CHAPTER 6

HEALTH SERVICE LOGISTICS

Section I. MISSION, POLICIES, AND RESPONSIBILITIES

6-1. Health Service Logistics Mission

- a. Health service logistics is managed solely by the AMEDD. This gives the surgeon the ability to influence and control the resources needed ta save lives. The health service logistics mission parallels and supports the surgeon's HSS mission, and in turn, the commander's mission. The health service logistics mission is to provide support where and when it is required in the fastest, most inexpensive, and most practical way possible. Health service logistics includes—
- Class VIII medical supplies (medical materiel to include medical peculiar repair parts used to sustain the HSS system).
 - Optical fabrication.
- $\check{\mathbf{Z}}$ Medical equipment maintenance.
- $\boldsymbol{\check{Z}}$. Blood storage and distribution. See Chapter 8 for a discussion on blood management.
- New technology like oxygen generation, resuscitative fluids production, blood substitutes, and frozen blood.
- b. The successful operation of the health service logistics system is directly dependent upon-
- Integration with the whole HSS effort.
- Supervision by *appropriate command surgeons*.

- Anticipatory and proactive support rather than reactive support.
- c. Field Manual 8-10 discusses the specific characteristics which set the Class VIII system apart from other classes of supply. One such characteristic is the special protection afforded by the Geneva Conventions.

This paragraph implements QSTAG 291.

6-2. Interface of Medical Materiel Procedures Under the International Standardization Agreement

The United States, United Kingdom, Australia, and Canadian Forces have agreed to accept each nation's medical materiel procedures so that they interface within their national supply systems. The need for cross-supply may occur whenever multinational forces are present in a TO.

- *a.* Use of cross-supply procedures can occur in some or all of the following areas:
 - (1) Requisitioning from depots.
 - (2) Return of materiel to depots.
- (3) Acknowledgment of issue and receipt.
- $\begin{tabular}{ll} \begin{tabular}{ll} \beg$
 - (5) Serviceability classification.

- (6) Repair and maintenance (within the health service logistics systems).
- $\it b.$ A health service logistics liaison will be established within the TO health service logistics system—
- To assist in establishing this interface.
- \bullet To develop specific cross-supply procedures.
- $\ ^{\bullet}$ $\ ^{}$ To provide other logistics assistance as required.

The Army component surgeon's office in conjunction with the Theater Medical Materiel Management Center (TMMMC) will perform this function.

6-3. Policy and Responsibility

The TA commander is responsible for the development of supplies for TA forces and, when applicable, for Navy, Air Force, Marines, allied forces, and CA activities. The Army component commander must be prepared to provide medical supply, medical equipment maintenance, optical fabrication, and blood support as the single integrated medical logistics manager (SIMLM) in a TO. On the special staff of the TA commander is the TA surgeon. Normally, the MEDCOM commander or the senior medical commander in the

COMMZ functions as the TA surgeon. In that capacity, he—

- Provides medical staff advice to the commander and to other staff members in the development of the TA health service logistics system.
- $\boldsymbol{\check{Z}}$. Ensures that an adequate health service logistics system exists to meet the needs of the Service.
- Recommends policy and states priorities.
- Plans and supervises technical inspections of the system.
- $\boldsymbol{\check{Z}}$ Determines TA requirements for medical equipment and supplies.
- **Ž** Exercises staff supervision over the requisitions, procurement, storage, maintenance, distribution, and documentation of Class VIII supplies and equipment.
- Provides support to other military Services and to civilian communities, as required. (The HSS for military operations is normally provided on an area basis and must be coordinated with the component Service. Requirements to support civilian communities are developed in coordination with the Deputy Chief of Staff for Host-Nation Activities.)

Section II THE HEALTH SERVICE LOGISTICS INFORMATION MANAGEMENT SYSTEM

6-4. **Medical Logistics Subsystems**

The TAMMIS includes medical logistics (MEDLOG) subsystems designed to provide support for field (TOE) medical units in peacetime

and wartime. The three subsystems listed below provide the TAMMIS medical logistics capabilities—

Ž MEDSUP-TAMMIS medical supply.

- MEDMNT-TAMMIS medical maintenance.
- MEDASM-TAMMIS medical assemblage management.

6-5. Theater Army Medical Management Information System, Medical Supply

- a. The TAMMIS MEDSUP System automates the comprehensive management and requisitioning of medical materiel (Class VIII) required to support all medical units.
- *b.* The MEDSUP system provides the user with automated capabilities in the following areas:
- (1) Customer processing which enables the user to process customer requests.
- (2) Requisitioning, receiving, and due-in items. This enables the user—
- To prepare and send requisitions to the supply support activity (SSA).
- To receive and process status and materiel receipts from the SSA.
- (3) Maintaining local stocks, quality control, and reporting which enables the user—
- To manage stockage items and their levels.
 - To maintain stock loca-
- To conduct physical inventories.

tions.

• To accomplish quality control and destruction actions.

- $\boldsymbol{\check{Z}}$. To produce the reports routinely required in the management of a medical supply account.
- (4) Calling up national stock numbers, due in/out data, or transaction histories enabling the user to access a broad range of management data and permitting decision making.
- (5) System setup/maintenance procedures allowing the user to build and update the-
 - Ž Supported customer file.
 - Supporting activity file.
 - Environmental data file.
 - Local description data.
 - Processing default data.
 - \check{Z} Processing control data.

This capability also allows the user to perform system file maintenance.

- $\hbox{ (6) Reviewing exceptions referred to manager allowing the user-} \\$
- $\tilde{\boldsymbol{Z}}$. To view the total number of exception records that require manager action.

 $\tilde{\boldsymbol{Z}}$ To identify exceptions that are over 2 days old.

The system generates four types of exception records: due-in status, demand, receipt, and replenishment.

(7) User designed reports allowing the user to create, modify, delete, and print reports of own design.

6-6. Theater Army Medical Management Information System, Medical Maintenance System

- a. The TAMMIS MEDMNT system supports the scheduled maintenance and repair of medical equipment essential for treating patients.
- *b.* The MEDMNT system provides the user with automated capabilities in the following areas:
- (1) Unit equipment file which allows the user to maintain maintenance records on supported medical equipment.
- (2) Work order processing which allows the user to schedule, assign, update, complete, and report MEDMNT work orders and to track the status of equipment supported by MEDMNT personnel.
- (3) Supply management which allows the unit to maintain stockage of the repair parts required to support the maintenance mission. This capability also allows the maintenance unit to interface with the supply system to request and receive materiels and maintain status on ordered items.
- (4) Periodic processing and reporting which provides a monthly maintenance performance report to be used by local management and/or higher commands.
- (5) Command and control reporting which provides command interest information concerning scheduled and unscheduled maintenance. It also provides the commander with upto-the-minute status of all readiness significant items of medical equipment.
- (6) Maintenance system setup procedures which define the local environment used

to control system processing by identifying supporting activities, supported customers, and processing default data.

6-7. Theater Army Medical Management Information System, Medical Assemblage Management System

- a. The TAMMIS MEDASM system is used to establish management visibility of unit assemblage components within medical assemblages.
- *b.* The MEDASM system provides the user with automated capabilities in the following areas:
- (1) Assemblage management process which includes a grouping of individual processes which are used to accomplish item management, allowance management, and quality control management, The result of the collective management of these individual areas allows accurate predictions of unit readiness based on asset availability.
- (2) Request, receipt, and due-in management which includes separate processes which expedite ordering of shortage items, placing of orders on the correct supply source, recording receipts, and managing aged orders for required items.
- (3) System setup procedures includes a group of processes which define the operating environment to the MEDASM system. These procedures describe the parent unit, its supported assemblages, sources of supply support, and routine ordering processes.
- (4) User designed reports allow the user to create, modify, delete, and print reports of his own design.

SECTION III. THE HEALTH SERVICE LOGISTICS CONTINUUM

6-8. Request Flow in the Theater

- a. Requests for medical materiel flow from Echelons I, II, and III HSS units to the medical battalion, logistics (forward) for issue.
- (1) The combat lifesaver requests Class VIII supplies from the BAS. The aid station is responsible for having sufficient stock to resupply the combat lifesaver. Combat lifesavers in nondivisional units obtain Class VIII from the nearest medical unit capable of supporting them.
- (2) The combat medic requests supplies from the BAS. This action is not a formal request so it can be oral or written. The requests are delivered to the BAS by whatever means are available. Usually this will be accomplished by the driver or the medic in the ambulance returning to the BAS with patients. Commonality of supplies between the combat medic and the ambulance equipment set may allow the ambulance crew to fill the combat medic's request from on-board stock. The ambulance crew can then replenish its stack upon returning to the BAS. Resupply to the combat medic can be by line item or by resupply packages.
- (3) The forward deployed BASS of a division request their Class VIII from the medical company of a forward support battalion (FSB).

NOTE

While the medical company of the FSB can be used as a medical supply point, the limited manpower resources (one MOS 76J, medical supply specialist) of the medical supply section within the medical company limits the amount of supplies that can be handled.

- (4) The division medical supply officer (DMSO) should anticipate requirements for the combat lifesaver, combat medic, and BAS allowing resupply PUSH packages to be forwarded to the maneuver battalion's trains area (preferred method). These packages should be small enough that they can be easily handled by one person.
- enhance the resupply to the combat medics by forward locating materiel at patient collecting points 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 collecting points, assuming the availability of manpower. Ambulances should never go forward empty as it only takes a few minutes to place a box of Ringer's lactate solution or a couple of resupply packages into the back of an ambulance.

NOTE

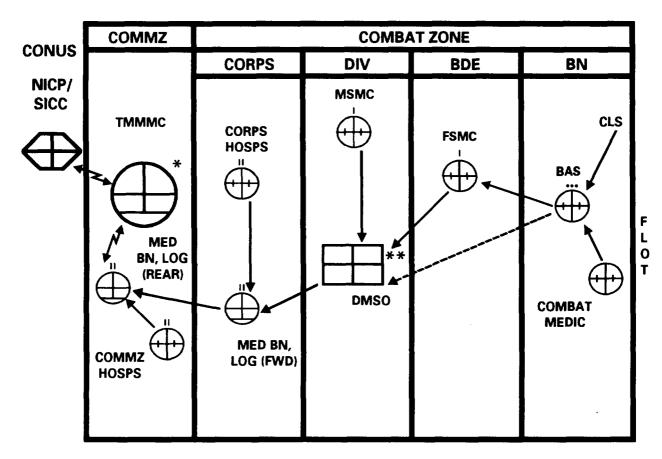
The DMSO, in conjunction with the DMOC and the medical battalion, logistics (forward), plans for preconfigured packages. This ensures that the user receives what he needs and eliminates waste of medical and transportation resources.

(6) Medical companies of maneuver divisions request their Class VIII from the DMSO, The DMSO has the responsibility to provide medical supply support to all units within the division area. Requests may come by message with returning ambulances (ground or air), by land line, or through radio nets within the division,

- (7) The DMSO requisitions Class VIII supplies from the medical battalion, logistics (forward). However, the medical battalion, logistics (forward) is responsible for anticipating requirements and pushing preconfigured resupply packages forward.
- (8) Corps hospitals request Class VIII supplies from the medical battalion, logistics (forward).
- (9) The medical battalion, logistics (forward) pushes resupply packages to Echelons I and II units and surgical squads/teams/detachments in the division. This battalion manages line item replenishment requests when the tactical situation permits.
- b. Echelons above corps units request Class VIII from the medical battalion, logistics (rear). This unit will build preconfigured resupply packages based on the medical battalion's, logistics (forward) mission. It will PULL or PUSH resupply packages based on requirements.
- c. The medical battalion, logistics (rear) either issues the item from stock or passes the requisitions for Class VIII through the TMMMC to a CONUS source. The TMMMC serves as the management interface with CONUS-based Class VIII national inventory control points (NICPs) and service item control centers (SICCs). Figure 6-1 illustrates the requisition flow in the TO.
- d. Replenishment requests for medical battalion, logistics (forward/rear) stocks follow the same procedure described above. The medical battalion, logistics (forward) handles resupply packages and throughput from CONUS. The medical battalion, logistics (rear) builds resupply packages primarily for Echelon I and II units and manages line-item replenishment requests for Echelon IV units.

