority must be delegated by the Secretary of Defense. Designation as executive agent, in and of itself, confers no authority. The exact nature and scope of the authority delegated must be stated in the document designating the executive agent. An executive agent may be limited to providing only administration and support or coordinating common functions, or it may be delegated authority, direction, and control over specified resources for specified purposes.

1SG first sergeant

FAX facsimile

FBCB2 *See* Force XXI Battle Command Brigade and Below.

FFP fresh frozen plasma

FLOT forward line of own troops

FM field manual; frequency-modulated

Force XXI Battle Command Brigade and Below (FBCB2) This is a digital, battle command information system that provides mounted/dismounted tactical combat, combat support, and combat service support commanders, leaders, and soldiers integrated, on-the-move, real-time/near real-time, battle command information and situational understanding from brigade down to the soldier/platform level across all battlefield functional areas. The FBCB2 is located in the mounted and dismounted maneuver (divisional, separate, heavy, and light) armor/cavalry/reconnaissance, and armored cavalry, mechanized infantry, infantry, and aviation units.

FP1 Force Package 1

FP2 Force Package 2

FSB forward support battalion

FSC forward support company

FSMC forward support medical company

FSMT forward support medical evacuation team

FST forward surgical team

ft foot (feet)

fwd forward

G3 Assistant Chief of Staff (Operations and Plans)

G5 Assistant Chief of Staff (Civil Affairs)

GC Geneva Convention Relative to the Protection of Civilian Internees in Time of War

GCSS-A *See* Global Combat Support System-Army.

GCSS-A (MNT) Global Combat Support System-Army (Maintenance)

GCSS-A (SPR) Global Combat Support System-Army (Supply and Property)

Global Combat Support System-Army (GCSS-A) This system is being developed as a replacement for several of the Army's current Standard Army Management Information System. It will operate in conjunction with other key systems (such as the Transportation Coordinators' Automated Information for Movement System II, the Movement Tracking System, and the combat service support control system) to provide support personnel detailed information about what support is required by the warfighter and the current availability of needed material, to include items in the distribution pipeline.

Global Command and Control System (GCCS) This system is the key joint command, control, communications, computers, and intelligence system. The Global Command and Control System and associated Service components have replaced the Worldwide Military Command and Control System. Like the Worldwide Military Command and Control System, the Global Command and Control System is a system of interconnected computers that provides an integrated command and control capability to the entire joint community. It provides up to SECRET-level information from a wide variety of applications that have migrated, or are in the process of migrating, from other systems including the Joint Operations Planning and Execution System. The Global Command and Control System provides a fused picture of the battlespace within the overall command, control, communications, and computers system. The Army Battle Command System is the Army's component of the Global Command and Control System.

Global Command and Control System-Army (GCCS-A) This is the Army's link of the Army Battle Command System to the Global Command and Control System. The Global Command and Control System-Army will provide a suite of modular applications and information and decision support to Army's strategic-/operational-/theater level planning and operational/theater operations and sustainment. The Global Command and Control system-Army will support the apportionment, allocation, logistical support, and deployment of Army forces to the combatant commands. Functionality includes force tracking, host nation and civil affairs support, theater air defense, targeting, psychological operations, command and control, logistics, medical, provost marshal, counterdrug, and personnel status. The Global Command and Control System-Army will be deployed from theater echelons above corps elements to division.

GPW Geneva Convention Relative to the Treatment of Prisoners of War

GS general support

GTN global transportation network

GWS Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in the Armed Forces

GWS (SEA) Geneva Convention for the Amelioration of the Condition of the Wounded, Sick, and Shipwrecked Members of the Armed Forces at Sea

HHC headquarters and headquarters company

HHD headquarters and headquarters detachment

HN host nation

HNS host-nation support

HOSP hospital

HQ headquarters

HRS human resources support

HSMO health service materiel officer

IHFR improved high frequency radio

installation medical supply activity (IMSA) The IMSA in the continental United States is the supply support activity for medical materiel for an installation or geographic area. Outside the continental United States, it is normally the primary supply support activity for medical materiel for a designated geographic area.

in-transit visibility (ITV) The capability provided to a geographic combatant commander to have visibility of units, personnel, and cargo while in-transit through the Defense Transportation System.

