EMPLOYMENT OF THE COMBAT SUPPORT HOSPITAL TACTICS, TECHNIQUES, AND PROCEDURES

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AUTHORIZATION LETTER

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.
Throughout history, much has been written on the confrontations and wars between nations. From the beginning, a major concern of the commander has been the health and fitness of his forces. Following all confrontations, an improvement in tactics and techniques has been sought to enhance the force's ability to win the decisive battle. Over the years, advancements in technology have given our commanders weapons with the lethality to destroy or generate casualties once thought to be impossible. These advancements in technology and battlefield strategy have caused support elements to strive to improve the effectiveness of their services. The Army Medical Department (AMEDD) has maintained the pace in the development and employment of battlefield medical techniques to provide responsive, quality combat health support (CHS) for the military forces.

The purpose of this publication is to describe the functions and employment of one of the CHS assets, the combat support hospital (CSH). This publication is designed for the hospital commander, his staff, and assigned personnel. It embodies doctrine based on Medical Force 2000 and the 1st Edition Table of Organization and Equipment (TOE) 08-705L000. The structural layout of the hospital is flexible and situational determined (for example, mission requirements, commander's guidance, and terrain features). It requires intensive prior planning and training of all personnel to establish the facility. The staffing and organizational structure presented in this publication reflects those established in the 1st edition TOE 08-705L000, effective as of this publication date. However, such staffing is subject to change to comply with Manpower Requirements Criteria outlined in Army Regulation (AR) 570-2 and can be subsequently modified by your Modification TOE (MTOR).

This publication is in concert with Field Manual (FM) 8-10, FM 8-55, and Training Circular (TC) 8-13. Other FM 8-Series publications will be referenced in this publication. Users should be familiar with FM 100-5 and FM 100-10.

Echelon is a North Atlantic Treaty Organization (NATO) term used to describe levels of medical care. For the purposes of this publication, the terms "level" and "echelon" are interchangeable.

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This publication implements the following NATO International Standardization Agreements (STANAGs):

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<td>2068M</td>
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</tr>
<tr>
<td>2931</td>
<td>Orders for the Camouflage of the Red Cross and Red Crescent on Land in Tactical Operations</td>
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Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

Use of trade or brand names in this publication is for illustrative purposes only and does not imply endorsement by the Department of Defense (DOD).
CHAPTER 1

HOSPITALIZATION SYSTEM IN A THEATER OF OPERATIONS

1-1. Combat Health Support in a Theater of Operations

a. A theater of operations (TO) is that portion of an area of war necessary for military operations and for the administration of such operations. The scenario depicts the size of the TO and the US Forces to be deployed. The theater is normally divided into a combat zone (CZ) and a communications zone (COMMZ). In some instances, the COMMZ may be outside the TO and located in offshore support facilities, Third Country support bases, or in the continental United States (CONUS). The CZ begins at the Army/corps rear boundary and extends forward to the extent of the commander's area of influence. The COMMZ begins at the corps rear boundary and extends rearward to include the area(s) needed to provide support to the forces in the CZ.

b. The mission of the AMEDD is to conserve the fighting strength. This mission of CHS is a continuous and an integrated function throughout the TO. It extends from the CZ back through the COMMZ and ends in CONUS. Combat health support maximizes the system's ability to maintain presence with the supported soldier, return injured, sick, and wounded soldiers to duty, and to clear the battlefield of soldiers who cannot return to duty (RTD). Patients are examined, treated, and identified as RTD or nonreturn to duty (NRTD) as far forward as is medically possible. Early identification is performed by the treating primary care provider and continues in the evacuation chain with constant reassessment. Patients requiring evacuation out of the division who are expected to RTD within the theater evacuation policy are evacuated to a corps and/or COMMZ hospital. Those patients classified as NRTD follow the evacuation chain for trauma care and stabilization for evacuation out of the theater.

1-2. Echelons of Combat Health Support

The CHS system within a TO is organized into four echelons of support which extend rearward throughout the theater (see Figure 1-1). The system is tailored and phased to enhance patient identification, evacuation, treatment, and RTD as far forward as the tactical situation will permit. Hospital resources will be employed on an area basis to provide the utmost benefit to the maximum number of personnel in the area of operations (AO). Each echelon reflects an increase in capability, with the function of each lower echelon being contained within the capabilities of the higher echelon. Wounded, sick, or injured soldiers will normally be treated, returned to duty, and/or evacuated to CONUS (Echelon V) through these four echelons:
a. Echelon 1. This echelon is also known as unit level. Care is provided by designated individuals or elements organic to combat and combat support (CS) units and elements of the area support medical battalion (ASMB). Major emphasis is placed on those measures necessary to stabilize the patient (maintain airway, stop bleeding, prevent shock) and allow for evacuation to the next echelon of care.

(1) Combat medic. This is the first individual in the CHS chain who makes medically substantiated decisions based on medical military occupational specialty (MOS)-specific training. The combat medic is supported by first-aid providers in the form of self-aid and buddy aid and the combat lifesaver.

(a) Self-aid and buddy aid. The individual soldier is trained to be proficient in a variety of specific
first-aid procedures with particular emphasis on lifesaving tasks. This training enables the soldier, or a buddy, to apply immediate care to alleviate a life-threatening situation.

(b) Combat lifesaver. Enhanced medical training is provided to selected individuals who are called combat lifesavers. These individuals are nonmedical unit members selected by their commander for additional training to be proficient in a variety of first-aid procedures. A minimum of one individual per squad, crew, team, or equivalent-sized unit is trained. All combat units and some CS and combat service support (CSS) units have combat lifesavers. The primary duty of these individuals does not change. The additional duties of combat lifesavers are performed when the tactical situation permits. These individuals provide enhanced first-aid care for injuries prior to treatment by the combat medic. The training is normally provided by medical personnel assigned or attached to the unit. The training program is managed by a senior medical person designated by the commander.

(2) Treatment squad. The treatment squad consists of a field surgeon, a physician assistant (PA), two noncommissioned officers (NCOs), and four medical specialists. The personnel are trained and equipped to provide advanced trauma management (ATM) to the battlefield casualty. Advanced trauma management is emergency care designed to resuscitate and stabilize the patient for evacuation to the next echelon of care. Each squad can split into two trauma treatment teams. These squads are organic to medical platoons/sections in maneuver battalions and designated CS units and medical companies of separate brigades, divisions, and echelons above division in the ASMB. Treatment squads (treatment teams) may be employed anywhere on the battlefield. When not engaged in ATM, these elements provide routine sick call services on an area basis. Echelon I care for units not having organic Echelon I capability is provided on an area basis by the organization responsible in the sector.

b. Echelon II. This echelon may also be known as division level. Care at this echelon is rendered at the clearing station (division or corps). Here the casualty is examined and his wounds and general status are evaluated to determine his treatment and evacuation precedences, as a single casualty among other casualties. Those patients who can RTD within 1 to 3 days are held for treatment. Emergency medical treatment (EMT) (including beginning resuscitation) is continued and, if necessary, additional emergency measures are instituted; but they do not go beyond the measures dictated by the immediate necessities. The division clearing station has blood replacement capability, limited x-ray and ambulatory services, patient holding capability, and emergency dental care. Clearing stations provide Echelon I CHS functions on an area basis to those units without organic medical elements. Echelon II CHS also includes preventive medicine (PVNTMED) activities and combat stress control (CSC). These functions are performed typically by company-sized medical units organic to brigades, divisions, and ASMBs.

c. Echelon III. The first hospital facilities are located at this echelon. Within the CZ, the mobile army surgical hospital (MASH) and the CSH are staffed and equipped to provide resuscitation, initial wound surgery, and postoperative treatment. Although the MASH is an Echelon III facility, it is designed to be employed within the division area. At the CSH, patients are stabilized for continued evacuation, or returned to duty. Those patients who are expected to RTD within the theater evacuation policy are regulated to a facility that has the capability for reconditioning and rehabiliting.

d. Echelon IV. At this echelon, the patient may be treated at the general hospital (GH) or the field hospital (FH). The GHs are staffed and equipped for general and specialized medical and surgical care. Those patients not expected to RTD within the theater evacuation policy are stabilized and evacuated to CONUS. At the FH, reconditioning and rehabiliting services are provided for those patients who will be RTD within the theater evacuation policy.

e. Echelon V. This echelon of care is provided in CONUS. Hospitalization is provided by DOD hospitals.
(military hospitals of the triservices) and Department of Veterans Affairs (DVA) hospitals. Under the National Disaster Medical System, patients overflowing DOD and DVA hospitals will be cared for in designated civilian hospitals.

1-3. Theater Hospital System

a. Medical Force 2000 is the modernization effort to restructure the CHS system including hospitalization in support of a TO. This system consists of four hospitals, a medical company, holding, and six medical/surgical teams. The two corps hospitals are the MASH and the CSH. The two COMMZ hospitals are the FH and the GH. In addition to these hospitals, the medical company, holding, provides a 1,200-cot convalescent capability. For a detailed discussion on the Medical Force 2000 hospital system, refer to FM 8-10.

(1) Mobile army surgical hospital. This hospital is a 30-bed facility with the primary mission of providing lifesaving surgical and medical care to stabilize patients for further evacuation, either to the CSH or to COMMZ hospitals. Patients are held approximately 24 to 36 hours until considered stable enough to tolerate a bed-to-bed transfer without incurring further risk to their condition. The MASH will be employed in the corps area or forward in the division rear area. This hospital is not Deployable Medical Systems (DEPMEDS)-equipped. It is 100 percent mobile with organic vehicles.