6-9. Supply Flow in the Theater

- Requests that are passed to CONUS sources from the medical battalion, logistics (rear) for those items that cannot be filled with on-hand stock for the medical battalion, logistics (forward) are normally filled via throughput. They are shipped from CONUS through the theater airhead/ port directly to the requisitioning medical battalion, logistics with those designated for medical battalion, logistics (forward) not normally transshipped through a medical battalion, logistics (rear). Ultimately the materiel is forwarded to the supported corps and COMMZ medical units via COMMZ/corps transportation assets. See Figure 6-2 for an illustration of Class VIII supply flow in a TO. Figure 6-3 illustrates asset visibility and supply request management of a two-corps, sixdivision theater.
- b. Medical materiel for the division will flow to the DMSO. Shipment of Class VIII into the division is coordinated with the corps MCC (CMCC) and division MCC (DMCC), Emergency resupply will be accomplished by air ambulance.
- Resupply of the medical companies of c. the heavy or the light division is by the DMSO. The DMSO has the responsibility to provide medical supply support to all units within the division area. The preferred method for resupply is through unit distribution using division transportation assets. The DMOC has responsibility to plan the use of division transportation assets in coordination with the DMCC. Backhaul, using ground or air ambulances, is used in emergency situations as backup to move the medical supplies forward to the forward support medical companies in the brigade support area. From this point, medical supplies are carried forward using ambulances (air and ground) or other vehicles that are going forward to the BASS.



* COLLOCATED WITH MED BN, LOG (REAR)

* * COLLOCATED WITH MED CO

LEGEND:

BN	BATTALION	MED	MEDICAL
BDE	BRIGADE	MGT	MANAGEMENT
CLS	COMBAT LIFESAVER	MSMC	MAIN SUPPORT MEDICAL COMPANY
CO	COMPANY	RQNS	REQUISITIONS
DIV	DIVISION		
FLOT	FORWARD LINE OF OWN TROOPS	RQNS	4
FSMC	FORWARD SUPPORT MEDICAL COMPANY	RQNS AN	D
FWD	FORWARD	RONS M	IGT Z
HOSPS	HOSPITALS	RONS (PREFERRED	
LOG	LOGISTICS	METHO	

Figure 6-1. Requisition flow.

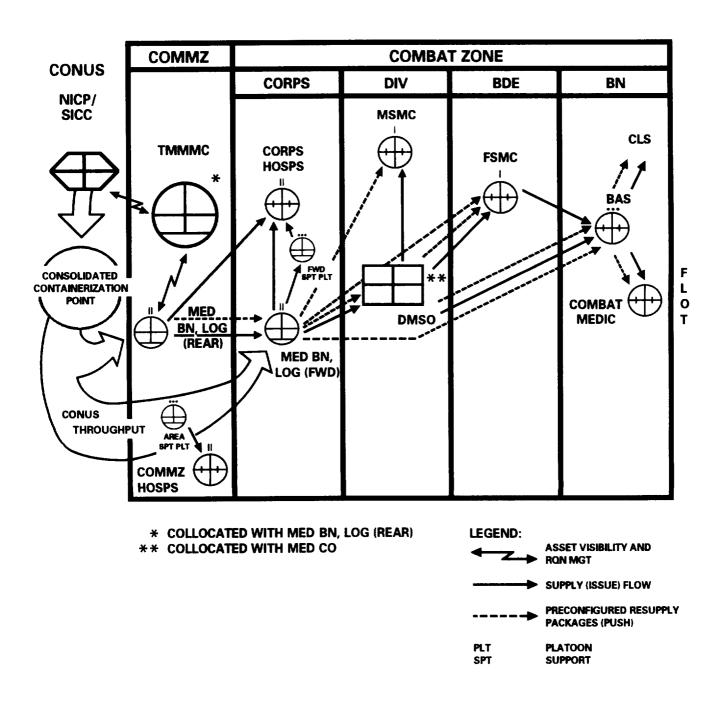


Figure 6-2. Supply (issue) flow.

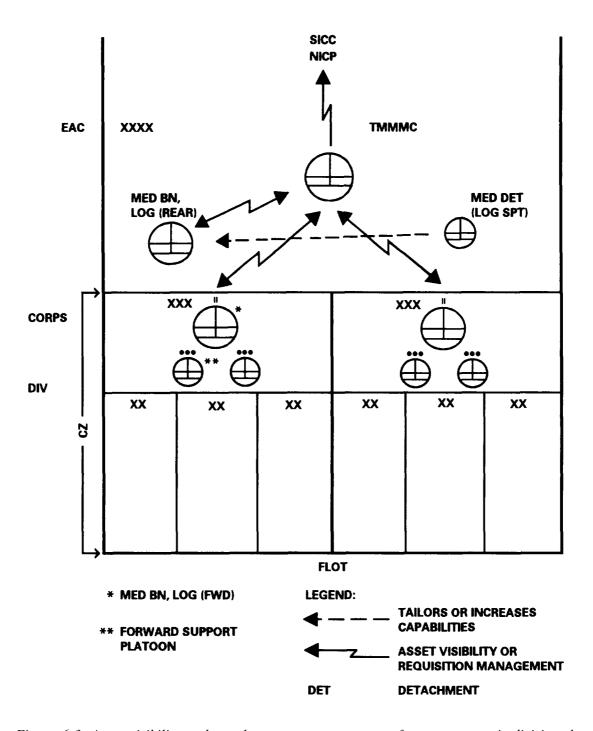


Figure 6-3. Asset visibility and supply request management of a two-corps, six-division theater.

Section IV. HEALTH SERVICE LOGISTICS THEATER REQUIREMENTS

6-10. General Requirements for a Developing or Mature Theater

- a. The intense management of all aspects of health service logistics within a developing or mature theater is essential. It requires organic *command and control to* provide overall operational standardization, maintenance, and logistical support. Continuous logistics planning is required since requirements may change as the theater matures.
- b. Analysis of past data and projected logistics requirements to support Army operations reveals a significant increase in the consumption of Class VIII materiel. Conservative estimates have raised the 0.35 pounds per man per day to 1.9 pounds per man per day, five times that experienced during World War II and the Korean Conflict. The increase in Class VIII supplies for soldiers is based on the expanded use of lifesaving resuscitative fluids and medical oxygen in the forward areas of the battlefield.
- c. Health service logistics units will be modular in design with the flexibility, mobility, and capability to assemble, produce, process, move, and issue that amount of health service materiel to meet the operational objective of continuous operations. The medical battalion, logistics (forward) can echelon a platoon to the AO early. As the platoon cannot stand alone, it must be attached to a command and control unit. Health service logistic activities are described in Section XII of this chapter. Resupply, follow-on resupply, resupply/throughput, and throughput will be effected as follows:
- (1) During the initial phases of conflict, resupply will be effected from war reserve stockpiles. These stocks are intended to fill the void created by the lag in establishing the functional pipeline from CONUS, or other sources outside the

- theater. They are not intended for initial basic load. *Units must deploy with their basic loads* because health service logistics units are late deploying CSS units that carry *resupply loads—NOT INITIAL SUPPLY.* Units that deploy without their basic loads impair the theater resupply mission by depleting stocks projected for resupply.
- (2) In the case of a developing (contingency) theater, *resupply* will be effected via initial preplanned supply support. The US Army Medical Materiel Agency (USAMMA) develops recommended lists for different scenarios.
- (3) Follow-on resupply beyond war reserve stockpiles will also be included in initial preplanned supply support. Initial preplanned supply support will be identified in logistical plans to ensure continued resupply until normal requisitioning procedures are established. Medical resupply planning has to consider existing intheater capabilities as well as deploying organizations tasked with a supply support mission.
- (4) Resupply/throughput will normally be limited to Echelon III and IV HSS units, that is, to the medical logistics battalion or the major medical unit. Under certain conditions, resupply/throughput may be required directly to the division.
- (5) *Throughput* of medical supplies will continue for the duration of the conflict. These medical supplies will be delivered by supporting corps or theater transportation assets directly to the medical battalion, logistics (forward) or medical battalion, logistics (rear).

6-11. Developing Theater Requirements

a. In the initial stages of a developing theater, arriving medical units, to include medical

battalions, logistics, will operate from their *pre*planned basic loads and from any existing prepositioned war reserve stockpiles. To deploy with the necessary Class VIII materiel, the planner must possess a detailed understanding of each contingency plan and the type and number of units to be supported.

- b. Health service logistics planning for an initial period of operations may be based on medical module (MEDMOD) resupply sets such as trauma and sick call sets, resupply by unit type (REBUT) computations, and recommended stockage lists developed for the DMSO in the heavy and the light divisions and for hospitals. Preconfigured sets contain a specific number of Class VIII consumable days of supply. Durable and nonexpendable items must be requested separately. Planners will review operational requirements and add or delete items from sets as necessary. Preconfigured packages will predominately consist of high-consumption items.
- (1) The preconfigured set concept is not restricted to standardized sets. It can apply to locally assembled collections of supplies in anticipation of unique contingency requirements, This concept is influenced by the projected usage rates and casualty estimates or the mission assigned. It can be as simple as a box of Ringer's lactate solution taped together with a box of starter sets.
- (2) Preconfigured packages can be sent automatically by supply support activities at prearranged intervals (PUSH) or can be called for when needed (PULL). The key to using preconfigured sets successfully is planning, coordinating, more planning, and more coordinating.
- (3) During initial planning when using resupply sets, an analysis of the climate and terrain, local acquisition, and throughput distribution should be made. This is necessary to ensure that the *resupply sets are supplemented* with items required at the specific geographic location.

- Z Climate and terrain. Special requirements may exist for operations in desert, mountain, jungle, or arctic conditions. Resupply sets, as normally configured, may not address all of a unit's needs under the above conditions. They may contain more than is required. Too much is wasteful of critical materiel and transportation resources and ties up the resupply pipeline. Therefore, close coordination with the appropriate staff is required to determine if specific items require addition, deletion, or quantity adjustment.
- Local acquisition. It may be possible to obtain commitments from host nations regarding specific items that will reduce support required from CONUS and/or reduce theater stockage requirements. Any medical items required to support operational requirements may be considered for host nation support pending the command surgeon's approval.
- c. Preplanning should include coordination with all supporting health service activities.
- *d.* When the logistics pipeline is established, line item requisitioning supports the theater.

6-12. Mature Theater Requirements

a. In-theater medical units and deploying medical units sustain their operations with unit basic loads and are resupplied from war reserve stockpiles. As the theater matures, levels of supply are established and normal replenishment based on demands will replace reliance on deployment loads and theater war reserves. Resupply to the theater is preplanned and defined in appropriate logistical plans. This preplanned resupply includes shortfalls coexisting war reserves, follow-on resupply and buildup to approved theater stockage levels, and combat loss replacements.

b. In-theater medical battalions, logistics (forward or rear) operate from stockpiles of war reserves and receive resupply from CONUS via preplanned supply increments or normal

requisitioning procedures. As corps are added to the theater, additional support units arrive and the health service logistics system expands to support changing requirements.