ISO International Organization for Standardization

ITV *See* in-transit visibility.

JBPO Joint Blood Program Office(r)

JMAR joint medical asset repository

joint tactical radio (JTR) The JTR will provide a means for transport of information exchange requirements between users throughout the theater. Various configurations of JTRs will support information exchange requirements extending from low-capacity local voice or data nets to high capacity video links or wide area networks covering large areas such as brigade, division, corps, and theater. The JTR family of radios will serve as a means to simultaneously operate across multiple frequency bands. It will operate simultaneously across multiple voice, data, or video networks to exchange information between users throughout the battlefield. The key function of JTR will be to serve as the information transport backbone for the tactical Internet at echelons brigade and below. The JTR system will allow operation of multiple applications simultaneously from a single radio unit. The future digital radio

concept will replace all other combat tactical radios, to include the single channel ground and airborne radio system, the mobile subscriber radiotelephone terminal, high-frequency sets, the Enhanced Position Location Requirement System, satellite communications, the Global Position System, and others.

JRCAB Joint Readiness Clinical Advisory Board

JTAV joint total asset visibility

JTR *See* joint tactical radio.

LAB laboratory

LAN local area network

lbs pounds

LIN line item number

LMSR large medium-speed roll-on/roll-off

LNO liaison officer

LOG logistics

LOGCAP logistics civil augmentation program

LOS line of sight

LSE logistics support element

MAC maintenance allocation chart

MACOM major Army command

MC4 Medical Communications for Combat Casualty Care

MCDM medical chemical defense materiel

MCO movement control office(r)

MED medical

MEDASM medical assemblage management

MEDCOM medical command

MEDEVAC medical evacuation

Medical Standby Equipment Program (MEDSTEP) Includes end items, components, or assemblies used to support activities with serviceable items when the primary item is unserviceable and is economically repairable (formerly called operational readiness float).

MEDLOG medical logistics

MEDMNT medical maintenance

MEDSTEP *See* Medical Standby Equipment Program.

MEDSUP medical supply

MER medical equipment repairer

MES medical equipment set

MF2K Medical Force 2000

mgt management

ml milliliter

MLB medical logistics battalion

MLMC Medical Logistics Management Center

MLST medical logistics support team

MMC movement management center

MMMB Medical Materiel Management Branch

MMOD medical maintenance operations division

MMS medical materiel set

MOS military occupational specialty

Movement Tracking System (MTS) This system will support distribution management through the full spectrum of military operations. The system's integration with Transportation Coordinators' Automated Information for Movement System II and Global Combat Support System-Army will provide commanders and distribution managers an unprecedented movement tracking, control, and management capability. It will provide near real-time information on the location and status of distribution platforms using cabin

console-mounted hardware and satellite technology. The Movement Tracking System will incorporate various technologies including the Global Positioning System, automated identification technology, vehicle diagnostics, and nonline of sight communication and mapping.

MRI medical reengineering initiative

MSE mobile subscriber equipment

MSRT mobile subscriber radiotelephone terminal

MST maintenance support team

MTF medical treatment facility

MTS *See* Movement Tracking System.