(2) Forward surgical team. A forward surgical team (FST) will replace the two surgical squads in each of the following: the airborne division; the air assault division; and the 2d Armored Cavalry Regiment (ACR). The FSTs will also replace the medical detachment (surgical) and the 30-bed MASH. This team will be a corps augmentation for divisional and nondivisional medical companies. It will provide emergency/urgent initial surgery and nursing care after surgery for the critically wounded/injured patient until sufficiently stable for evacuation to a theater hospital. The FSTs not organic to divisions and the 2d ACR will be assigned to a medical brigade or group and normally attached to a corps hospital when not operationally employed and further attached for support to a divisional/nondivisional medical company.

(3) Combat support hospital. This hospital is addressed in detail in the following chapters of this publication.

(4) Field hospital. This hospital is a 504-bed facility with the mission of providing hospitalization for patients and for reconditioning and rehabilitating those patients who can RTD within the theater evacuation policy. The majority of patients within this facility will be in the convalescent care category. The FH is normally located in the COMMZ, but could be used in the corps rear when geographical operational constraints dictate. It is 20 percent mobile with organic vehicles.

(5) General hospital. This organization is a 476-bed facility with the mission of providing stabilization and hospitalization for patients who require either further evacuation out of the TO, or who can RTD within the theater evacuation policy. The GH will normally be located in the COMMZ. Its mobility is 10 percent with organic vehicles.

(6) Medical company, holding. This unit provides reconditioning and rehabilitation for up to 1,200 convalescent care patients. This unit may be located in the corps or COMMZ. It is used to augment the CSH when operational necessity dictates. It may also be used in the 3-week CSC reconditioning program. This unit is staffed and equipped to provide care for minimal category (self-care) patients.

b. The CSH, FH, and GH are designed using the following four modules:

(1) Hospital unit, base (HUB).
(2) Hospital unit, surgical (HUS).

(3) Hospital unit, medical (HUM).

(4) Hospital unit, holding (HUH).

They are configured using the appropriate combination of these modules. The HUB can operate independently, is clinically similar, and is located in each hospital as the initial building block. The other three mission-adaptive modules (HUS, HUM, and HUH) are dependent upon the HUB (see Figure 1-2.)

* Although the HUB has 238 beds, when it is used as the base component for the FH, it is only staffed to provide hospitalization for 224 patients. In the FH configuration, the HUB has two intensive care wards that provide care for up to 24 patients. By contrast, in the CSN and GH configurations, the HUB has three intensive care wards that provide care for up to 36 patients. This is the reason for the 12 patient difference in the FH configuration.

Figure 1-2. Component hospital system.
CHAPTER 2
THE COMBAT SUPPORT HOSPITAL

2-1. Mission and Allocation

The mission of this hospital is to provide resuscitation, initial wound surgery, postoperative treatment, and RTD those soldiers in the CZ who fall within the corps evacuation policy, or to stabilize patients for further evacuation. This hospital is capable of handling all types of patients. It has a basis of allocation of 2.4 hospitals per division.

2-2. Assignment and Capabilities

a. The CSH is assigned to the Headquarters and Headquarters Company (HHC), Medical Brigade, TOE 08-422L100. The hospital may be further attached to the Headquarters and Headquarters Detachment (HHD), Medical Group, TOE 08-432L000.

b. This unit provides hospitalization for up to 296 patients. The hospital has eight wards providing intensive nursing care for up to 96 patients, seven wards providing intermediate nursing care for up to 140 patients, one ward providing neuropsychiatric (NP) care for up to 20 patients, and two wards providing minimal nursing care for up to 40 patients.

c. Surgical capacity is based on eight operating room (OR) tables for a surgical capacity of 144 OR table hours per day.

d. Other capabilities include--

- Consultation services for patients referred from other medical treatment facilities (MTFs).
- Unit-level CHS for organic personnel only.
- Pharmacy, clinical laboratory, blood banking, radiology, physical therapy, and nutrition care services.
- Medical administrative and logistical services to support work loads.
- Dental treatment to staff and patients and oral and maxillofacial surgery support for military personnel in the immediate area plus patients referred by the area CHS units.

2-3. Hospital Support Requirements

In deployment and sustainment of operations, this unit is dependent upon appropriate elements of the corps for--

- Personnel administrative services.
- Finance.
- Mortuary affairs and legal services.
- Transportation services (unit is 35 percent mobile with organic assets).
- Laundry services for other than patient-related linen.
- Security and enemy prisoner of war (EPW) security during processing and evacuation.
- Transportation for discharged patients.
- Class I supplies (rations) to include the Medical B Rations required for patient feeding.
- Engineer support for site preparation waste disposal, and minor construction.
- Veterinary support for zoonotic disease control and investigation; inspection of medical and nonmedical rations, to include suspected contaminated rations and disposition recommendations; and animal bites.
2-4. Hospital Organization and Functions

The CSH is a modular-designed facility which consists of a HUB and HUS. It can be further augmented with specialty surgical/medical teams to increase its capabilities. It may become a designated specialty center as the work load or mission dictates (Figure 2-1).

![CSH Organization Diagram]

**NOTE:** Depending upon operational requirements, the medical and surgical teams may or may not be attached to the individual clinical element of the CSH.

*Figure 2-1. Combat support hospital organization.*

*a.* The HUB is a 236-bed facility which has 36 intensive, 140 intermediate, 40 minimal, and 20 NP care beds. It has two OR modules, one surgical and the other orthopedic, which are staffed to provide a total of 72 OR table hours per day. It also allows for attachment of specialty surgical teams. The HUB is an independent organization which includes all hospital services (Figure 2-2).
b. The HUS is comprised of 60 intensive care beds, two OR modules, one x-ray module, one triage/preoperative/EMT module, and the appropriate staffs (Figure 2-3). The HUS is dependent on the HUB for food service, maintenance, and administration.
c. When the HUB and HUS are employed to form a single hospital, half of the OR tables are staffed for two 12-hour shifts with the other half only staffed for one 12-hour shift per day.

2-5. The Hospital Unit, Base

The HUB provides a solid infrastructure for the CSH operations. The HUB contains the following sections:

a. Hospital Headquarters Section. This section provides internal command and control (C2) and management of all hospital services. Personnel of this section supervise and coordinate the surgical, nursing, medical, pastoral, and administrative services. Staffing includes the HUB commander, the chiefs of surgery, nursing, and medicine, an executive officer (XO), a chaplain, a command sergeant major (CSM), and an administrative specialist (Table 2-1). When the HUB and the HUS join to function as a CSH, the HUB commander is the CSH commander unless otherwise designated.
Table 2-1. Hospital Headquarters Organization

<table>
<thead>
<tr>
<th>Hospital Headquarters</th>
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<tbody>
<tr>
<td>HOSPITAL COMMANDER</td>
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<tr>
<td>CHIEF, SURGICAL SERVICE</td>
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<tr>
<td>CHIEF, NURSING SERVICE</td>
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<tr>
<td>CHIEF, MEDICAL SERVICE</td>
</tr>
<tr>
<td>EXECUTIVE OFFICER</td>
</tr>
<tr>
<td>HOSPITAL CHAPLAIN</td>
</tr>
<tr>
<td>COMMAND SERGEANT MAJOR</td>
</tr>
<tr>
<td>ADMINISTRATIVE SPECIALIST</td>
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</table>

(1) Hospital commander (60A00). Command and control is the process through which the activities of the hospital are directed, coordinated, and controlled to accomplish the mission. This process begins and ends with the commander. An effective commander must have a thorough knowledge and understanding of planning and implementing CHS (FM 8-55). He is decisive and provides specific guidance to his staff in the execution of the mission. The successful commander delegates authority and fosters an organizational climate of mutual trust, cooperation, and teamwork. He has the overall responsibility for coordination of CHS within the hospital’s AO. Additionally, he is responsible for the structural layout of the hospital.

(2) Chief, surgical service (61J00). The chief surgeon is the principal advisor to the hospital commander for surgical activities. He provides supervision and control over the surgical services to include the ORs. He prescribes courses of treatment and surgery for patients having injuries or disorders with surgical conditions and participates in surgical procedures as required. He coordinates and is responsible for all matters pertaining to the evaluation, management, and disposition of patients received by the section. He is responsible for the evaluation and training programs for his professional staff. He also functions as the Deputy Commander for Professional Services.

(3) Chief, nurse (66A00). The chief nurse is the principal advisor to the hospital commander for nursing activities. This officer plans, organizes, supervises, and directs nursing care practices and activities of the hospital. This officer is also responsible for the orientation and professional development programs for the nursing staff.

(4) Chief, medicine services (61F00). This officer is responsible for the examination, diagnoses, and treatment, or recommended course of management for patients with medical illnesses. He controls the length of patient stay through continuous patient evaluation, early determination of disposition, or evacuation to the next echelon of care.

(5) Executive officer (67A00). The hospital XO advises the commander on matters pertaining to health care delivery. He plans, directs, and coordinates administrative activities for the hospital. He provides guidance to the tactical operations center (TOC) staff in planning for future operations. He also functions as the Chief, Administrative Service.

(6) Hospital chaplain (56A00). The chaplain functions as the staff officer for all matters in which religion impacts on command programs, personnel, policy, and procedures. He provides for the spiritual well-being and morale of patients and hospital personnel. He also provides religious services and pastoral counseling to soldiers in the AO.