SECTION V. HEALTH SERVICE LOGISTICS COMPUTATIONS

6-13. Computing Days of Supply

- a. Computing the days of supply (DOS) is a key factor in supply planning. Levels of supply express the quantity of supplies authorized to be on hand or on order in anticipation of demands. For most consumable medical materiel, the DOS concept is normally employed to determine medical materiel and medical repair parts stockage requirements.
- b. The DOS method computes stockage requirements for a given number of days based on a daily usage or demand rate. In addition to medical materiel, the DOS method is used throughout the Army for other items that possess a short life, or that are critical, seasonal, or perishable. Successful use of the DOS concept requires demand history or the ability to forecast over the short run (6- to 12-month forecasting period).
- c. Department of the Army Pamphlet (DA Pam) 710-2-2 contains specific details for DOS computations. Other supply planning, estimating, and computational guidance is contained in FM 101-10-1/1 and FM 101-10-1/2. The appropriate DOS levels may vary; however, the planner must keep in mind the levels are *situationally* and *operationally* dependent on the type of mission.

6-14. Theater Stockage Objective

Headquarters, DA, prescribes the DOS authorized for overseas armies. Days of supply are converted to numerical quantities of items. These quantities constitute the stockage objective; permit requisitioning, inventory control, and movement planning; and form the basis of supply support. The theater stockage objective includes all required stocks except those in the hands of using units. The senior health service materiel officer in the theater recommends the theater stockage objective to the theater surgeon. Routinely, the theater stockage objective is 30 days at the medical battalion, logistics (rear) with 15 days stockage objective at each supported corps (medical battalion, logistics [forward]). The senior health service materiel officer continuously monitors the theater stockage objective and, if required, recommends that it be modified based on the situation or operation. A pounds-per-day-per-man consumption figure can be used for initial gross planning for transportation and storage estimates within the theater. However, this is not a precise planning method.

6-15. Requisitioning Objective

A unit's requisitioning objective (RO) consists of several stockage levels added together. The RO is the maximum quantity of an item that may be on hand or on order. The following formula is used to calculate the RO:

where:

• OL=Operation level. The OL is the quantity of stock required to sustain operations in the interval between receipt of a replenishment requisition and submission of another requisition.

- OST = Order ship time. The OST is the quantity of stock required to sustain operations between the time a replenishment requisition is submitted and the time the materiel is received and posted to the stock record account.
- $\check{\mathbf{Z}}$ SL = Safety level. The SL is the quantity of stock on hand to sustain operations in the event of demand rate increases or temporary interruptions to the supply pipeline. The SL for Class VIII will be determined by the appropriate command surgeon.

6-16. The Reorder Point

The reorder point (ROP) is the number of DOS expressed as a quantity of stock which in all cases is less than the RO. A replenishment requisition

should be submitted whenever the quantity of stock on hand and due in, less any due out, equals or is less than the ROP. The following formula is used to calculate the ROP:

ROP = OST + SL

NOTE

Since the DOS concept is based on demand history or forecasting or both, the planner must be careful when establishing levels for a changing situation where usage or consumption is likely to increase or decrease rapidly. In this case, an improperly established level could result in excess or zero balances and poor supply economy.

Section VI. MEDICAL ASSEMBLAGES

6-17. Management

Medical assemblages are classified service unique (major) or multiservice (minor).

- a. A service-unique (major) medical assemblage is a grouping of medical and nonmedical items under a single stock number which is managed by the AMEDD and used primarily by the Army. These assemblages are identified by the Sets, Kits, and Outfits (SKO) National Stock Number and Title Only reflected in the Components of Sets, *Kits, and Outfits* printed in Volume II, Medical Sets, Kits, and Outfits of the DOD Medical Catalog (microfiche version).
- (1) Components are initially authorized and published in DA supply catalogs (SC) 6545-8-XXX series and unit assemblage listings (UAL).
- (2) Revisions to assemblage components are published annually in the DA Supply

Bulletin (SB) 8-75 series and are reflected in current year UAL.

- b. A multiservice (minor) medical assemblage is a grouping of medical and nonmedical items under a single stock number which is managed by the Defense Medical Standardization Board (DMSB) and used by multiple services.
- (1) Components are published in the DOD Medical Catalog (microfiche version), Volume H, Medical Sets, Kits, and Outfits.
- (2) Revisions to assemblage components are published monthly in the DOD Medical Catalog, Volume II, Medical Sets, Kits, and Outfits.

6-18. Procedures

a. Requisition. Authorized service unique medical assemblages are requisitioned according to procedures contained in AR 40-61.

Authorized multiservice medical equipment sets are requisitioned through normal supporting Class VIII channels to the wholesale system. Equipment listed in the authorized column of the units' modified table of organization and equipment (MTOE) should be either on hand or on requisition according to AR 710-2.

- b. Accounting. Property records are maintained for each authorized nonexpendable item according to AR 710-2. A quality control program must be established.
- c. Maintenance. The commander of a unit issued a medical assembly is responsible for continuous maintenance and update of its components. To prevent loss of shelf-life items, commanders should ensure that stock rotation is accomplished where this capability exists. Normally, potency dated items are not packed with the assemblage but are maintained separately for management purposes. United States Medical Materiel Agency will furnish latest unit assembly

listings to commanders on request. These listings reflect the latest assembly configurations as authorized by The Surgeon General, Commanders should ensure that all newly authorized assembly components are promptly requisitioned. The official component listing of medical assemblages is listed in the supply catalog. Unit assemblage listings are updated annually by USAMMA. If there is a discrepancy between the supply catalog and the UAL, the UAL will be used since it contains the most current information. Detailed maintenance and surveillance procedures for medical assemblages are contained in TB Med 1 and TB 740-10.

NOTE

Service unique medical assemblages, if issued to Reserve units, will not normally contain components having a shelf life of 60 months or less. Reserve units must be prepared to requisition these items, if required, on deployment.

Section VII. MEDICAL EQUIPMENT MAINTENANCE

6-19. Purpose

The purpose of medical equipment maintenance is to assure that medical equipment is maintained in a mission-capable condition. Commanders at each level are responsible for the successful accomplishment of the maintenance requirements of their unit. In recent years, medical technology has advanced at a very rapid pace. As a result, maintenance actions required to support these technological advances have become more complex. In many cases, proper care and maintenance now require sophisticated test, measurement, and diagnostic equipment (TMDE), and advanced schooling for maintenance personnel.

- a. Maintenance of an item includes—
 - Inspecting.
 - Testing.
 - Servicing.
 - Classifying.
 - Ž Adjusting.
 - Aligning.
 - Ž Repairing.

Ž Rebuilding.

- Modifying.
- $\it b.$ The objectives of a maintenance program include—
- (1) Prevention of equipment failures by timely and adequate scheduled services (preventive maintenance checks and services [PMCS]).
- (2) Early detection and correction at the lowest level of repair capability or capacity.
- (3) Minimizing requirements for new equipment.
- c. Maintenance planning must be conducted concurrently with supply planning, as the two are closely related. An inadequate maintenance program will impose inordinate requirements on the supply system. A lack of proper prescribed load list (PLL) management causes great increases in maintenance turnaround time when repair parts are not available.

6-20. Policy

- a. Medical equipment maintenance efforts are divided into two main areas:
- (1) Scheduled periodic services. These services include-
- Preventive maintenance checks and services.
- Electrical safety inspections and tests.
- \bullet Calibration, verification, and certification (CVC).

Scheduled periodic services take precedence over all but emergency repairs. Preventive maintenance checks and services, performed principally at the operator level, are the heart of a maintenance system. Preventive maintenance is defined as the systematic care, servicing, and inspecting of equipment to maintain it in a standard serviceable condition and to detect and correct minor faults before they develop into major defects.

- (2) Unscheduled repairs (remedial maintenance). These repairs will be performed only by or under the direct supervision of a health service maintenance technician or a medical equipment repairer (MER). Unscheduled repairs of an item consist of inspecting, classifying, testing, servicing, and all related actions necessary to return the item to a fully serviceable state. Unscheduled repairs include necessary calibrations and tests that are incidental to a repair action.
- b. Medical equipment maintenance support must be provided as far forward as possible. Ideally, equipment items should be diagnosed and repaired on site if conditions permit, either by organic MERs or by mobile support teams (MSTs) from the supporting medical battalion, logistics. This policy eliminates time-consuming evacuation procedures and normally results in more rapid return of the equipment to the user. Considerations for employment of the forward support concept include—
- Mission statement, to include maintenance allocation charts.
- $\check{\boldsymbol{Z}}$ Availability of appropriate TMDE, tools, and repair parts.
- Requirements for special maintenance skills or specialized procedures.
- $\boldsymbol{\check{Z}}$ Size and/or transportability of the item requiring maintenance services.

6-21. Concepts

In addition to having a high degree of technological proficiency, maintenance managers must be capable of employing a variety of management principles to ensure that the maximum service possible is available to supported unite. Techniques of production scheduling, production control, workflow analysis, and work area configuration must be analyzed and the best combination of the available resources selected to allow optimal use of the MER's technical skills. The high technology, critical life support nature of many medical equipment items requires a maximum managerial effort to ensure that life-sustaining equipment is fully mission capable when needed. To this end, the following concepts should be considered for maintenance planning purposes:

- a. Forward Support. In a TO, diagnosis and repair of an item as far forward as possible is essential. Ideally, equipment items should be repaired on site if conditions permit either by organic MER's or by MSTs from the appropriate medical battalion, logistics. On-site repair reduces time-consuming and costly retrograde of equipment.
- b. Evacuate. Selected end items and/or components will be evacuated to the supporting medical battalion, logistics when a lower echelon of maintenance cannot perform the required services, or when conditions do not permit on-site repairs. If within its capability, the supporting medical battalion, logistics will repair the item and return it to the user. Items that cannot be repaired will be further evacuated to a supporting activity. Uneconomically repairable items will be disposed of according to appropriate directives.
- c. Discard. Certain items of medical equipment are designed and engineered to employ discardable "throw-away" components or modules. These components/modules should only be treated as discard items when—

- Specifically designated as such by the manufacturer or other competent authority.
- It is more economical to discard the items than to repair them.
- **Ž** Repair times would significantly affect mission performance.

In many cases, the discard feature allows more rapid repair and return to operational status. Unserviceable "throw-away" items must be disposed of according to approved procedures.

- d. Reparable Exchange. Reparable exchange will be used to the maximum extent possible to enhance the "fix forward concept. Reparable exchange facilitates immediate replacement of defective modules and minimizes equipment downtime. Defective modules will be evacuated to supporting medical battalions, logistics, where an exchange for serviceable modules will occur and repair of the defective module will be made.
- e. Cannibalization and Controlled Exchange. Authority for employing cannibalization and controlled exchange is contained in AR 40-61 and AR 750-1.
- (1) Cannibalization is the authorized removal, under specified conditions, of items such as serviceable and unserviceable parts, components, and assemblies from uneconomically repairable materiel authorized for disposal. Removed items may be reused immediately in restoring one or more like items to a serviceable condition, or held in storage by support activities as an alternate parts source.
- (2) Controlled exchange is the authorized removal, under specified conditions, of items such as serviceable parts and assemblies from unserviceable, economically repairable materiel. Removed items are to be reused

immediately in restoring a like item of materiel to a mission-capable condition.