NATO North Atlantic Treaty Organization

NAVMEDLOGCOM Navy Medical Logistics Command

NBC nuclear, biological, and chemical

NCO noncommissioned officer

NMC nonmission capable

no. number

OBJ objective

OCONUS outside continental United States

OES optical equipment set

OPS operations/operational project stocks

OTSG Office of The Surgeon General

P&D potency and dated

PAX passenger

PLL prescribed load list

PLT platoon

PM preventive medicine

PMCS preventive maintenance checks and services

PMI patient movement item

POL petroleum, oils, and lubricants

PVNTMED preventive medicine

QSTAG Quadripartite Standardization Agreement

RBC red blood cell

ROP reorder point

RORO roll-on/roll-off

RP retained personnel

S1 Adjutant (US Army)

S2 Intelligence Officer (US Army)

S3 Operations and Training Officer (US Army)

S4 Supply Officer (US Army)

SARSS *See* Standard Army Retail Supply System.

SFC sergeant first class

SIMLM single-integrated medical logistics manager

SINCGARS single channel ground and airborne radio system

SOS source of supply

SPBS-R *See* Standard Property Book System-Redesigned.

SPOD sea port of debarkation

SPOE sea port of embarkation

SPT support

sq square

SRC standard requirement code

SRIM stockroom and readiness inventory management

SRTS-II Spectacle Request Transmission System-II

STAMIS *See* Standard Army Management Information System.

STANAG standardization agreement

Standard Army Management Information System (STAMIS) This system is composed of separate logistical, medical, and personnel information management systems that provide a continuous flow of information from sustaining base through the tactical level. These systems are currently not seamlessly integrated but rather are subsystems residing on separate computer platforms. To bridge this gap, the Global Combat Support System-Army initiative is proposed to fulfill the role of an integrated client/ server system for all manning, arming, fixing, fueling, transporting, and sustaining support to the warfighter.

Standard Army Retail Supply System (SARSS) This system consists of three components: the SARSS-1, the SARSS-2A, and the SARSS-2AC/B. The SARSS-1 is the automated system used in supply support activities at all echelons to accomplish the receive, store, and issue mission. The SARSS-1 has interfaces to receive and process requests for issue from the Unit-Level Logistics System, the Standard Property Book System-Redesigned, and the Standard Army Maintenance System-1. The SARSS-2A is the automated supply management system used by managers in materiel management centers at the division, separate brigade, or armored cavalry regiment level. It provides the tools necessary for item managers to establish stockage levels and support relationships, and to control the lateral issue process (that is, referrals) of assets between supply support activities. The SARSS-2AC/B is used at the corps and theater materiel management centers. It provides the same management capabilities for the corps/theater materiel management center managers who are responsible for corps/theater supply support activities that SARSS-2A provides for divisional materiel management center managers. Additionally, it maintains the demand history files used for demand analysis and the interface with the finance system.

Standard Property Book System-Redesigned (SPBS-R) This is an automated property accountability system that provides on-line management information and automated reporting procedures for property book officers. The Standard Property Book System-Redesigned interfaces with the Standard Army Retail

Supply System at the supply support activity to requisition property book and other accountable items required by units. It interfaces with the Unit-Level Logistics System-Supply Officer at the unit level to provide the information needed so that the Unit-Level Logistics System-Supply Officer can generate the hand receipt/subhand receipt and component listings. The Standard Property Book System-Redesigned performs automated reporting of assets to support Army total asset visibility.

STD standard

SURG surgery

TA theater Army

tactical Internet (TI) At brigade and below, the tactical Internet will extend the Army Battle Command System to the soldier and weapons platform. The tactical Internet passes battle command and situation understanding data. Today it integrates the legacy single channel ground and airborne radio system and Enhanced Position and Location Reporting System radio. In the future, the joint tactical radio will be a networked, multiwave form, multiband radio system employed to provide the tactical Internet backbone that supports voice and high data throughput. The joint tactical radio will support existing and planned information systems at brigade and below including the Army Tactical Command and Control System, Force XXI Battle Command Brigade and Below, and the Standard Army Management Information System information where the area common-user system is unable to provide support.

TAMMIS *See* Theater Army Medical Management Information Systems.