(7) Command sergeant major (00Z50). The CSM is the principal enlisted representative to the
commander. He advises the commander and staff on all matters pertaining to welfare and morale of enlisted personnel in terms of assignment, reassignment, promotion, and discipline. He provides counsel and guidance to NCOs and other enlisted personnel of the hospital. He is also responsible for the reception of newly assigned enlisted personnel into the unit. The CSM evaluates the implementation of individual soldier training on common soldier tasks and supervises the hospital's NCO professional development.

(8) Administrative specialist (71L20). The administrative specialist performs typing, clerical, and administrative duties for the hospital headquarters. He proofreads correspondence for proper spelling, grammar, punctuation, format, and content accuracy. He establishes and maintains files, logs, and other statistical information for the command. He is the light-vehicle driver and radio operator for the command section.

b. Hospital Operations Section. This section is responsible for communications (internal and external), security, plans and operations, deployment, and relocation of the hospital. The staff is composed of a medical operations officer, a field medical assistant, an operations NCO, a nuclear, biological, and chemical (NBC) NCO, an administrative specialist, and appropriate communications personnel (Table 2-2). The authorization for the field medical assistant is counted in the HUS.

Table 2-2. Hospital Operations Section

<table>
<thead>
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<th>Organization</th>
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<tr>
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<tr>
<td>Field Medical Assistant</td>
<td>CPT</td>
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<tr>
<td>Operations Sergeant</td>
<td>SFC</td>
<td>91B40</td>
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<tr>
<td>Section Chief</td>
<td>SFC</td>
<td>31U40</td>
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<tr>
<td>Nuclear, Biological, and Chemical NCO</td>
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<td>SGT</td>
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<tr>
<td>Signal Support Systems Specialist</td>
<td>PFC</td>
<td>31U10</td>
</tr>
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</table>

(1) Medical operations officer (70H67). This officer is responsible to the XO for the Intelligence Officer/Operations and Training Officer (S2/S3) functions of the hospital. He supervises all tactical operations conducted by the hospital to include planning and relocation. He is responsible for the formulation of the tactical standing operating procedures (TSOP) and hospital planning factors (refer to Appendix A for an example of a TSOP format and Appendix B for an estimate of hospital planning factors).

(2) Field Medical Assistant (70B67). This officer is responsible to the medical operations officer for planning and coordinating site selection and convoy operations during hospital deployment and relocation. He also functions as the operations security (OPSEC) and communications security
(COMSEC) officer for the hospital. The requirement for this position is counted in the unit headquarters section (HUS). When the HUB and HUS form a CSH, the field medical assistant, HUS becomes the field medical assistant in this section.

(3) Operations sergeant (91B40). The operations sergeant is responsible to the medical operations officer for physical security, to include the hospital defense plan; preparation of unit plans, operation orders (OPORDs) and map overlays; and intelligence information and records. He also supervises subordinate staff.

(4) Section chief (31U40). This NCO serves as the principal signal advisor to the hospital commander and medical operations officer on all communications matters. He is responsible to the medical operation and plans officers for the planning, supervising, coordinating, and technical assistance in the installation, operation, management, and operator-level maintenance of radio, field wire, and switchboard communications systems. He supervises all subordinate communications personnel.

(5) Nuclear, biological, and chemical noncommissioned officer (54B40). This NCO is the technical advisor to the hospital commander and medical operations officer on matters pertaining to NBC operations. He is responsible to the medical operations officer for the planning, training, NBC decontamination (less patient), and other aspects of hospital NBC defensive operations.

(6) Electronic switch systems operator (31F20). This operator is responsible to the section chief for the installation, operation, and operator-level maintenance of switchboards and switching systems.

(7) Electronic switch systems operator (31F10). These operators are responsible to the section chief for the installation, operation, and unit-level maintenance on switchboards, switching assemblages, and associated communications equipment.

(8) Signal information service specialist (31U10). This individual is responsible to the section chief for installation and operation of unit wire systems, associated equipment, and frequency modulated (FM) radios.

(9) Administrative specialist (7L10). This individual is responsible to the operations sergeant for general typing and administrative functions for the section.

(10) Signal support systems specialist (31U10). This individual is responsible to the section chief for installing wire for field telephones and assisting in the operation of the hospital FM radios.

c. Company Headquarters. This section is responsible for company-level command, duty rosters, weapons control, and mandatory training. Staffing includes the company headquarters commander, the first sergeant, a decontamination specialist, an administrative clerk, and an armorer (Table 2-3).

Table 2-3. Company Headquarters Organization

<table>
<thead>
<tr>
<th>COMPANY HEADQUARTERS</th>
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<tbody>
<tr>
<td>COMPANY COMMANDER</td>
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<td>FIRST SERGEANT</td>
<td>MSG 9185M NC</td>
</tr>
<tr>
<td>DECONTAMINATION SPECIALIST</td>
<td>SPC 54B10</td>
</tr>
<tr>
<td>ADMINISTRATIVE CLERK</td>
<td>SPC 71L10</td>
</tr>
<tr>
<td>ARMORER</td>
<td>SPC 92Y10</td>
</tr>
</tbody>
</table>
(1) **Company commander (70B67)**. The company commander is responsible to the XO for all activities in the company headquarters. He administers Uniform Code of Military Justice (UCMJ) actions for enlisted personnel; plans and conducts common task training; and functions as the commander of the medical holding detachment, when assigned. When the HUB and HUS are employed to form the CSH, the medical holding detachment is assigned as dictated by the medical mission.

(2) **First sergeant (91B3M)**. The first sergeant is responsible to the company commander for enlisted matters. He also assists in supervising company administration and training activities. He provides guidance to the enlisted members of the company and represents them to the company commander. He also functions as the reenlistment NCO.

(3) **Decontamination specialist (54B10)**. This specialist is responsible to the first sergeant for training the company's NBC teams on the operation of NBC detection and decontamination equipment and for the operator maintenance on this equipment. He assists the NBC NCO in the establishment, administration, training, and application of NBC defense measures. He also performs NBC reconnaissance and is designated as a light-vehicle operator.

(4) **Administrative clerk (71L10)**. The clerk-typist is responsible to the first sergeant for providing the personnel and unit administration support for the company headquarters. His duties consist of general administration and personnel actions.

(5) **Armor (92Y110)**. The armorer's primary duty is that of maintaining the weapons storage area, small arms, and ammunition and performing small arms unit maintenance. He is designated as the light-vehicle operator for the section.

d. Administrative Division. This division provides overall administrative services for the hospital to include personnel administration, mail distribution, awards and decorations, leaves, and typing support. The staff is composed of the hospital adjutant, personnel sergeant, personnel administrative sergeant, an administrative specialist, mail delivery clerks, and an administrative clerk (Table 2-4). This section coordinates with elements of corps support command (COSCOM) for finance, personnel, and administrative services.

<table>
<thead>
<tr>
<th>ADMINISTRATIVE DIVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOSPITAL ADJUTANT CPT 70F67 MS</td>
</tr>
<tr>
<td>PERSONNEL SERGEANT SFC 75Z40 NC</td>
</tr>
<tr>
<td>PERSONNEL ADMINISTRATIVE SERGEANT SGT 75B20 NC</td>
</tr>
<tr>
<td>ADMINISTRATIVE SPECIALIST SPC 71L10</td>
</tr>
<tr>
<td>MAIL DELIVERY CLERK PFC 71L00</td>
</tr>
<tr>
<td>ADMINISTRATIVE CLERK PFC 71L00</td>
</tr>
</tbody>
</table>

(1) **Hospital adjutant (70F67)**. This officer is responsible to the hospital XO for the adjutant functions within the hospital. He also advises the commander and staff in the area of personnel management for patients and staff.

(2) **Personnel sergeant (75240)**. The personnel sergeant is responsible to the adjutant for specific personnel functions which include personnel management, records, actions, and preparation of Standard...
Installation/Division Personnel System (SIDPERS) changes. He ensures coordination between the medical brigade and/or medical group Personnel and Administration Center (PAC) and the hospital. He advises the hospital commander, adjutant, and other staff members on personnel administrative matters. He also supervises the activities of subordinate personnel.

(3) **Personnel administrative sergeant (75B20).** This individual is responsible to the personnel sergeant for personnel and administrative functions for the hospital.

(4) **Administrative specialists (71L10).** These specialists are responsible to the personnel sergeant for general typing and administrative functions for the division.

(5) **Mail delivery clerks (71L10).** These administrative specialists are responsible to the personnel staff NCO for establishing and operating the unit mail room. They also assist the personnel staff NCO with personnel and clerical duties. They are the designated light-vehicle operators for the division.

e. **Patient Administration Division (PAD).** This division is responsible for the admission and disposition of patients, maintenance of patient records, security of patient valuables, and preparation of patient statistical reports for the hospital. The staff is composed of the patient administration officers, NCOs, and specialists (Table 2-5).