- Operational Readiness Float Pro-The name and acronym Operational Readiness Float (ORF) Program replaces the name and acronym Medical Standby Equipment Program (MEDSTEP) found in earlier publications. The change is required so that the AMEDD's terminology can be consistent with that used by the Army at large. Operational readiness float assets include items, components, or assemblies used to provide supported activities with serviceable items in exchange for mission essential, economically repairable items. Operational readiness float assets are not intended to be used for equipment shortages, expansion of operational missions, or temporary loan requirements. Operational readiness float assets in the theater are located at medical battalions, logistics (forward and rear) and are used to satisfy requirements at all medical units in the theater.
- g. Alteration/Modification. Alteration/modification of medical equipment is authorized only under certain conditions which will be announced inappropriate publications. Records of such alterations and modifications must be maintained. Army Regulations 40-61 and 750-10 contain additional guidance on equipment alteration and modification procedures.
- h. Repair Parts Management. Careful selection and stockage of the correct quantity of repair parts are essential elements of any successful maintenance program. Field medical units are concerned with four categories of repair parts:
- (1) Prescribed load list (unit-level maintenance function includes a mandatory parts list [MPL]).
- (2) Nonstocked repair parts (all maintenance levels).

- (3) Bench stock/common usage items (all maintenance levels).
- (4) Authorized stockage list (ASL) (DS maintenance function).

Army Regulation 40-61, AR 710-2, DA Pam 710-2-1, and DA Pam 710-2-2 contain a detailed discussion of requirements and criteria for management of each of these categories of repair parts, A list of MPLs for medical equipment is published in the TB 8-6500-MPL. On request, the USAMMA national maintenance point (NMP) will construct and provide a recommended PLL based on equipment density for newly activated units and units having changes in assigned equipment.

6-22. Levels of Medical Maintenance

There are four levels of maintenance.

- a. Unit Maintenance, Level 1. The intended purpose of unit maintenance (UM) is to sustain materiel readiness by performing scheduled services, minor repairs, and replacement of components. Unit maintenance is performed by equipment operators, users, assigned MERs, and/or MSTs.
- (1) The responsibilities of the equipment operator/user include—
 - Cleaning.
- Preventive maintenance checks and services according to AR 40-61.
- $\boldsymbol{\check{Z}}$ Replacement of operator-level components and accessories.
- \check{Z} Prompt reporting of equipment malfunction to the MER.
- (2) The responsibilities of the MER include–

 $\ \ \, \bullet$ Scheduling, $\ \,$ performing, and documenting UM.

 $\label{eq:Z} \boldsymbol{\check{Z}} \ \ \text{Electrical safety inspections and tests}.$

- Calibration, verification, and certification services.
- $\ ^{\bullet}$ Performing unscheduled maintenance (remedial repair).
- **Ž** Maintaining unit-level repair parts (PLL, MPL, bench stick).
- Maintaining a file of operating and service literature for all assigned medical equipment.
- \check{Z} Performing preissue technical inspections on incoming medical equipment and condition coding medical equipment to be turned in.
- Notifying support maintenance activities of requirements and/or evacuating unserviceable equipment as appropriate to support maintenance activity.
- b. Direct Support Maintenance, Level 2. The purpose of DS maintenance is to—
- \check{Z} Provide all authorized maintenance functions that exceed the authority, capability, or capacity of UM.
- Provide UM to medical units within the CZ without an organic capability.
- \bullet Repair Level 2 components and/ or modules.
- $\check{\boldsymbol{Z}}$ Provide on site support to CZ medical units by means of MSTs.

- Provide technical assistance to supported units.
- Fabricate minor repair parts when required to meet operational readiness requirements.
- Notify the next higher maintenance support level of requirements and/or evacuate unserviceable equipment to a higher maintenance level.
- c. General Support Maintenance, Level 3. The purpose of GS maintenance is to—
- Provide all authorized repair functions that exceed the authority, capability, or capacity of DS units.
- Provide UM to medical units within the COMMZ without an organic capability.
- Repair GS-level components and/or modules.
- Provide on-site support to COMMZ medical units by means of MSTs.
- $\ \ \, \bullet$ Provide technical assistance to supported units.
- Fabricate repair parts when required.
- Ž Notify the next higher maintenance support level of requirements and/or evacuate unserviceable equipment to a higher maintenance level.
- d. Depot Maintenance, Level 4. The purpose of depot maintenance is to—
- Provide overhaul and rebuild of end items and components in support of the wholesale supply system and as repair and return actions.

- $\boldsymbol{\check{Z}}$ Perform special inspections, tests, and modification program actions.
- Perform maintenance services and functions for the wholesale supply system.
- $\begin{tabular}{ll} \begin{tabular}{ll} \beg$
- Provide end items, components, and repair parts through established programs in support of both TOE and tables of distribution and allowances (TDA) medical units.
- $\boldsymbol{\check{Z}}$ Provide on-site MSTs on an "as required" basis.

6-23. Organization for Maintenance

a. In the CZ, the most forward provider of medical equipment services is the medical

equipment maintenance section of the main support battalion (MSB) of the division. The MERs of this organization normally provide UM support only to divisional units, Also located in the CZ are CSHs and MASHs with organic MERs. As with the MERs in the division, the corps TOE hospitals will normally provide UM support to their own organization and attached units. Area medical equipment maintenance support for units without organic MERs and DS maintenance, when required, is provided by the medical equipment maintenance section of the medical battalion, logistics (forward).

b. In the COMMZ, in addition to the medical battalion, logistics (rear), there are FHs and GHs, each with organic MERs. As in the corps, MERs assigned to these organizations normally provide UM for their own organization and attached units. Area medical equipment maintenance support for units in the COMMZ without organic MERs and DS/GS maintenance is provided by the medical battalion, logistics (rear).

Section VIII. OPTICAL FABRICATION SUPPORT

6-24. Support Responsibilities

More than one-third of all active military personnel require vision correction. Current support agreements require the Army to provide optical fabrication and repair services to the Air Force and the Navy. Other support agreements may require provision of these services to others such as the Coast Guard, the Red Cross, EPW, and allies.

6-25. Organization for Optical Support

a. The most forward provider of optical fabrication support capability of the CZ is the optometry section of the medical company, MSB. The optometry section provides fabrication of finished prescription single vision lenses and spectacles and repair services.

- *b.* Area optical support within the CZ or COMMZ is provided by the optometry section of the medical battalion, area support.
- *c.* For greater optical fabrication and resupply of the optical medical equipment sets, requisitions will be supported by the medical battalion, logistics (forward/rear).

6-26. Optical Fabrication Concept

Optical fabrication support is only for standard prescription eyewear. Prescription eyewear includes standard spectacles, aviation spectacles, protective mask inserts, and similar optical devices, Detailed procedures for preparation and submission of eyewear prescriptions are contained in

AR 40-63. Contact lenses, to include ancillary items such as saline solution and cleaners, may be required for stockage and issue to individuals, such as Apache and Comanche pilots, who are operators of targeting devices which preclude the use of regular spectacles.

6-27. Optical Supply Planning

Optical fabrication laboratory operating supplies are those consumable items, components, and ancillary supplies used in the fabrication of prescription eyewear. The initial supply of consumable items incorporated in optical fabrication assemblages for medical TOE (nondivisional) units, except the medical battalion, logistics (forward), consists of those items required under average conditions for a period of 10 days. Authorizations for individual items are listed in the SC 6545-8-CL series. The initial allowance of consumable items for the optical section of the medical battalion, logistics (forward) consists of those quantities required under average conditions for a period of 15 days.

Section IX. CONSIDERATIONS IN HEALTH CARE LOGISTICS PLANNING

6-28. Planning Considerations

- a. Adequate supplies, maintenance, transportation, and services are necessary for the HSS mission to be successful. Detailed planning principles are discussed in AR 40-61, Chapter 2 of this manual, FM 101-5, and FM 101-10-1/1 and 1/2. Logistics planners must fully understand these principles and must actively participate in the planning process.
- b. Due to the technical nature of the health service logistics system, coupled with the likelihood of a rapidly changing battlefield, the planner must develop creative and flexible plans.
 - c. The planner must-
- Have a comprehensive understanding of the operational and tactical plans. Additional contingency missions beyond those for which a published plan exists may be assigned on a short- or no-notice basis.
- Have a thorough knowledge of the entire spectrum of the logistics system to include those organizations and activities responsible for specific aspects of support.

- Be aware of Joint Service support agreements.
- $\ \ \bullet \ \$ Be aware of host-nation support agreements.
- $\it d.$ The health service logistics planner determines requirements for the-
- (1) Types of medical supplies needed.
- (2) Supply procedures to be followed.
 - (3) Stock levels to be maintained.
- (4) Sizes and locations of the health service logistics installations needed.
- (5) Medical equipment maintenance procedures.
 - (6) Optical fabrication procedures.
- (7) Production of medical-quality fluids.

- (8) Production of medical oxygen.
- (9) Disposal of unserviceable US equipment and supplies.
- (10) Disposition of captured medical equipment and supplies.
- $\it e.$ These determinations are based on the health service estimate of the situation and METT-T.

6-29. Disposal Planning

- a. Disposal instructions will be provided when medical materiel is determined to be unsafe or unsuitable for use by-
 - (1) The Surgeon General.
- $\hbox{ (2) US Army Medical Materiel } \\ Agency.$
- (3) Defense Personnel Support Center.
- $\qquad \qquad \textbf{(4) Food and Drug Administration,} \\ or \\$
- (5) Some other competent authority.
- *b.* Excess, unserviceable, or unidentifiable medical materiel must be disposed of in accordance with ARs 40-5,40-61, 200-1; FMs 8-10 and 27-10; and the SB 8-75 series if it is not authorized for—
- (1) Return to either a MEDLOG battalion or a CONUS source.
- $\mbox{(2) Redistribution within the the-} \\ \mbox{ater, or} \\$

(3) Retention at the MTF.

- Inadequate supply controls and procedures often generate excess materiel. Logistics managers must implement measures to ensure that established levels are realistic and do not produce unnecessary excesses. Often, newly introduced items by the health care provider may render existing stocks obsolete or items of second choice. In these cases, close coordination between the logistics manager and the clinical staff on the use of existing stocks and authorized substitutions will eliminate or minimize creation of unnecessary excess from this source. Excess materiel at any level reduces mobility and increases accounting, storage, surveillance, and security requirements. Excess materiel must be reported to supporting medical battalions, logistics (forward and rear) for redistribution.
- d. Many pharmaceutical items require advanced technology and production techniques. Accordingly, these items may pose serious environmental hazards if disposed of improperly. Other items of medical materiel maybe sensitive, pilferable, or subject to abuse and may also require controlled disposal methods. Economically recoverable precious metals constitute yet another category of materiel requiring special disposal techniques.

USAMMA SB 8-75-9 contain additional guidance on disposal techniques for specific medical materiel. These techniques are developed in coordination with the US Army Environmental Hygiene Agency. The US Government Environmental Protection Agency (EPA) and the Army Environmental Hygiene Agency have developed lists of hazardous pharmaceuticals and biological.

f. Disposal of medical materiel under combat conditions may require additional planning and/or coordination with the MEDLOG battalion(s) and engineer units. Authorized means of disposal

for medical materiel include, but are not limited to – $\,$

- Disposal in an authorized incinerator.
 - Disposal in a sanitary landfill.
 - Disposal in a hazardous waste

landfill.

- Ž Disposal in a sanitary sewer.
- Disposal by chemical treatment.
- g. In all cases, current directives must be consulted prior to disposal action. These directives must take into account restrictions imposed by host nations and/or allied nations and United States and territorial governments.