TB MED technical bulletin, medical

TBTC Transportable Blood Transshipment Center

TC-AIMS II *See* Transportation Coordinators' Automated Information for Movement System II

TDA table of distribution and allowance

Theater Army Medical Management Information Systems (TAMMIS) The TAMMIS tracks patients and manages medical supply information. Medical command and control information is provided through data roll-ups on the statuses of medical units, evacuation workloads, and critical workloads. The replacement for the logistics portion of TAMMIS is in the early stages of development. It is a joint system known as the Defense Medical Logistics Standard Support.

TI tactical Internet

TM technical manual; team

TMDE test measurement and diagnostic equipment

TMIP Theater Medical Information Program

TO theater of operations

TOE table of organization and equipment

total asset visibility The total asset visibility provides the capability for both operational and logistics managers to obtain and act on information on the location, quantity, condition, movement, and status of assets throughout Department of Defense's logistics system. Total asset visibility includes all levels and all secondary items, both consumable and reparable.

Transportation Coordinators' Automated Information for Movement System II (TC-AIMS II) This system is being developed as the deployment system of the future and will replace the Department of the Army Movement Management System-Redesigned and selected other Army transportation systems. It is a Department of Defense system being designed for use by all Services. It will support all unit and installation deployment, redeployment, and retrograde operations requirements. The Transportation Coordinators' Automated Information for Movement System II will operate in conjunction with the Global Combat Support System-Army and the Movement Tracking System to provide the automated tools needed for successful distribution management. The Transportation Coordinators' Automated Information for Movement System II will provide the capability to automate unit movement and installation transportation/traffic management office planning and execution from both in-garrison and deployed field environments. The Transportation Coordinators' Automated Information for Movement System II will also provide an automated information management capability to managers involved with movement control and allocation of common-user land transportation in a theater of operations. This system will also provide needed data to the Global Transportation Network and command and control systems at various command levels. The Transportation Coordinators' Automated Information for Movement System II will be the standard joint transportation and deployment information management system.

TRMT treatment

TSC theater support command

TSOP tactical standing operating procedure

UA unit assemblage

ULLS Unit Level Logistics System

ULLS-G Unit Level Logistics System-Ground

US United States

USACHPPM United States Army Center for Health Promotion and Preventive Medicine

USAF United States Air Force

USAMMA United States Army Medical Materiel Agency

USAMRMC United States Army Medical Research and Materiel Command

VET veterinary

W2 warrant officer, second grade

W3 warrant officer, third grade

W4 warrant officer, fourth grade

Warfighter Information Network (WIN) This is an integrated command, control, communications, and computers network comprised of commercially based, high technology communications network systems. It is designed to enable the gaining of information dominance by increasing the security, capacity, and velocity (speed of service to the user) of information distribution throughout the battlespace. A common sense mix of terrestrial and satellite communications is required for a robust Army Battle Command System. The Warfighter Information Network will support the warfighter in the 21st century with the means to provide information services from the sustaining base to deployed units worldwide. Currently, the Warfighter Information Network information systems available to the echelon corps and below warfighter are the Global Command and Control System, the Standard Army Management Information System, the Defense Message System, and the Army Battle Command System.

WB whole blood

wireless local area network (WLAN) A major terrestrial transport component of Warfigher Information Network is the wireless local area network. The wireless local area network supported by all Warfighter Information Network switches will be the primary wireless access point for the majority of wireless users to the data network. The future small extension node switch will have an embedded joint tactical radio. The joint tactical radio will provide wireless local area network access, for users at brigade and below, via the tactical Internet to the switched packet network. The wireless local area network will support information needs of highly mobile and distributed users through adaptation to military tactical communications systems and commercial wireless technology. The wireless local area network will assist in providing mobile and flexible command posts and enhancing command and control on the move.

WRSS war reserve sustainment stocks

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FM 4-02.1
28 SEPTEMBER 2001

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

Official:



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0124106

DISTRIBUTION:

Active Army, Army National Guard, and US Army Reserve: To be distributed in accordance with the initial distribution number 115862 for FM 4-02.1.