Table 2-5. Patient Administration Division Organization

<table>
<thead>
<tr>
<th>Patient Administration Division Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PATIENT ADMINISTRATION DIVISION</strong></td>
</tr>
<tr>
<td><strong>OFFICER</strong></td>
</tr>
<tr>
<td>MAJ 70E67 MS</td>
</tr>
<tr>
<td><strong>OFFICER</strong></td>
</tr>
<tr>
<td>CPT 70E67 MS</td>
</tr>
<tr>
<td><strong>NCO</strong></td>
</tr>
<tr>
<td>SSG 71G30 NC</td>
</tr>
<tr>
<td><strong>NCO</strong></td>
</tr>
<tr>
<td>SGT 71G20 NC</td>
</tr>
<tr>
<td><strong>SPECIALIST</strong></td>
</tr>
<tr>
<td>SPC 71G10 (4)</td>
</tr>
<tr>
<td><strong>SPECIALIST</strong></td>
</tr>
<tr>
<td>PFC 71G10 (4)</td>
</tr>
</tbody>
</table>

(1) **Patient administration officer (70E67).** As chief of the PAD, this officer is responsible to the hospital XO for planning, organizing, directing, and controlling the patient administration aspects of the hospital. He advises the commander on patient administration matters. He maintains close liaison with the chiefs of services, attending physicians, and chiefs of administrative sections and offices to ensure timely decisions on patient administration matters.

(2) **Patient administration officer (70E67).** This officer assists the chief, PAD in developing plans and procedures for patient administration support, to include patient statistical reports and medical regulation of patient dispositions (refer to FM 8-10-6).

(3) **Patient administration non-commissioned officer (71G30).** This NCO is responsible to the patient administration officer for patient administration and disposition procedures, inpatient records, and security of patients' personal effects. He works in concert with the supply sergeant (company headquarters) on reequipping the RTD soldier. He also supervises the application of the Theater Army Medical Management Information System (TAMMIS) for the Medical Patient Accounting and Reporting (MEDPAR) System and for the Medical Regulating (MEDREG) System.

(4) **Patient administration noncommissioned officers (71G20).** These NCOs are responsible to the
principal patient administration NCO for implementing the TAMMIS for the hospital. They process correspondence received for medical information. They also assist in supervising subordinate specialists.

(5) **Patient administration specialists (7IG10).** These specialists are responsible to the patient administration NCOs for preparing, consolidating, and maintaining medical records and statistics pertaining to patient data. They also implement the TAMMIS for the division.

**f. Nutrition Care Division.** This division is responsible for providing hospital nutrition services, meal preparation and distribution to patients and staff; dietetic planning; and supervision and control of overall operations. Hospital staff will be fed in accordance with the theater ration policy. The field medical feeding standard for hospitals is to prepare three hot meals per day plus nourishments and forced fluids using Medical B (or A) Rations. Meals, ready to eat (MRE) are not authorized for patient use. Rations will be obtained from the supporting COSCOM. Patient meals, nourishments, and forced fluids will be distributed to the wards three times per day; tube feedings are provided intermittently as patient's nutritional needs require. (Refer to FM 8-505, Technical Manual [TM] 8-500, and Appendix B of this manual.) The staff is composed of dietitians, hospital food service NCO, and hospital food service specialists (Table 2-6).

**Table 2.6. Nutrition Care Division Organization**

<table>
<thead>
<tr>
<th>NUTRITION CARE DIVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIEF, NUTRITION CARE DIVISION: MAJ 65C00 SP</td>
</tr>
<tr>
<td>DIETITIAN: CPT 65C00 SP</td>
</tr>
<tr>
<td>HOSPITAL FOOD SERVICE</td>
</tr>
<tr>
<td>NCO: SFC 91M40 NC</td>
</tr>
<tr>
<td>NCO: SSG 91M30 NC</td>
</tr>
<tr>
<td>NCO: SGT 91M20 NC (6)</td>
</tr>
<tr>
<td>SPECIALIST: SPC 91M10 (10)</td>
</tr>
<tr>
<td>SPECIAL ST: PFC 91M10 (19)</td>
</tr>
</tbody>
</table>

(1) **Chief nutrition care division (65C00).** This officer is responsible to the Chief, Administrative Services for the operation of this division. He directs and supervises the operation of nutrition care services.

(2) **Dietitian (65C00).** This officer is responsible to the Chief, Nutrition Care for formulating policies, developing procedures, and assisting in supervising the operation of nutrition care. This officer also assists physicians in dietary management of patients.

(3) **Hospital food service noncommissioned officer (91M40).** This NCO serves as the principal NCO for the nutrition care division. He is responsible to the Chief, Nutrition Care for the implementation of policies and procedures and for supervision of subordinate personnel.

(4) **Hospital food service noncommissioned officer (91M30).** This NCO is responsible to and serves as an assistant to the principal NCO in nutrition care operations. He implements and directs contingency and combat feeding plans.

(5) **Hospital food service sergeants (91M20).** These sergeants are responsible to the principal NCO and assist with the clinical and administrative management of nutritional care programs.

(6) **Hospital food service specialists (91M10).** These hospital food service specialists are responsible to the hospital food service sergeants for performing basic clinical dietetic functions in the dietary...
management and treatment of patients. They prepare, cook, and serve regular and modified food. They also perform light-vehicle operator/driver duties for the division, to include operator maintenance.

g. Supply and Service Division. This division provides logistics functions throughout the hospital, to include laundry, general and medical supplies, and maintenance; blood management (see Appendix B [paragraph B-4k]); utilities such as water distribution, waste disposal, and environmental control of patient treatment areas; power and vehicle maintenance; equipment records and repair parts; fuel distribution; and transportation to include ground/air movement operations. The logistics division requests resupply from the supporting medical logistics (MEDLOG) battalion (forward) and COSCOM elements using whatever communication links are available and compatible with the Theater Army Medical Management Information System-Medical Logistics (TAMMIS-MEDLOG). Medical logistics and medical maintenance (MEDMNT) will be managed utilizing TAMMISMEDLOG and TAMMIS-MEDMNT. This division coordinates with COSCOM elements for materiel handling equipment (MHE) capable of moving DEPMEDS equipment, environmental control units, and power distribution equipment for the hospital. This division is also responsible for maintaining the unit property book and for establishing a temporary morgue for handling remains until transported to supporting mortuary affairs organization. This section coordinates with elements of the corps and COSCOMs for movement control, nonmedical supplies and equipment, and field services. This section will provide one basic uniform to RTD soldiers and will also coordinate with the COSCOM for the transportation of these soldiers to the replacement companies. Table 2-7 lists the staffing for this division.

Table 2-7. Supply and Service Division Organization

<table>
<thead>
<tr>
<th>SUPPLY AND SERVICE DIVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH SERVICE MATERIAL OFFICER</td>
</tr>
<tr>
<td>HEALTH SERVICE MATERIAL OFFICER</td>
</tr>
<tr>
<td>POWER SYSTEMS TECHNICIAN</td>
</tr>
<tr>
<td>MILITARY SERVICE MAINTENANCE TECHNICIAN</td>
</tr>
<tr>
<td>MEDICAL SUPPLY NCO</td>
</tr>
<tr>
<td>MOTOR SERGEANT</td>
</tr>
<tr>
<td>MEDICAL EQUIPMENT REPAIRER/SUPERVISOR</td>
</tr>
<tr>
<td>SENIOR UTILITIES EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>SHOOTER A/CO</td>
</tr>
<tr>
<td>SENIOR MECHANIC</td>
</tr>
<tr>
<td>MECHANICAL STORAGE SUPERVISOR</td>
</tr>
<tr>
<td>SUPPLY SERGEANT</td>
</tr>
<tr>
<td>MECHANICAL EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>UTILITIES EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>POWER GENERATOR EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>TEAM CHEF</td>
</tr>
<tr>
<td>LIGHT-WHEELED VEHICLE MECHANIC</td>
</tr>
<tr>
<td>QUARTERMASTER AND CHEMICAL EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>MEDICAL SUPPLY SERGEANT</td>
</tr>
<tr>
<td>EQUIPMENT RECOVERY PARTS SPECIALIST</td>
</tr>
<tr>
<td>SIGNAL SUPPORT SYSTEMS MAINTAINER</td>
</tr>
<tr>
<td>MEDICAL EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>UTILITIES EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>POWER GENERATOR EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>LAUNDRY SPECIALIST</td>
</tr>
<tr>
<td>LIGHT-WHEELED VEHICLE MECHANIC</td>
</tr>
<tr>
<td>RECOVER VEHICLE OPERATOR</td>
</tr>
<tr>
<td>MEDICAL SUPPLY SPECIALIST</td>
</tr>
<tr>
<td>PETROLEUM LIGHT VEHICLE OPERATOR</td>
</tr>
<tr>
<td>SUPPLY SPECIALIST</td>
</tr>
<tr>
<td>UTILITIES EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>POWER GENERATOR EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>LAUNDRY SPECIALIST</td>
</tr>
<tr>
<td>LIGHT WHEELED VEHICLE MECHANIC</td>
</tr>
<tr>
<td>QUARTERMASTER AND CHEMICAL EQUIPMENT REPAIRER</td>
</tr>
<tr>
<td>MEDICAL SUPPLY SPECIALIST</td>
</tr>
<tr>
<td>PETROLEUM LIGHT VEHICLE OPERATOR</td>
</tr>
<tr>
<td>EQUIPMENT RECOVERY PARTS SPECIALIST</td>
</tr>
<tr>
<td>SUPPLY SPECIALIST</td>
</tr>
</tbody>
</table>
(1) *Health service materiel officer (70K67).* This officer is responsible to the Chief, Administrative Services. He plans, coordinates, and manages the entire logistics system for the hospital. Additionally, he controls and manages the budget for the hospital commander. He is also responsible for hospital field waste and safety procedures (refer to Appendixes C and D for examples of these programs).