6-30. Staff Relationships

- a. The Health Service Logistics Officer. The health service logistics officer establishes communications and directs necessary coordination with supported HSS logistical organizations of all uniformed services and other federal agencies for which the AMEDD has area support responsibility.
- b. The Transportation Officer. The health service logistics officer advises the transportation officer—

- In the transportation and dock storage of Class VIII materiel to preclude spoilage or deterioration in transit.
- In the supervision of the transportation of Class VIII.
 - c. The Engineer Officer.
- (1) The health service logistics officer should review plans with the engineer officer for constructing facilities used for Class VIII supplies.
- (2) The above step prevents potential problems resulting from improper construction.
- d. The Civil Affairs Officer. The health service logistics officer advises the CA officer on Class VIII matters. He may be asked to furnish technical assistance or health service logistics personnel, or both, to that office to assist in the humanitarian effort.
- e. The Chemical Officer. The health service logistics officer requests assistance from the chemical officer in developing threat assessments. This coordination is needed to determine the correct packaging and preservation methodology to protect medical materiel.

Section X. THE HEALTH SERVICE LOGISTICS ESTIMATE

6-31. Developing the Estimate

- a. The basic HSS estimate of the situation discussed in Chapter 2 is used to develop specific information on health service logistics. This information can be—
- (1) Presented in a separate paragraph.
- (2) Included along with the medical and dental aspects in parts of paragraphs, or
- (3) Presented as a separate appendage to the HSS estimate.
- *b.* The format shown in subsequent paragraphs includes the major points to be considered in arriving at a logical conclusion.

- *c.* The health service logistics planner should adapt this format to his particular situation. He should omit those portions which do not apply, or expand those which require more detail.
- d. The plans and operations division of the surgeon's staff should not overlook the fact that the estimates and plans they prepare require definite data relating to health service logistics. These data should be provided by the staff health service logistics officer, who should be furnished sufficient information to guide him in preparing the health service logistics portion of the estimate or the plan.

6-32. Mission

The health service logistics mission will parallel and support the surgeon's mission, and in turn, the commander's mission. The unit's mission must be clearly understood.

6-33. Situation and Considerations

The health service logistics situation may comprise a few or many elements. Some of the principal ones are as follows:

- a. The Enemy Situation. List the enemy capabilities that might affect the ability of the health service logistics system to accomplish its mission.
- b. The Friendly Situation. The scope of health services logistics support to be planned is determined to a great extent by the following factors:
- (1) Casualty estimates (types and numbers and evacuation policy).
 - (2) Age of population supported.

(3) Number of MTFs.

- c. Characteristics of the Area of Operations. The following should be included:
- (1) Factors in the basic HSS estimate of the AO.
- (2) Statements concerning the population, health, and types of population in the AO.
- (3) Detailed information concerning any disease which may pose a serious threat to the health of the command or other personnel in the AO and which may require specific Class VIII materiel.

d. Strengths to be Supported.

- (1) Accurate data regarding the supported population, to include personnel strength of the Army, Navy, Air Force and Marines, allies, EPW, indigenous civilians, detained persons, civilian interns, and others, is required to determine Class VIII needed.
- (a) Medical materiel and equipment. The Army is responsible for providing medical care and treatment as stated in 6-33d(1) and may become responsible for providing medical care or assistance to displaced persons, and refugees. In computing requirements for supplies and equipment needed to perform this function, full use should be made of all available intelligence data pertaining to estimates of the number of individuals for whom medical care must be provided and the incidence of disease among them. See FM 8-10-8 for additional discussion.

(b) Supplies subject to capture.

1. The Geneva Convention precludes willful destruction of medical materiel; therefore, when the capture of medical supplies by enemy forces is imminent, medical

materiel must not be purposefully destroyed. When a commander, because of military necessity, has decided to abandon patients, sufficient and adequate medical personnel and materiel must be left for the care of those abandoned patients. Under all other conditions, every attempt must be made to evacuate all medical materiel and equipment. Those that cannot be evacuated should be abandoned, but the abandonment of medical supplies is a command decision.

2. The destruction of supplies, other than medical, is also a command decision. Medical units should have an SOP for the evacuation and destruction of their own supplies and equipment (other than medical) based on command priorities.

(c) Medical materiel and equipment captured from the enemy.

1. Medical materiel and equipment captured from the enemy are considered to be neutral and protected property and are not to be intentionally destroyed. (See discussion in PM 8-10.) They are to be turned over to designated medical supply facilities. Adequate samples of all captured materiel and equipment must be preserved and reported according to FM 8-10-8. In the event that large amounts of enemy medical materiel and equipment are captured, it is frequently advisable to concentrate this materiel in one or more medical materiel installations where it may be examined for intelligence value and classified. The materiel is segregated and that of value is picked up in the theater if the designated facilities have the capability to store the supplies.

2. Since captured reedical personnel are familiar with their medical materiel, the captured items are especially valuable in the treatment of EPW. Only after their needs have been fully met may such supplies be used to treat others. If these supplies are unfit for use or

not needed, they may be abandoned for the enemy's use. Under no circumstances will captured medical supplies be destroyed.

(2) Locations of personnel would be needed to determine the most appropriate location for units in the CZ and or the COMMZ.

(a) The general locations of medical materiel activities are chosen along the proposed axis of advance, However, consideration must be given to the—

Strategic and tac-

tical effort.

Location of airfields

and seaports.

Ž Major usable trans-

portation facilities.

(b) When selecting specific locations, however, one must consider such factors as--

• Adequate dispersion because of the threat.

Ž Defensibility of in-

stallations.

Local roads.

• Disposition of

troops.

Railsiding (situated beside a railroad track or right of way).

Adequacy of local

communication facilities.

Existing buildings

and utilities.

Availability of local

labor.

NOTE

Under the provisions of the Geneva Convention, medical stocks must be stored and distributed separately from other classes of supply to be considered protected materiel. See FM 8-10 for a discussion.

(c) Medical supply installations should be near railheads, ports, airfields, and highways to minimize hauling. As transportation means are always at a premium, efficient methods should be employed to minimize unnecessary shipments, transshipments, and rehandling of medical supplies. So far as possible, shipments of medical supplies should be accomplished in one move and as far forward as possible. Movement of supplies through successive supply installations should be avoided. Health service logistics organizations will provide supply support using unit distribution. Supply point distribution can be considered as an alternative method of supply.

(d) The availability of transportation assets, both organic and support units, must be analyzed. Many Class VIII items are sensitive and special transportation and/or storage requirements exist, such as refrigeration, security, and flammable precautions. A sophisticated and responsive transportation system may lessen requirements for large safety levels and large storage areas. Field Manual 55-1 contains additional transportation planning guidance.

(e) Storage facilities for Class VIII supplies generally require 100-percent covered storage. Consideration must be given to any special climatic conditions such as desert,

mountain, jungle, or arctic. Existing buildings should be used to the maximum extent possible provided they offer required security, refrigeration, flammable protection, and controlled humidity and temperature storage. Preservation and packing procedures as prescribed in TB MED 1 must be followed to the fullest extent practical.

1. Overall space requirements are determined from logistical management data and from experience factors for handling medical supplies. Detailed space requirements should be based on specific assignments of support missions, supply levels to be carried, area and troops served, and types of supplies. Medical unit commanders and staff officers should have an appreciation of storage problems, particularly those pertaining to covered storage if they are to establish appropriate policies covering storage of medical supplies. See TB 740-10 for additional guidance.

2. Maximum use of storage space is basic to economical supply operations, Such factors as accessibility of stored medical supplies and maximum protection from deterioration, fire, weather, theft., rodents, and enemy action must be considered in ensuring efficient storage procedures.

(f) Accurate equipment density data throughout the supported area is essential to ensure adequate equipment repair capability. Equipment density data is also essential for medical unit reconstitution planning. Equipment density data affects the ORF program.

(g) Conservation of supplies and equipment should always be a matter of priority concern; however, under combat conditions, conservation of medical supplies becomes particularly critical. An austere environment requires that clinicians practice supply discipline. They must be prepared to work with and be supported by generic supplies. Lack of physician-preferred brands does

not constitute a patient risk. A lack of supply discipline may contribute to a strained health service logistics system which constitutes a risk to the patient. Unit assemblage listings must be updated, maintained, and enforced. supply discipline must be a command priority. Clinicians must be familiar with their unit's assembly listings.

(h) With certain restrictions, specified items and categories of items of medical supply are authorized for procurement locally within the theater. Procurement of certain medical supplies from non-US sources in overseas areas is not authorized unless specific prior approval of the command surgeon is obtained. Consideration in the procurement of medical items from local sources should include manufacturer technical know-how, sterilization techniques, raw material availability, and production capabilities. Because of the nature of most medical items (mainly drugs and surgical instruments), sound judgment must be exercised. The high standards established by the US Government make it difficult to consider the use of manufacturers in many areas of the world as possible sources of drug supplies. Drug standards vary in different countries, and, therefore, foreign drugs are used only in emergencies. In practice, locally procured materiel is identified and segregated from similar items of US manufacture. Quality control procedures must be followed as prescribed in TB 740-10, AR 40-61, and SB 8-75 series.

(i) Time permitting, inventories will be conducted in accordance with ARs 710-2 and 40-61. All effort should be made to reduce the occurrence of warehouse denials. Inventories tell what items are on hand, When it is not known that an item is available, then the item is not on hand.

(j) Medical supply activities will be located in areas where maximum security is provided. Such locations will be incorporated into rear operations plans for the CZ and COMMZ.

- *e.* Health of Troops in the Command. (If applicable to this estimate.)
- f. Assumptions. Assumptions necessary for completing the health service logistics estimate should be considered.
- g. Special Factors. The particular operation being planned will have certain items of special importance. These items should be listed and taken into consideration by the planner.

6-34. Analysis

- a. Health Service Logistics Personnel Estimate. A number of factors are involved in estimating the number and type of health service logistics personnel that will be required to support a particular operation.
 - (1) Distribution of MTFs.
 - (2) Extent of local procurement.
- b. Health Service Logistics Requirements. The planner must estimate what the requirements will be for the situation. It is then necessary to compare this with what is available within troop ceilings.

6-35. Courses of Action

A careful comparison of the health service logistics requirements with the resources available enables the health service logistics planner to determine his major problems. This comparison subsequently enables him to develop all logical COA that will accomplish the mission. The COA are expressed in terms of what, when, where, how, and why.

6-36. Evaluation and Comparison of Courses of Action

- a. Once COA have been enumerated and described, it is necessary to analyze and compare them to determine which one should be used. There are two steps in the process which should be followed:
- (1) Determine and state those anticipated difficulties or difficulty patterns that will have an equal effect on the COA
- (2) Evaluate each COA against each significant difficulty or difficulty pattern to determine strengths and weaknesses inherent in each COA.
- b. Having determined the specific strengths and weaknesses inherent in each COA, the health service logistics planner must compare the COAs to determine significant advantages and disadvantages of each. He then decides which COA promises to be most successful in accomplishing the mission with the least amount of problems.

6-37. Conclusions

After review and analysis of all possible COA, the planner is able to make a number of possible conclusions in relation to the mission to be accomplished.

- a. The mission can or cannot be supported based on preceding paragraphs of the estimate. If the mission cannot be supported, a full justification for inability to support must be given.
- b. The preferred COA can be identified in terms of health service logistics support to be provided.
- *c.* The disadvantages of the COA not selected can be identified.
- d. Deficiencies in the preferred COA must be brought to the attention of the commander; deficiencies should be enumerated and briefly discussed.

Section XI. THE HEALTH SERVICE LOGISTICS PLAN

6-38. Developing the Plan

The health service logistics plan is a part of the HSS plan and is included in it or, if very detailed, appended to it. It bears the same relationship to the health service logistics estimate that the HSS plan does to the HSS estimate. When approved, it—

- *a.* Becomes a directive to health service logistics officers in subordinate commands.
- *b.* Serves as a guide to them in working out the details of their particular functions within health service logistics support of the command.

6-39. Format for the Health Service Logistics Plan

- *a.* General Supply. (Provide special instructions applicable to medical units.)
- b. Medical Supply. (Provide special procedures applicable to this operation.)
 - (1) Requirements.
 - (2) Procurement.
 - (3) Storage.
 - (4) Distribution.

(5) Transportation.

C. Medical Equipment Maintenance Support. (Include in separate subparagraphs the location, mission, hours of opening or closing of MEDMNT, and/or optical repair teams, unless they are included as attachments to health service logistic units.)

d. Optical Support.

- e. Medical Supply Installations. (Give the locations, mission, hours of opening and closing, and troops supported for each health service logistics installation. An overlay may also be used for clarity.)
- (1) Health service logistics units must remain flexible to meet changing situations. A rapidly changing military situation may make it necessary that alternative health service logistics plans, procedures, and operations be formulated. In certain instances, it maybe advisable to establish duplicate records, especially when automated procedures are used, to serve as a backup system. Supply levels in the CZ must be kept to a minimum to allow for the mobility required to support a rapidly changing battlefield. An inventory management process is necessary for recording

supplies received and inventory control. By contrast, supply levels in the COMMZ will likely be higher to support the entire depth of the battlefield.

(2) The extent of the area for which plans are made influences health service logistics troop planning in several ways. A large number of MTFs widely dispersed in the AO would require more health service logistics, for example, than if there were fewer and more centralized MTFs.

f. Policy Statements.

- (1) A statement of the local procurement inspection policy.
- (2) A statement of the captured medical supplies inspection policy.
- (3) A statement of the NBC. contaminated Class VIII inspection policy.

g. Salvage of Medical Equipment and Supplies.

- h. Civilian Medical Supplies.
- i. Other Supply Matters.

Section XII. MAJOR HEALTH SERVICE LOGISTICS ACTIVITIES

6-40. Health Service Logistics in the Combat Zone

In future conflicts, the DMSO may be the highest level of health service logistics support in the theater. Resupply to the DMSO maybe sporadic during the first 5 to 15 days of a conflict with limited access to pre-positioned sticks. The DMSO or the medical supply officer for the separate brigade medical company provides medical supply, medical maintenance, and optical fabrication support to the organic medical companies within

the division/separate brigade. The preferred method of distributing Class VIII supplies within the division is by unit distribution using division transportation assets coordinated through the MCC and operations section of the MSB.

- a. The DMSO normally provides this support to divisional or brigade units only, unless specifically tasked otherwise.
- b. Although the division surgeon (with the assistance of the DMOC) plans for HSS, the

DMSO executes health service logistics plans. He exercises his responsibilities by—

- Procuring, receiving, storing, and issuing Class VIII supplies.
- Coordinating with the supported elements to determine requirements for Class VIII materiel and liquid blood and to determine when they should be shipped.
- Developing and maintaining authorized stockage levels of contingency medical supplies. These levels should be based upon transportation and storage constraints, as well as characteristics of the AO.
- Managing the division's health service logistics quality control program.
- Supervising the unit medical equipment maintenance program.
- Monitoring the division medical assemblage management program.
- Ž Coordinating logistical planning for the assembly, packing, and delivery of standard medical supply sets and locally developed, unit-peculiar resupply bundles.
- Establishing and operating a division Class VIII supply point.
- $\it c.$ The reconstitution duties of the DMSO include—
- Reconciling by brigade the shortages in each medical company and treatment platoon as reported by the commander, platoon leader, or the battalion headquarters element.
- Coordinating with the DMOC to determine and acquire the number of medical assemblages required to ensure units maintain medical readiness.

• Coordinating with the medical battalion, logistics (forward) to monitor the status of requisitions for medical assemblages due in.

 $oldsymbol{\check{Z}}$ Coordinating through the DMOC—

- With the DMCC for movement of bulk medical supplies or medical assemblages from the DMSO to forward units when backhaul would be inadequate. (The DMOC directs quick fixes using available assets and controlled exchanges for medical equipment to maximize the capability of returning trained soldiers to duty.)
- Ž With the CMCC for delivery of supplies from the MEDLOG battalion to the DMSO.
- Ž To alert the appropriate company when modular systems are due to arrive,
- To distribute modular medical assemblages to the units based on guidance from the DMOC. (The DMSO coordinates with the DMCC, through the DMOC, for transportation assets to deliver modular medical assemblages to the unit being reconstituted.)
- To prepare the critical items listing and consolidate the critical shortages by brigade.

NOTE

Differences between health service logistics units discussed in FM 8-10, dated 1 March 1991, and those discussed in this chapter resulted from experience gained during Operation Desert Storm/Desert Shield, Operation Provide Comfort, and Total Army Analysis projections.

6-41. The Medical Battalion, Logistics (Forward), TOE 08-485L0

a. Mission. The mission of this organization is to provide Class VIII supplies, optical fabrication, medical equipment maintenance support, and blood processing, storage, and distribution to divisional and nondivisional units operating in the corps. In a single corps theater, this organization must be prepared to function as the SIMLM for the theater.

NOTE

AS OF THE PUBLICATION DATE OF THIS MANUAL, FROZEN BLOOD WAS NOT AN ASSIGNED MISSION.

- b. Assignment. This unit is assigned to the corps under the command and control of the Medical Brigade, TOE 08-442L00.
- c. Concept of Operations. This unit is the single point of contact for medical logistics support for the corps. It should be located near major lines of communication (sea or air) to ease transportation requirements for incoming shipments and facilitate distribution of materiel. The modular nature of this organization allows it to be incrementally introduced in the theater with the supported forces. Forward support platoons of the distribution company should be deployed early to coordinate support to a DMSO and prepare to receive pre-positioned stocks and resupply from CONUS.
- (1) Supply support. Levels of supply at the medical battalion, logistics (forward) are kept to a minimum to permit relocation on a rapidly changing battlefield. Replenishment requests from supported units that are not filled from on hand stock will be passed to the supporting

supply source. This supporting supply source may be a medical battalion, Iogistics (rear) or the CONUS base. Unit distribution using corps transportation assets will normally be used to move the medical supplies forward to the divisions, separate brigades, armored cavalry regiments (ACRs), and Special Forces groups (SFGs).

- (2) Medical equipment maintenance services. The medical battalion, logistics (forward) provides medical equipment maintenance services to supported units in the corps. It provides unit level maintenance to units in the corps without organic medical equipment specialists. It provides DS maintenance to medical units in the corps. This level of maintenance is directed toward repair and return of equipment. Mobile support teams will provide these services as far forward as the tactical situation permits. The medical battalion, logistics (forward) maintains a limited ORF of critical items.
- (3) Optical services. Optical fabrication requirements beyond the extremely limited capabilities of the main support medical companies and the medical battalion, area support are provided by the medical battalion logistics (forward). This organization provides spectacle frame repair, fabrication of prescription lenses and spectacles, and fabrication of protective mask inserts.
- (4) Blood processing, storage, and distribution. This organization receives, stores, packs for distribution, and distributes blood and blood products, A detailed discussion of the concept of support is provided in Chapter 8.

d. Capabilities. This unit—

(1) Provides command and control, staff planning, supervision of operations, and administration of assigned or attached units engaged in providing Class VIII supplies, optical fabrication, medical equipment maintenance

support, and blood processing, storage, and distribution.

- (2) Provides Class VIII supply based on a consumption rate of 1.9 pounds per man per day, theater stockage objective of 30 days, and 15 days of supply in each supported corps.
- (3) Provides Class VIII supply, optical fabrication, and medical equipment maintenance support, and blood processing, storage, and distribution to a maximum force of a two to three division equivalent-size corps.
- (4) Receives, classifies, and issues up to 141.5 (maximum) short tons of Class VIII supplies per day. (This organization can support a corps force consisting of 74,470 soldiers based on its processing capability, consumption rate of 1.9 pounds per man per day, and the theater stockage objective. These factors may change based on a number of variables. However, the actual methodology explained in the notes, below, will remain the same.)

NOTE

For example a corps force consisting of 74,470 soldiers to be supported requires 70.75 short tons per day (74,470 troops X 1.9 pounds per man per day/ 2,000 pounds [to arrive at short tons]) to be issued to the force. The medical battalion logistics (forward) is required to receive 70.75 short tons per day to replace the stack issued. The medical battalion, logistics (forward) would be at its limit to support the corps.

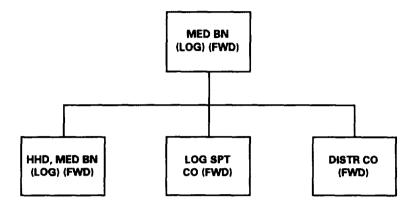
(5) Provides storage of up to 707.5 short tons of Class VIII supplies based on an average order ship time of 5 days.

NOTE

Based on a 15-day stockage level in a corps with 5-days of that stockage level being order ship time, the operating and safety levels to be stored would be 10 days. Using the data in the note above, the unit stores 707.5 short tons (70.75 short tons per day X 10 days).

- (6) Provides unit medical equipment maintenance for units without organic capability and DS medical equipment maintenance to corps and divisional medical units.
- (7) Provides for blood processing, storage, and distribution within the corps. Distributes blood products to division medical units.
- e. Basis of Allocation. One medical battalion, logistics (forward) is allocated per corps or three division equivalent-size force. One additional medical battalion logistics (forward) is allocated to support each additional increment of 100,000 joint service population.
- *f. Organic Units.* This organization has three organic units.
- (1) Headquarters and Headquarters Detachment.
- (2) Logistics Support Company (Forward).
- (3) Distribution Company (Forward).

See Figure 6-4 for an organizational diagram of the medical battalion, logistics (forward).



LEGEND:

DISTR DISTRIBUTION

Figure 6-4. Schematic of medical battalion, logistics (forward).

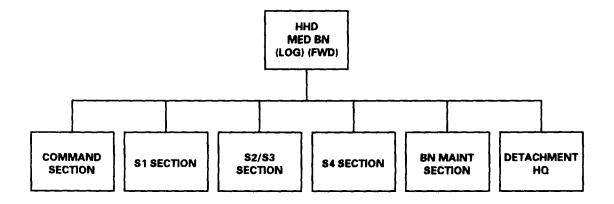
6-42. Headquarters and Headquarters Detachment, Medical Battalion, Logistics (Forward), TOE 08-486L0

- a. Mission. The mission of this unit is to provide command and control and administrative and logistics support to assigned and attached units.
- b. Concept of Operations. This unit will usually be employed with the logistics support company to plan and direct the execution of the health service logistics mission.
 - c. Capabilities. This unit—
- (1) Provides command and control, staff planning, and supervision of operations and administration of assigned or attached units.
- (2) Provides unit maintenance for nonmedical equipment of assigned and attached units.
- (3) Maintains a consolidated property book for assigned units.

- (4) Coordinates with corps transportation assets for the routine delivery of Class VIII supplies.
- (5) Coordinates with the medical battalion (evacuation) for transportation assets (aeromedical or ground ambulance) for the emergency delivery of Class VIII supplies.
- d. Dependency. This unit is dependent on the Logistics Support Company, TOE 08-487L0, for food service.
- *e.* Basis of Allocation. One unit is allocated per medical battalion, logistics (forward). See schematic of this unit in Figure 6-5.