(2) *Health service materiel officer (70K67).* This officer is responsible to the Chief, Supply and Services Division. He has primary responsibility for the medical supply area and functions as the supply officer for the hospital. This officer is also responsible for managing the controlled substances stored by the medical supply section.

(3) *Power systems technician (210A5).* This warrant officer is responsible to the Chief, Supply and Services Division. He advises the command on the status, maintenance, and repairs of general support (GS) equipment. He supervises organizational maintenance of wheeled vehicles, associated support equipment, and power support equipment. He is responsible for the preparation of log books, maintenance records, and associated reports.

(4) *Health service maintenance technician (670A0).* This warrant officer is responsible to the Chief, Supply and Services Division. He supervises and assists in the installation and maintenance of hospital equipment. He serves as the technical consultant to all members of the hospital staff on medical maintenance matters. He also supervises scheduled (preventive maintenance) and unscheduled (repair) services on medical and related equipment within his scope of responsibility.

(5) *Medical supply noncommissioned officer (76J40).* This NCO assists the division chief in the supervision of the logistics division, to include medical supply operations, stock control, and medical assemblage management. He is responsible for the development and preparation of plans, maps, overlays, sketches, and other administrative procedures related to employment of the supply and service division.

(6) *Motor sergeant (63B40).* This NCO is responsible to the power systems technician for unit maintenance on wheeled vehicles and MHE and the upkeep of hand and power tools. He supervises, trains, advises, and inspects subordinate personnel in the use of the Army Maintenance Management System (TAMMS), prescribed load list (PLL), and automated systems output. He is also responsible for supervising the training and licensing of vehicle and equipment operators and ensuring their skills qualification.

(7) *Medical equipment repairer/supervisor (91A30).* This NCO is responsible to the health service maintenance technician for performing and supervising hospital medical maintenance operations. He is responsible for interpreting technical publications that apply to inspection, troubleshooting, maintenance, repair, calibration, and testing of medical equipment. He also supervises the operation of TAMMIS-MEDMNT.

(8) *Senior utilities equipment repairer (52C30).* This NCO is responsible to the power systems technician for supervising and performing unit maintenance of utilities quartermaster equipment. He inspects the installation and condition of power generation and distribution equipment systems.

(9) *Shower noncommissioned officer (57E30).* This NCO is responsible to the medical supply sergeant for the supervision of laundry and bath operations for the hospital. He supervises the subordinate laundry specialists. He coordinates with the supporting engineer unit and quartermaster unit for water support and wastewater disposal.

(10) *Senior mechanic (63B30).* This NCO assists the motor sergeant in the performance of his duties. He
instructs and supervises subordinate personnel in proper unit maintenance practices and procedures.

(11) **Medical storage supervisor (76J30).** This NCO is responsible to the medical supply sergeant for supervising and planning hospital storage activities. He operates the TAMMIS-MEDLOG for the hospital.

(12) **Supply sergeant (92Y30).** The supply sergeant is responsible to the medical supply NCO for requisitioning, accountability, and issuing of general supplies and equipment for the hospital. He keeps the property book for the hospital on the Tactical Army Combat Service Support (CSS) Computer System (TACCS), using the standard property book supply revised (SPBSR) system. He works in concert with the PAD and requests, from the supporting direct support (DS) supply company, those minimum Class II supply items authorized for issue to RTD soldiers (to include mission-oriented protective posture [MOPP] gear, if required). He ensures that RTD soldiers are provided transportation to the replacement company. The supply sergeant supervises the activities of the supply specialists.

(13) **Medical equipment repairer (91A20).** This NCO assists the medical equipment repairer/supervisor in the performance of his duties. He advises and assists equipment operators in the assembly and disassembly of field medical equipment.

(14) **Utilities equipment repairers (52C20).** These NCOs are responsible to the senior utilities equipment repairer for repair and maintenance of utilities-type equipment. They install heating, refrigeration, and air-conditioning equipment. They are also light-vehicle operators for the section.

(15) **Power-generator equipment repairer (52D20).** This NCO is responsible to the power systems technician for performing unit-level maintenance functions on power generation equipment and associated items. He also supervises the subordinate power-generator equipment repairer.

(16) **Team chiefs (57E20).** These NCOs assist the shower NCO in performing his duties. They also conduct laundry site reconnaissance to determine the best site based on drainage, water supply, hospital layout, cover, and concealment.

(17) **Light-wheeled vehicle mechanic (63B20).** This mechanic is responsible to the motor sergeant for those mechanical duties within his scope of responsibility. He also performs driver operator duties.

(18) **Quartermaster and chemical equipment repairer (63J20).** This NCO is responsible to the senior utilities equipment repairer for troubleshooting and repairing quartermaster and chemical equipment malfunctions.

(19) **Medical supply sergeants (76J20).** These NCOs are responsible to the medical supply NCO in performing medical supply duties. They supervise the medical supply specialists.

(20) **Equipment receiver/parts specialist (92A20).** This soldier is responsible to the motor sergeant for maintaining equipment records and repair parts list and performing maintenance control duties. He also performs driver operator duties.

(21) **Signal support systems maintainer (31U10).** This individual is responsible to the medical supply sergeant for removing, installing, and providing unit-level maintenance of tactical radio communications systems, field wire equipment, and other electronic items of equipment. He works in coordination with the Chief, Hospital Operations Section.
(22) **Medical equipment repairers (91A10).** These repairers are responsible to the medical equipment repairer/supervisor for performing unit-level maintenance on assigned medical equipment. They also assist in training equipment operators in the performance of operator-level preventive maintenance checks and services (PMCS).

(23) **Utilities equipment repairers (52C10).** These repairers are responsible to the senior equipment repairer for unit maintenance of refrigeration equipment, air-conditioning units, and gasoline engines used as prime movers of refrigeration units. They are also vehicle operators for their section.

(24) **Power generator equipment repairers (52D10).** These equipment repairers are responsible to the power generator equipment repairer NCO for operator and unit maintenance of tactical utility and power generation equipment and associated items.

(25) **Laundry specialists (57E10).** These specialists are responsible to the shower NCO for performing their designated duties.

(26) **Light-wheeled vehicle mechanics (63B10).** These specialists are responsible to the light-wheeled vehicle mechanic NCO for performing their designated duties. They are vehicle operators for the division.

(27) **Recovery vehicle operator (63B10).** This specialist is responsible to the senior mechanic for unit-level maintenance and recovery operations on light-and heavy-wheeled vehicles, MHE, and associated items.

(28) **Medical supply specialists (76J10).** These specialists are responsible to the medical supply sergeants for performing designated medical supply and equipment functions. They are designated light-vehicle operators for their section.

(29) **Petroleum light-vehicle operators (77F10).** These petroleum light-vehicle operators are responsible to the motor sergeant. They receive, store, account and care for, dispense, issue, and ship bulk and packaged petroleum, oil, and lubricant (POL) supplies. They also operate and maintain the petroleum vehicles.

(30) **Supply specialists (92Y10).** These supply specialists assist the supply sergeant in the accomplishment of his duties.

(31) **Quartermaster and chemical equipment repairer (63J10).** This equipment repairer is responsible to the quartermaster and chemical equipment repairer NCO for unit maintenance on quartermaster and chemical equipment.

(32) **Equipment receiver/parts specialist (92A10).** This specialist is responsible to the motor sergeant for maintaining equipment records and repair parts lists and performing maintenance control duties.

**h. Nursing Service Control Team.** This team is responsible to the Chief, Nursing Service for supervision of all nursing service personnel regardless of organizational placement. This team also provides daily patient reports to the chief nurse and PAD and is responsible for the standards of nursing practice and nursing care throughout the facility. The staff to provide this control are the assistant chief nurse, chief and assistant chief wardmasters, and a respiratory NCO (Table 2-8).
Table 2-8. Nursing Service Control Team

<table>
<thead>
<tr>
<th>Organization</th>
<th>Officer</th>
<th>Rank</th>
<th>ASI</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSING SERVICE CONTROL TEAM</td>
<td>ASSISTANT CHIEF NURSE</td>
<td>LTC</td>
<td>66A00</td>
<td>AN</td>
</tr>
<tr>
<td></td>
<td>CHIEF WARDMASTER</td>
<td>MSG</td>
<td>91C50</td>
<td>NC</td>
</tr>
<tr>
<td></td>
<td>ASSISTANT CHIEF</td>
<td>SFC</td>
<td>91C40</td>
<td>NC</td>
</tr>
<tr>
<td></td>
<td>WARDMASTER</td>
<td>SFC</td>
<td>91V40</td>
<td>NC</td>
</tr>
<tr>
<td></td>
<td>RESPIRATORY NCO</td>
<td>SFC</td>
<td>91V40</td>
<td>NC</td>
</tr>
</tbody>
</table>

(1) Assistant chief nurse (66A00). The assistant chief nurse works in concert with the Chief, Nursing Service. This nurse plans, organizes, executes, and directs nursing care practices for the hospital. This officer holds the additional skill identifier (ASI) 8J as an infection control officer.

(2) Chief wardmaster (91C50). This master sergeant manages and supervises enlisted personnel and assists in the planning and operation of nursing service. He coordinates with the operations section in planning the hospital layout. He is responsible to the chief nurse for the erection of the hospital clinical facilities.

(3) Assistant chief wardmaster (91C40). This NCO assists the chief wardmaster in supervision of enlisted personnel and operation of nursing service.