6-43. Logistics Support Company, Medical Battalion, Logistics (Forward), TOE 08-487L0

- a. Mission. The mission of this organization is—
- To execute the planned support of the corps in the areas of Class VIII supplies,



LEGEND:

HQ HEADQUARTERS
MAINT MAINTENANCE

Figure 6-5. Schematic of headquarters and headquarters detachment, medical battalion, logistics (forward).

optical fabrication, medical equipment maintenance support, and blood processing, storage and distribution.

- To be prepared to support medical units of other Services in the corps area, as directed.
- b. Concept of Operations. This unit executes the medical logistics mission as directed by the headquarters element.
 - c. Capabilities. This unit—
- (1) Receives, classifies, and issues up to 119.5 short tons of Class VIII supplies per

- (3) Receives and distributes preassembled modules (PUSH packages) for resupply in support of divisional and nondivisional units in the supported corps.
- (4) Provides unit medical equipment maintenance for units without organic capability and DS medical equipment maintenance through MSTs.
- (5) Provides for blood processing, storage, and distribution within the corps. Distributes blood products to division and nondivisional medical units.
 - (6) Provides optical lens fabrication.

- d. Dependency. This unit is dependent on the Headquarters and Headquarters Detachment, Medical Battalion, Logistics (Forward), TOE 08-486L0, for UM on nonmedical equipment.
- e. Basis of Allocation. One logistics support company is allocated per one Medical Battalion, Logistics (Forward), TOE 08-485L0. See schematic of this unit in Figure 6-6.

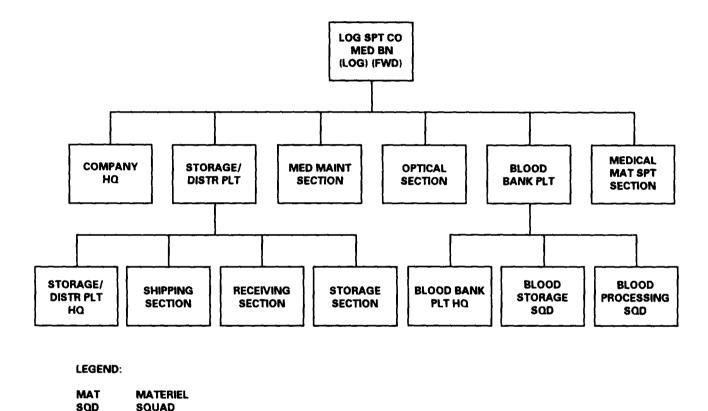


Figure 6-6. Logistics support company, medical battalion, logistics (forward).

6-44. Distribution Company, Medical Battalion, Logistics (Forward), TOE08-488L0

- a. Mission. The mission of this organization is to provide Class VIII support to divisional and nondivisional medical units operating in the supported operational area.
- b. Concept of Operations. This unit employs a company headquarters and organic

forward support platoons to provide Class VIII support on an area basis. This unit provides limited Class VIII supply support for high volume consumables and facilitates the support of DMSOs and corps forces deployed in the division area of operations, This unit provides unit medical equipment maintenance to units not otherwise provided support and has limited DS medical equipment maintenance service for units within its area.

- c. Capabilities. This unit—
- (1) Receives, classifies, and issues up to 22 short tons of Class VIII supplies per day (11 short tons per platoon).
- (2) Provides storage for up to 22 short tans of Class VIII supply (11 short tons per platoon).
- (3) Provides, through MSTs, unit medical equipment maintenance to units not otherwise provided such support and limited DS medical equipment maintenance on an area basis.

LOC

LOCATOR

d. Dependency. This unit depends on-

- (1) Headquarters and Headquarters Detachment, Medical Battalion, Logistics (Forward), TOE 08-486L0, for unit maintenance on nonmedical equipment.
- (2) Logistics Support Company, TOE 08-487L0, for food service, when collocated. Food service support must be coordinated for an element operating independently.
- *e.* Basis of Allocation. One distribution company is allocated per Medical Battalion, Logistics (Forward), TOE08-485L0. See schematic of distribution company in Figure 6-7.

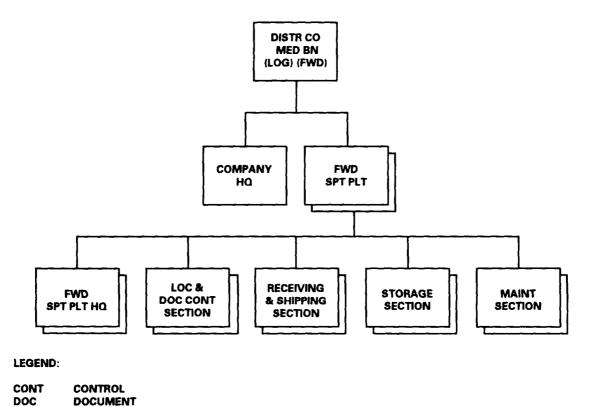


Figure 6-7. Distribution company.

6-45. The Medical Battalion, Logistics (Rear), TOE 08-696L0

- a. Mission. The mission of this organization is to provide Class VIII supplies, optical fabrication, medical equipment maintenance support, and blood processing, storage, and distribution to echelons above corps units and the medical battalions, logistics (forward) for nonthroughput requirements. This organization must be prepared to function as the SIMLM for a joint theater.
- b. Assignment. This unit is assigned to a MEDCOM. TOE 08-611L00.
- c. Concept of Operations. The medical battalion, logistics (rear) is the single point of contact for medical logistics support for the theater providing support to both EAC units and medical battalions, logistics (forward). The medical battalion, logistics (rear) is normally located near major lines of communication (sea or air) to ease transportation requirements for incoming shipments and facilitate distribution of materiel.
- (1) Supply support. Levels of supply at the medical battalion, logistics (rear) are greater to permit support of a rapidly changing battlefield. Replenishment requisitions from supported medical battalions, logistics (forward) that are not filled from on hand stock will normally be throughput from the CONUS base or other supporting supply source bypassing the medical battalion, logistics (rear). Resupply for EAC units and requests from medical battalion, logistics (forward) filled from on hand stock will normally be distributed on a unit distribution basis using theater transportation assets.
- (2) Medical equipment maintenance services. The medical battalion, logistics (rear) provides unit maintenance to those EAC units with medical equipment without organic capability. It also provides DS maintenance to EAC units. This unit provides GS medical equip-

- ment maintenance to the theater. Mobile support teams will provide these services as far forward as the tactical situation permits. The medical logistics (rear) battalion maintains an expanded ORF of critical items. Normally, an excessive maintenance backlog at any unit, regardless of extent of repairs required, will be resolved by support from the next higher echelon, either by sending MSTs forward or by evacuation. In this regard, the medical battalion, logistics (rear) may expect to provide backup support to both the medical battalion, logistics (forward) and other EAC-supported units as required.
- (3) Optical services. Optical fabrication requirements beyond the capabilities of the medical battalion, logistics (forward) and EAC treatment facilities are provided by the medical battalion, logistics (rear). This organization provides spectacle frame repair, fabrication of prescription lenses and spectacles, and fabrication of protective mask inserts.
- (4) Blood processing, storage, and distribution. This organization receives, stores, packs for distribution and distributes blood and blood products.

d. Capabilities. This unit—

- (1) Provides command and control, staff planning and supervision of operations, and administration of assigned or attached units engaged in providing Class VIII supplies, optical fabrication, medical equipment maintenance support, and blood processing, storage, and distribution.
- (2) Provides Class VIII supply based on a consumption rate of 1.9 pounds per man per day; theater stockage objective of 30 days; and 15 days of supply in each supported corps.
- (3) Provides Class VIII supply, optical fabrication medical equipment maintenance

support, blood processing, storage, and distribution to a maximum force of a three corps equivalentsize force.

(4) Receives, classifies, and issues up to 384.8 (maximum) short tons of Class VIII supplies per day. (This unit can support a force consisting of 202,500 soldiers.)

NOTE

For example a theater force consisting of 202,500 soldiers to be supported requires 192.4 short tons per day (202,500 X 1.9/2,000 pounds) to be issued to the force. The medical battalion logistics (rear) is also required to receive 192.4 short tans per day to replace the stock issued. The medical logistics battalion (rear) would be at its limit to support this theater.

(5) Provides storage of up to 1725.5 short tons of Class VIII supplies based on an average order ship time of 10 days.

NOTE

Based on a 15-day stockage level in a corps, a 30-day stockage level at theater and 10 days of that stockage level being order ship time, the operating and safety levels to be stored would be 20 days. Using the data in the note above, the unit stores 1725.5 short tons (192.4 short tons per day X 20 days -[3 corps X 707.5 short tons stored in each corps]).

(6) Provides unit medical equipment maintenance for EAC units without organic capability and DS medical equipment maintenance

to EAC units and added support to corps medical battalions, logistics (forward).

- (7) Provides GS medical equipment maintenance to the theater.
- (8) Provides for blood processing, storage, and distribution within the EAC and added support to corps medical battalions, logistics (forward).
- e. Basis of Allocation. One medical battalion, logistics (rear) is allocated per theater supported. One additional medical battalion, logistics (rear) is allocated to support each additional increment of 250,000 joint service population. See a schematic of the medical battalion, logistics (rear) in Figure 6-8.
- f. Organic Units. This organization has three organic units.
- (1) Headquarters and headquarters detachment.
- (2) Logistics support company (rear).
 - (3) Distribution company (rear).

6-46. Headquarters and Headquarters Detachment, Medical Battalion, Logistics (Rear), TOE 08-686L0

- a. Mission. The mission of this unit is to provide command and control and administrative and logistics support to assigned and attached units.
- b. Concept of Operations. This unit will usually be employed with the logistics support company to plan and direct the execution of the health service logistics mission.

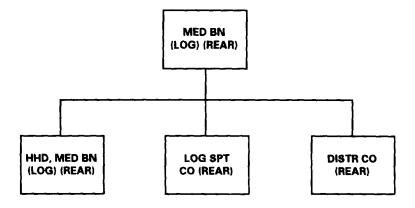


Figure 6-8. Medical battalion, logistics (rear).

c. Capabilities. This unit—

- (1) Provides command and control, staff planning, supervision of operations, and administration of assigned or attached units.
- (2) Provides unit maintenance for nonmedical equipment of assigned and attached units.
- (3) Maintains a consolidated property book for assigned units.
- (4) Coordinates with theater transportation assets for the routine delivery of Class VIII supplies.
- (5) Coordinates with the medical battalion (evacuation) for transportation assets (aeromedical or ground ambulance) for the emergency delivery of Class VIII supplies.
- d. Dependency. This unit is dependent on the Logistics Support Company, TOE 08-697L0, for food service.
- *e.* Basis of Allocation. One HHD is assigned per medical battalion, logistics (rear). See schematic of the HHD in Figure 6-9.

6-47. Logistics Support Company, Medical Battalion, (Logistics) (Rear), TOE 08-697L0

- $\it a.~~Mission.$ The mission of this organization is—
- To execute the planned support of the theater in the areas of Class VIII supplies, optical fabrication, medical equipment maintenance support, and blood processing, storage and distribution.
- To be prepared to support medical units of other Services in the theater area, as directed.
- b. Concept of Operations. This unit executes the medical logistics mission as directed by the headquarters element.
 - c. Capabilities. This organization—
- (1) Receives, classifies, and issues up to 351.8 short tans of Class VIII supplies per day.
- (2) Provides storage for up to 1692.5 short tons of Class VIII supply.

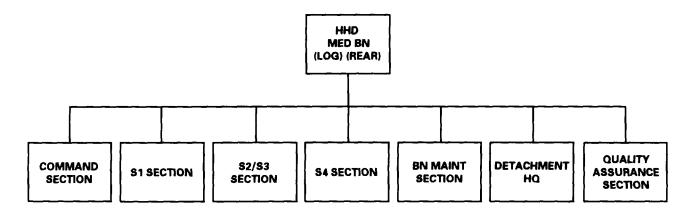


Figure 6-9. Headquarters and headquarters detachment, medical battalion, logistics (rear).

- (3) Receives, assembles, and distributes preplanned modules (PUSH packages) for resupply in support of corps and EAC units in the theater.
 - (4) Provides optical lens fabrication.
- (5) Provides unit medical equipment maintenance for EAC units without organic capability and DS medical equipment maintenance to EAC units and added support to corps medical battalions, logistics (forward).
- (6) Provides GS medical equipment maintenance in the theater.
- (7) Provides for blood processing, storage, and distribution within the EAC and added support to corps medical battalions, logistics (forward).
- (8) Provides food service support for the medical battalion, logistics (rear), TOE 08-695L0.
- d. Dependency. This unit is dependent on the Headquarters and Headquarters Detachment, Medical Battalion, Logistics (Rear), TOE 08-696L0, for UM on nonmedical equipment.

e. Basis of Allocation. This unit is allocated on the basis of one per medical battalion, logistics (rear). The schematic of the logistics support company, medical battalion, logistics (rear) is in Figure 6-10.

6-43. Distribution Company, Medical Battalion, Logistics (Rear), TOE 08-6981.0

- a. Mission. The mission of this organization is to provide Class VIII supplies and medical equipment maintenance support to EAC units operating in the supported operational area.
- b. Concept of Operations. This organization employs a company headquarters and organic forward support platoons to provide Class VIII support on an area basis in the theater. This unit provides limited Class VIII supply support for high-volume consumables and facilitates the support of EAC units and corps forces in the area of operations. This unit provides unit maintenance to units not otherwise provided support and has limited DS medical equipment maintenance service for units within its area of operations.

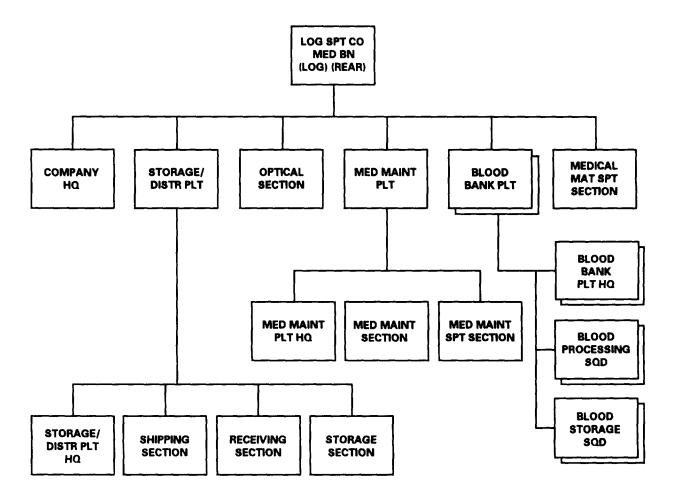


Figure 6-10. Logistics support company, medical battalion, logistics (rear).

c. Capabilities. This unit—

- (1) Receives, classifies, and issues up to 33 short tons of Class VIII supplies per day (16.5 short tons per platoon).
- (2) Provides storage for up to 33 short tons of Class VIII supply (16.5 short tons per platoon).
- $\hspace{1.5cm} \textbf{(3) Provides, through MSTs, unit} \\ \textbf{medical equipment maintenance to units not} \\$

otherwise provided such support and limited DS medical equipment maintenance on an area basis.

d. Dependency. This unit depends on—

- (1) Headquarters and Headquarters Detachment, Medical Battalion, (Logistics) (Rear), TOE 08-696L0, for unit maintenance on organic nonmedical equipment.
- (2) Logistics Support Company, TOE 08-697L0, for food service, when collocated.

Food service support must be coordinated for an element operating independently.

e. Basis of Allocution. This unit is allocated on the basis of one per medical battalion, logistics (rear). See the distribution company's organizational diagram in Figure 6-11.

6-49. Theater Medical Materiel Management Center, TOE 08-897L0

- a. Mission. The mission of this organization is to provide centralized, theater-level inventory management of Class VIII materiel, medical equipment maintenance, optical fabrication, and blood support to the theater.
- b. Assignment. This unit is assigned to the senior medical command and may be attached

to medical battalion, logistics (rear) for administrative and logistics support.

c. Concept of Operations. The TMMMC provides centralized control over the medical logistics support of the theater. This unit coordinates prioritization of scarce medical materiel, medical maintenance, and optical fabrication assets in the theater.

d. Capabilities. This unit—

- (1) Monitors the operation of health service logistics units in the theater which may include joint forces if a SIMLM mission has been assigned.
- (2) Monitors the receipt and processing of Class VIII requisitions from health service logistics units.

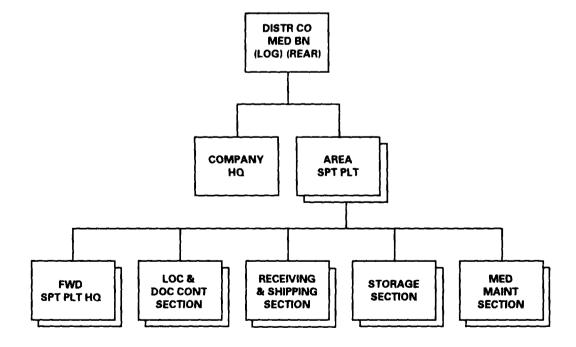


Figure 6-11. Distribution company, medical battalion, logistics (rear).

- (3) Reviews and analyzes demands and computes theater requirements for Class VIII supplies, medical equipment, optical fabrication, medical equipment maintenance, and blood processing, storage, and distribution.
- (4) Monitors and evaluates the work load, capabilities, and asset position of the supported medical battalions, logistics (forward and rear) and recommends cross-leveling of work load or resources to achieve compatibility and maximum efficiency.
- (5) Implements plans, procedures, and programs for medical materiel management systems.
- (6) Provides medical materiel management data and reports required by higher theater commands and services.
- (7) Functions as the management interface with CONUS-base Class VIII NICPs and SICCs.
- (8) Manages critical items and analyzes production capabilities.
- (9) Disseminates medical quality control information throughout the theater.
- (10) Provides logistics assistance to medical battalions, logistics (forward and rear). Much of this assistance will be provided on site at the medical battalions, logistics to improve communications, automation, and transportation interfaces.
- (11) Provides logistics assistance to TOE hospitals within the theater to help improve logistics support to and within the hospitals.
- $\ensuremath{\text{(12)}}$ Coordinates for the return to theater of medical evacuation equipment from CONUS.

- e. Dependency. This unit is dependent on the existing area support system to provide for the exchange of information within the theater and to CONUS. The communications exchange requirements include but are not limited to high volume data, voice, facsimile, and message traffic. This unit is dependent on the medical battalion, logistics (rear) for organizational maintenance on all organic equipment and the Logistics Support Company, TOE 08-697L0, for food service support, when collocated.
- f. Basis of Allocation. This unit is allocated on the basis of one per theater supported. See the TMMMC's organizational diagram in Figure 6-12.

6-50. The Medical Detachment (Logistics Support), TOE 06-909L0

- a. Mission. The mission of this unit is to provide Class VIII supply, optical fabrication, and medical equipment maintenance augmentation capability to a medical battalion, logistics (forward or rear) where work load or special operations require an increment of less than a battalion-size unit.
- b. Assignment. This unit is attached to a medical battalion, logistics (forward), TOE 08-485L000, or a medical battalion logistics (rear), TOE 08-695L000.
- c. Concept of Operations. This unit provides a modular unit to incrementally increase the capability of a medical battalion logistics. This unit may be deployed early in an operation to coordinate support to a DMSO and prepare to receive pre-positioned stocks and resupply from CONUS.
- d. Capabilities. This unit provides augmentation to the unit of attachment for Class VIII supplies, optical fabrication, and medical equipment maintenance support.

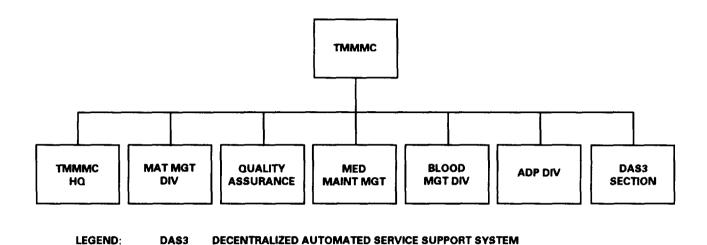


Figure 6-12. The Army theater medical management materiel center.

- e. Basis of Allocation. This unit is allocated as follows:
- (1) One per division, ACR, or separate brigade not supported by a medical battalion, logistics (forward).
- (2) One per 25,000 Joint Service population in CZ to include corps (rear).
- $\hspace{1.5cm} \textbf{(3) One per 50,000 joint service} \\ \textbf{population in COMMZ}.$
- (4) One per medical battalion, logistics (forward) supporting a three-division corps.

See the medical detachment, logistics support, organizational diagram in Figure 6-13.

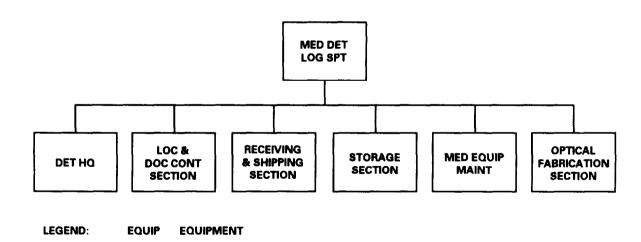


Figure 6-13. Medical detachment, logistics support.

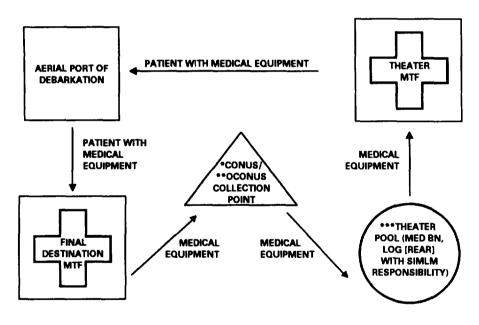
Section XIII. PREVENTING MEDICAL EQUIPMENT SHORTFALLS

6-51. Aeromedical Evacuation Equipment Shortfalls

The senior surgeon and logistics planner should recommend to the theater commander the procedures to be used to ensure that medical equipment that leaves the TO during patient evacuation does not cause a critical shortfall in equipment availability. Prior planning for replacement and adequate in-theater stockage levels of these items is necessary.

6-52. Procedure

The originating MTFs equipment travels with the patient to the destination MTF. The equipment is then returned to the TO equipment pool through a CONUS/OCONUS collection point. The CONUS/OCONUS collection point performs any necessary cleaning and maintenance. The TO equipment pool redistributes the equipment based on requisitions from theater hospitals. This system addresses critical AE equipment such as ventilators, suction apparatus, and pulse oximeters using the SIMLM. Figure 6-14 depicts this procedure.



- TOBYHANNA ARMY DEPOT
- ** US ARMY MEDICAL MATERIEL CENTER, EUROPE/16TH MEDICAL BATTALION (LOGISTICS)
- *** CENTRAL RECEIVING COLLECTING POINT FOR MEDICAL EQUIPMENT RETURNED TO THE THEATER

LEGEND:

EQUIPMENT FLOW

Figure 6-14. Medical equipment flow.