(4) Respiratory noncommissioned officer (91V40). Under the technical guidance of a physician or nurse anesthetist, this NCO supervises the respiratory activities within nursing service.

i. Triage/Preoperative/Emergency Medical Treatment. This section provides for the receiving, triaging, and stabilizing of incoming patients. The staff will receive patients, assess their medical condition, provide EMT, and transfer them to the appropriate areas of the hospital. The staff will be trained in both advanced cardiac life support (ACLS) and ATM. The staff monitors patient conditions and prepares those requiring immediate surgery for the OR. Sick call for organic staff is conducted by this section. Table 2-9 lists the staffing for this section.
(1) Emergency physician (62A00). This physician is responsible to the Chief, Professional Services (or the designated chief of emergency medical services) for management and operations of this section. He examines, diagnoses, and treats or prescribes courses of treatment for the initial phase of diseases and injuries. This officer is the physician primarily responsible for triage.

(2) Head nurse (66H00). This nurse manages the operations of the EMT section, to include staffing and supervising nursing personnel and developing nursing policies and procedures. He is also responsible for the standard of nursing care provided and assists in providing patient care.

(3) Primary care physician (61H00). This physician provides care to patients in the areas of general medicine, obstetrics/gynecology (OB/GYN), psychiatry, PVNTMED, pediatrics, and orthopedics. When the EMT/surgical patient load is heavy, this officer can assume the duties of triage and preoperative evaluation/care.

(4) Emergency physician (62A00). This physician examines, diagnoses, and treats or prescribes course of treatment for the initial phase of disease and injuries.

(5) Medical-surgical nurses (66H00). These nurses plan and implement nursing care under the supervision of the head nurse. They provide direct supervision to subordinate nursing service personnel.

(6) Emergency treatment noncommissioned officer (91B40). This NCO is responsible to the senior nurse. He manages and supervises the enlisted nursing staff. He is also responsible for supplies and equipment.

(7) Emergency treatment noncommissioned officers (91B30/91B20). These NCOs are supervised by the principal NCO. They perform direct patient care within their scope of practice and under professional supervision. They supervise subordinate nursing staff.

(8) Medical specialists (91B10). Under professional supervision, these specialists are responsible for providing nursing care within their scope of practice.
of patients within the hospital on a 24-hour basis. The staffing is identified in Table 2-10.

### Table 2-10. Litter Bearer Section Organization

<table>
<thead>
<tr>
<th>LITTER BEARER SECTION</th>
<th>SGT</th>
<th>91B20</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SENIOR LITTER BEARER</td>
<td>SGT</td>
<td>91B20</td>
<td>(2)</td>
</tr>
<tr>
<td>LITTER BEARER</td>
<td>SPC</td>
<td>91B10</td>
<td>(2)</td>
</tr>
<tr>
<td>LITTER BEARER</td>
<td>PFC</td>
<td>91B10</td>
<td>(2)</td>
</tr>
</tbody>
</table>

(1) **Senior litter bearers (91B20)**. These NCOs are responsible to the emergency treatment NCO (triage/preoperative/EMT section). They supervise and coordinate the activities of the subordinate litter bearers.

(2) **Litter bearers (91B10)**. These litter bearers are responsible for transporting patients internally in the hospital. They are also responsible for loading and off-loading air and ground ambulances.

**k. Operating Room/Central Materiel Service (CMS) Control Team.** This team provides supervision of the OR and CMS. It is responsible for the scheduling of nursing staff, preparing and maintaining the OR and CMS, and the maintaining of surgical, anesthetic, and nursing standards within these areas. The OR/CMS control team is composed of an anesthesiologist, a clinical head nurse, an OR NCO, and a CMS NCO (Table 2-11).

### Table 2-11. Operating Room/Central Materiel Service Control Team Organization

<table>
<thead>
<tr>
<th>OPERATING ROOM/CENTRAL MATERIEL SERVICE CONTROL TEAM</th>
<th>LTC</th>
<th>60N00</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANESTHESIOLOGIST</td>
<td>LTC</td>
<td>60N00</td>
<td>MC</td>
</tr>
<tr>
<td>OPERATING ROOM CLINICAL HEAD NURSE</td>
<td>LTC</td>
<td>66E00</td>
<td>AN</td>
</tr>
<tr>
<td>CENTRAL MATERIEL SERVICE NCO</td>
<td>SFC</td>
<td>91D40</td>
<td></td>
</tr>
<tr>
<td>OPERATING ROOM NCO</td>
<td>SFC</td>
<td>91D40</td>
<td></td>
</tr>
</tbody>
</table>

(1) **Anesthesiologist (60N00)**. This physician supervises team members and is responsible to the Chief, Surgical Services. He establishes the hospital's anesthesiology program. He administers or supervises administration of anesthetics to patients in the ORs.

(2) **Operating room clinical head nurse (66E00)**. This officer is responsible to the chief nurse for the management of daily operations of the OR and CMS to include scheduling and supervision of nursing staff. He coordinates with the Chief, Surgical Services in the scheduling of patient cases. He is responsible for the quality of nursing care provided.

(3) **Central materiel service noncommissioned officer (91D40)**. This NCO is responsible to the clinical head nurse for supplies, equipment maintenance, and supervision of enlisted CMS nursing staff.

(4) **Operating room noncommissioned officer (91D40)**. This NCO is responsible to the clinical head nurse for the supervision and management of the enlisted OR nursing staff. He also manages supplies and equipment.
1. Operating Room A. This section provides general surgical services with two OR tables for a total of 36 hours of table time per day. The staff is composed of general surgeons, OR nurses, nurse anesthetists, and OR specialists (Table 2-12).

Table 2-12. Operating Room A Organization

<table>
<thead>
<tr>
<th>OPERATING ROOM A</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL SURGEON</td>
<td>MAJ</td>
<td>61J00 MC (2)</td>
</tr>
<tr>
<td>OPERATING ROOM NURSE</td>
<td>MAJ</td>
<td>68E00 AN</td>
</tr>
<tr>
<td>OPERATING ROOM NURSE</td>
<td>CPT</td>
<td>68E00 AN</td>
</tr>
<tr>
<td>CLINICAL NURSE, ANESTHETIST</td>
<td>CPT</td>
<td>66F00 AN (2)</td>
</tr>
</tbody>
</table>

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Table 2-15. Central Materiel Service Organization

<table>
<thead>
<tr>
<th>CENTRAL MATERIEL SERVICE</th>
<th>SPECIALIST</th>
<th>SGT 91D20</th>
<th>NC (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CENTRAL MATERIEL SERVICE</td>
<td>SPECIALIST</td>
<td>SPC 91D10</td>
<td>(2)</td>
</tr>
<tr>
<td>CENTRAL MATERIEL SERVICE</td>
<td>SPECIALIST</td>
<td>PFC 01D10</td>
<td>(4)</td>
</tr>
</tbody>
</table>

(1) Central materiel service specialists (91D20). These NCOs work under the supervision of the CMS NCO of the OR/CMS control team. They supervise the activities of the CMS specialists. They ensure that sterilization techniques and procedures are applied and further ensure that safe sterile supplies are provided to users on a timely basis. They also supervise operator-level maintenance on CMS equipment.

(2) Central materiel service specialists (91D10). These CMS specialists are responsible to the CMS section sergeants. They perform CMS functions within their scope of responsibility.

p. Dental Services. This section provides dental services and consultation for patients and staff. During mass casualty situations, the dentists assist in the delivery of ATM. The oral surgeon uses the ORB or the dental operatory to perform oral and maxillofacial surgery. The staff is composed of an oral surgeon, a comprehensive dental officer, a preventive dental NCO, and a dental specialist (Table 2-16).

Table 2-16. Dental Services Organization

<table>
<thead>
<tr>
<th>DENTAL SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORAL AND MAXILLOFACIAL SURGEON</td>
</tr>
<tr>
<td>COMPREHENSIVE DENTAL OFFICER</td>
</tr>
<tr>
<td>PREVENTIVE DENTAL NCO</td>
</tr>
<tr>
<td>DENTAL SPECIALIST</td>
</tr>
</tbody>
</table>

(1) Oral and maxillofacial surgeon (63N00). This officer examines, diagnoses, and treats or prescribes courses of treatment for conditions which involve oral surgical procedures, including oral and maxillofacial injuries, wounds, and infections. Additionally, treatment is provided to patients referred by other dental and medical facilities when required oral and maxillofacial care is beyond the capability of the referring facility. This officer is responsible to the Chief, Professional Services for the technical and administrative management of the section.

(2) Comprehensive dental officer (63B00). This officer provides emergency care to staff and in-patients. When work load permits, this officer provides maintaining-level dental care to the same population and to patients referred from other dental and medical facilities when the required dental treatment is beyond the capability of the referring facility. In addition, he provides OR assistance and support to the oral and maxillofacial surgeon, when requested. He also augments the ATM capability of the hospital, particularly during mass casualty situations.

(3) Preventive dental noncommissioned officer (91E20). This NCO assists the dental officers in prevention, examination, and treatment of diseases of teeth and oral region. He also performs those administrative tasks as directed by the oral surgeon. He supervises operator-level maintenance of the
dental equipment. This NCO holds the ASI X2, designating formal dental hygiene training.

(4) Dental specialist (91E10). This specialist is responsible to the preventive dental NCO. He assists in the prevention, examination, and treatment of diseases of teeth and oral region. He performs operator-level maintenance of dental equipment.

q. Inpatient Medicine A. This section provides medical services such as consultations, as requested; evaluation and treatment of infectious disease and internal medicine disorders; evaluation and treatment of skin disorders; and treatment of patients with gynecological disease, injury, or disorders. Staffing includes internists, primary care physicians, and an obstetrician and gynecologist (Table 2-17).

<table>
<thead>
<tr>
<th>OBSTETRICIAN AND GYNECOLOGIST</th>
<th>MAJ 60J00</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERNIST</td>
<td>MAJ 61F00</td>
<td>MC (2)</td>
</tr>
<tr>
<td>PRIMARY CARE PHYSICIAN</td>
<td>CPT 61H00</td>
<td>MC (2)</td>
</tr>
</tbody>
</table>

(1) Obstetrician/gynecologist (60J00). This physician provides medical care during pregnancy, performs obstetric deliveries, and examines, diagnoses, and treats or prescribes courses of treatment for patients who have gynecological disease, injury, or disorders. He is responsible to the Chief, Professional Services for the technical and administrative management of this section.

(2) Internists (61F00). These internists examine, diagnose, and treat patients with medical illnesses and recommend courses of management for those illnesses.

(3) Primary care physicians (61H00). These physicians provide comprehensive health care to patients in the areas of general medicine, OB/GYN, psychiatry, PVNTMED, pediatrics, and orthopedics in both inpatient and outpatient care. They may be used to augment surgical specialties in triage and preoperative care.

r. Intensive Care Unit Wards. These three 12-bed intensive care units (ICUs) provide for critically injured or ill patients. As ICU nurses, the clinical nurses hold an ASI of 8A. This section is under the supervision of the nursing service control team. Nursing care is performed for those patients who require close observation and vital sign monitoring, complex nursing care, and mechanical respiratory assistance. The ICU is also used as a postanesthesia recovery area for patients after surgery. Intensive care is provided by a staff of a clinical head nurse, clinical nurses, a wardmaster, practical nurses, and medical and respiratory specialists (Table 2-18).
Table 2-18. Intensive Care Unit Ward Organization

<table>
<thead>
<tr>
<th>INTENSIVE CARE UNIT WARD (3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTENSIVE CARE UNIT</strong></td>
<td></td>
</tr>
<tr>
<td>CLINICAL HEAD NURSE</td>
<td>MAJ 66H00 AN (3)</td>
</tr>
<tr>
<td>CLINICAL NURSE</td>
<td>CPT 66H00 AN (9)</td>
</tr>
<tr>
<td>CLINICAL NURSE</td>
<td>LT 66H00 AN (6)</td>
</tr>
<tr>
<td>WARDMASTER</td>
<td>SFC 91C40 NC (3)</td>
</tr>
<tr>
<td>PRACTICAL NURSE</td>
<td>SSG 91C30 NC (9)</td>
</tr>
<tr>
<td>RESPIRATORY NCO</td>
<td>SSG 91V30 NC (3)</td>
</tr>
<tr>
<td>PRACTICAL NURSE</td>
<td>SGT 91C20 NC (9)</td>
</tr>
<tr>
<td>RESPIRATORY SERGEANT</td>
<td>SGT 91V20 NC (3)</td>
</tr>
<tr>
<td>MEDICAL SPECIALIST</td>
<td>SPC 91B10 (6)</td>
</tr>
</tbody>
</table>

(1) Clinical head nurses, intensive care unit (66H00). These officers are responsible to the nursing service control team for managing the operations of the ICU to include the development of nursing policies and procedures and the scheduling and supervision of nursing staff. They are responsible for the quality of nursing care. They supervise all other ICU nursing personnel.

(2) Clinical nurses, intensive care unit (66H00). These clinical nurses are responsible to the clinical head nurse for planning and providing nursing care of a specialized and technical nature for the care and treatment of critically injured or ill and postanesthesia patients. They supervise enlisted nursing personnel.

(3) Wardmasters (91C40). These NCOs work under the supervision of the ICU head nurses. They also work in concert with the chief wardmaster of the nursing control team. They manage and supervise enlisted personnel and assist in the planning and operation of the ICU.

(4) Practical nurses (91C30). These practical nurses are responsible to the wardmaster. They provide direct patient care under professional supervision within their scope of practice. They also assist in supervising the subordinate enlisted nursing staff.

(5) Respiratory noncommissioned officers (91V30). These NCOs provide technical guidance and training of subordinate personnel. They manage the respiratory care functions under the supervision of a physician or nurse anesthetist.

(6) Practical nurses (91C20). These practical nurses perform preventive, therapeutic, and emergency nursing care procedures under professional supervision within their scope of practice.

(7) Respiratory sergeants (91V20). These respiratory sergeants provide treatment for patients with cardiopulmonary problems under the supervision of a physician or nurse anesthetist. Included is emergency care in cases of heart failure, shock, treatment of acute respiratory symptoms in cases of head injuries, and respiratory complications in patients having thoracic or abdominal surgery.

(8) Medical specialists (91B10). These specialists provide direct patient care within their scope of practice under the supervision of a clinical or practical nurse.

s. Intermediate Care Wards. These seven intermediate care wards (ICWs) with 20 beds per ward are identical in personnel and equipment. They are under the supervision of the nursing service control team. These wards provide care for patients whose conditions vary from acute to moderate. The nursing care staff consists of a
clinical head nurse, clinical nurses, a wardmaster, practical nurses, and medical specialists (Table 2-19). The responsibilities and functions of the clinical head nurses, clinical nurses (66H00), wardmasters, practical nurses, and medical specialists are the same as those identified in paragraph r above. The clinical nurses (66J00) assist the clinical head nurse in their duty performance. They perform first-level nursing care duties within their scope of clinical nursing activities. The lowest-grade medical specialist is the designated vehicle operator for the section.

Table 2-19. Intermediate Care Ward Organization

<table>
<thead>
<tr>
<th>INTERMEDIATE CARE WARD (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CLINICAL</strong></td>
</tr>
<tr>
<td>HEAD NURSE</td>
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<tr>
<td>NURSE</td>
</tr>
<tr>
<td>NURSE</td>
</tr>
<tr>
<td>NURSE</td>
</tr>
<tr>
<td>WARDMASTER</td>
</tr>
<tr>
<td>PRACTICAL NURSE</td>
</tr>
<tr>
<td>PRACTICAL NURSE</td>
</tr>
<tr>
<td>MEDICAL SPECIALISTS</td>
</tr>
<tr>
<td>MEDICAL SPECIALISTS</td>
</tr>
</tbody>
</table>

1. Neuropsychiatric Ward and Consultation Service. This section provides NP diagnosis and consultation to all areas of the hospital; it staffs a 20-bed ward for inpatient stabilization of NP patients. The staff for this section consists of a psychiatrist, psychiatric nurses, clinical nurses, a social worker, a behavioral science NCO, an occupational therapy NCO, and psychiatric specialists (Table 2-20). Medical group and brigade headquarters integrate the CSH NP section’s operations with those of the division and ASMB mental health sections, and with the CSC units in the area. To the extent possible, the CSH NP ward should receive only those NP and/or stress casualties who are too disturbed to receive restoration treatment at Echelon II MTFs or CSC fatigue centers. These casualties include--

- Cases of psychosis, paranoia, mania, and suicidal depression.
- Substance overdose or withdrawal requiring detoxification.
- Mental or bodily symptoms which require CSH laboratory and x-ray capability to rule out life-or limb-threatening organic causes.
<table>
<thead>
<tr>
<th>Position</th>
<th>Rank</th>
<th>Code</th>
<th>Branch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrist</td>
<td>MAJ</td>
<td>60W00</td>
<td>MC</td>
</tr>
<tr>
<td>Psychiatric/Nursing Health Nurse</td>
<td>MAJ</td>
<td>66C00</td>
<td>AN</td>
</tr>
<tr>
<td>Nurse</td>
<td>CPT</td>
<td>86C00</td>
<td>AN (2)</td>
</tr>
<tr>
<td>Social Work Officer</td>
<td>CPT</td>
<td>73A6</td>
<td>MS</td>
</tr>
<tr>
<td>Clinical Nurse</td>
<td>LT</td>
<td>66H00</td>
<td>AN</td>
</tr>
<tr>
<td>Psychiatric NCO</td>
<td>SSG</td>
<td>91F30</td>
<td>NC</td>
</tr>
<tr>
<td>Wardmaster</td>
<td>SSG</td>
<td>91F30</td>
<td>NC</td>
</tr>
<tr>
<td>NCO</td>
<td>SGT</td>
<td>91F20</td>
<td>NC (3)</td>
</tr>
<tr>
<td>Behavioral Science NCO</td>
<td>SGT</td>
<td>91G20</td>
<td>NC</td>
</tr>
<tr>
<td>Occupational Therapy NCO</td>
<td>SGT</td>
<td>91B20</td>
<td>NC</td>
</tr>
<tr>
<td>Psychiatric Specialist</td>
<td>SPC</td>
<td>91F10</td>
<td>(2)</td>
</tr>
<tr>
<td>Specialist</td>
<td>PFC</td>
<td>91F10</td>
<td></td>
</tr>
</tbody>
</table>

The mission of the NP ward is to provide brief (2 to 4 days) stabilization. The patients are then reevaluated to determine if they should be--

- Evacuated to a GH in the COMMZ (or to CONUS) for further stabilization and evacuation, definitive treatment, or administrative discharge.
- Evacuated to a FH or CSC company in the COMMZ for RTD after 14 to 28 days of further reconditioning (depending on the theater evacuation policy).
- Returned to duty in the CZ, usually after transfer to a CSC unit's reconditioning center for 4 to 10 days further treatment.

The CSC reconditioning center may be collocated with the CSH. The CSC center will maintain its separate, nonhospital identity, but coordinates closely with the CSH's NP service. The CSC reconditioning center, if attached to the CSH, will require administrative and logistical support. The NP section's consultation mission provides--

- Diagnosis and recommendations for treatment for medical/surgical patients with organic mental disorders on all other CSH wards and in-patient admissions (emergency room).
- Assistance, including stress debriefings, to all RTD and NRTD patients with stress issues.
- Assistance, including routine and special stress debriefings, to all CSH staff, in close cooperation with leadership and the chaplains.

Stress casualties (battle fatigue and misconduct stress behaviors) may be brought to the hospital who do not require in-patient admission. Those cases must be triaged by the NP service and treated and released to their units for duty, administrative action, or rest and outpatient follow-up.

(1) Psychiatrist (60W00). This officer is responsible to the Chief, Professional Services for the technical and administrative management of this section. He supervises the NP service staff, advises the CSH commander, and provides technical supervision of NP/mental health activities throughout the CSH. He examines, diagnoses, treats and or prescribes treatment, and recommends disposition for patients and staff with NP and stress disorders.
(2) **Psychiatric/mental health nurse (66C00).** This officer is responsible for the technical and professional management of the NP ward nursing staff. He provides psychiatric nursing consultation to all other wards of the CSH. He provides specialized nursing services for patients with psychiatric and emotional problems and promotes mental health within the hospital and support area. This nurse performs liaison, consultative, and training functions throughout the CSH to enhance the continuity and quality of patient care.

(3) **Psychiatric/mental health nurses (66C00).** These officers are responsible to the psychiatrist and head nurse in the operation of the ward and consultation throughout the hospital. They develop and carry out nursing care plans for each NP ward patient. These nurses also assist in the training, supervising, and technical management of subordinate NP ward staff, including the nonpsychiatrically trained nurses and augmenting technicians.

(4) **Social work officer (73A67).** This officer is responsible to the psychiatrist. He provides stress control prevention and treatment throughout the hospital, and especially to the minimum care (RTD-oriented) wards. He supports the NP ward by evaluating the RTD potential of patients, based on interviews with the soldier, plus data from the soldier's unit. He coordinates RTD, administrative disposition, or transfer to the CSC reconditioning center. The social work officer also assures effective use of social service support agencies for patients and CSH staff members.

(5) **Clinical nurse (66H00).** This clinical nurse is responsible to the head nurse for direct and surgical nursing care to patients on the ward. He is cross-trained in stress control techniques and procedures.

(6) **Psychiatric noncommissioned officer (91F30).** This NCO assists the wardmaster in the performance of his duties. He provides psychiatric nursing care duties within his scope of practice under professional supervision.

(7) **Psychiatric wardmaster (91F30).** This NCO assists the psychiatrist and nursing staff with the management and administrative functions of the ward. He provides psychiatric nursing care duties within his scope of practice under professional supervision.

(8) **Psychiatric noncommissioned officers (91F20).** Under professional supervision, these NCOs provide psychiatric nursing care within their scope of practice.

(9) **Behavioral science noncommissioned officer (91G20).** Under professional supervision, this NCO provides mental health assessment and care within his scope of practice.

(10) **Occupational therapy noncommissioned officer (91B20, ASI N3).** This NCO is responsible to the head nurse for establishing and conducting the work therapy and recreational programs throughout the CSH, and especially the minimal care wards. Under professional supervision, he provides occupational therapy within his scope of practice. If additional clinical guidance is required for planning and implementing occupational therapy programs, occupational therapists (65A) are assigned to CSC companies and detachments, FHS, and GHs.

(11) **Psychiatric specialists (91F10).** These specialists are responsible to the psychiatric NCOs. Under professional supervision, they provide care and treatment for psychiatric, drug, and alcohol patients within their scope of practice.

**u. Minimal Care Wards.** These two minimal care wards of 20 beds each provide care for patients whose conditions vary from moderate to minimal. These are convalescent patients with minimal requirements for...
nursing and medical treatment. Staffing is composed of clinical nurses, a wardmaster, practical nurses, and medical specialists (Table 2-21). Resupply of consumables is similar to that described for the ICU.

**Table 2-21. Minimal Care Ward Organization**

<table>
<thead>
<tr>
<th>MINIMAL CARE WARD (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLINICAL NURSE LT 66H00 AN (2)</td>
</tr>
<tr>
<td>WARDMASTER SSG 91C30 NC</td>
</tr>
<tr>
<td>PRACTICAL NURSE SGT 91C20 NC</td>
</tr>
<tr>
<td>MEDICAL SPECIALISTS SPC 91B10 (2)</td>
</tr>
<tr>
<td>MEDICAL SPECIALISTS PFC 91B10 (2)</td>
</tr>
</tbody>
</table>

(1) **Clinical nurses (66H00).** These nurses are responsible to the nursing service control team for management and operations of the ward. They supervise the enlisted nursing staff and perform appropriate nursing duties.

(2) **Wardmaster (91C30).** This NCO assists the clinical nurses in ward management. He provides nursing care leadership and supervises subordinate staff. This NCO also works in concert with the chief wardmaster of the nursing service control team.

(3) **Practical nurse (91C20).** This practical nurse is responsible to the wardmaster and, under professional supervision, performs nursing care duties within his scope of practice.

(4) **Medical specialists (91B10).** Under professional supervision, these specialists provide medical treatment to patients within their scope of practice.

**v. Pharmacy Services.** The pharmacy is responsible for quality control of pharmaceuticals, distribution of bulk drugs, maintenance and publication of the hospital formulary, and the intravenous (IV)-additive program. This section maintains a registry for controlled drugs. The pharmacy provides discharge medications for the required number of days to complete therapy and/or a 5-day supply of medications required for air evacuation out of theater. The pharmacy requisitions required supplies through the logistics section to the supporting MEDLOG battalion (forward). The staff is composed of pharmacy officers, NCOs, and specialists (Table 2-22). Three of the enlisted staff hold the ASI Y7 (sterile pharmacy specialty) for the IV-additive program.

**Table 2-22. Pharmacy Services Organization**

<table>
<thead>
<tr>
<th>PHARMACY SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIEF, PHARMACY SERVICES MAJ 67E00 MS</td>
</tr>
<tr>
<td>PHARMACY OFFICER CPT 67E00 MS</td>
</tr>
<tr>
<td>NCO SFC 91Q40 NC</td>
</tr>
<tr>
<td>NCO SSG 91Q30 NC</td>
</tr>
<tr>
<td>STERILE PHARMACY NCO SSG 91Q30 NC</td>
</tr>
<tr>
<td>PHARMACY SPECIALIST SPC 91Q10</td>
</tr>
<tr>
<td>STERILE PHARMACY SPECIALIST SPC 91Q10</td>
</tr>
<tr>
<td>PHARMACY SPECIALISTS PFC 91Q10</td>
</tr>
<tr>
<td>STERILE PHARMACY SPECIALISTS PFC 91Q10</td>
</tr>
</tbody>
</table>

(1) **Chief, pharmacy services (67E00).** This officer is responsible to the Chief, Professional Services (or...
the designated chief of ancillary service). He directs, plans, and participates in all hospital pharmaceutical activities. He is responsible for and maintains security within the pharmacy area and monitors the storage, security, and control to include inventories and audit trails of controlled substances. He also acts as a liaison between the professional staff and the logistics office for requisition of pharmaceutical items.

(2) Pharmacy-officer (67E00). This officer assists the Chief, Pharmacy Services in the performance of his duties. He supervises other pharmaceutical staff and collects data for required reports.

(3) Pharmacy noncommissioned officer (91Q40). This NCO serves as the noncommissioned officer in charge (NCOIC), pharmacy services. He is responsible for the work schedule of subordinate specialists; he is also responsible for ensuring adequate training for all subordinate specialists. He prepares, controls, and issues pharmaceutical products under the supervision of a pharmacist. He also assists with the supervision of the section, providing technical guidance to subordinate personnel.

(4) Pharmacy and sterile pharmacy noncommissioned officers (91Q30). These NCOs assist the pharmacy officer and NCO in their duty performance. They prepare, control, and issue pharmaceutical products, ensuring compliance with Army and Federal rules, laws, and regulations relative to pharmacy operations. One of these specialists holds the Y7 ASI. This specialist serves as the NCOIC of the sterile products service. He performs sterile technique procedures in the preparation of items such as IV-additives which are used to combat infection and to restore and maintain electrolyte and nutritional balance.

(5) Pharmacy/sterile pharmacy specialists (91Q10). Under professional supervision, these specialists perform pharmaceutical duties within their scope of duties. Two of these specialists will hold the Y7 ASI. Their duties as sterile pharmacy specialists will be the same as those identified in paragraph (4) above.

w. Laboratory Services. This section performs a limited array of analytical procedures in hematology, urinalysis, chemistry, microbiology, and blood bank. The staff is composed of a clinical laboratory officer, laboratory NCOs, and medical laboratory specialists (Table 2-23). The 91K10 specialists hold the M4 ASI in blood banking procedures in order to provide back up capability for the blood bank section.

Table 2-23. Laboratory Services Organization

<table>
<thead>
<tr>
<th>LABORATORY SERVICES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CLINICAL LABORATORY OFFICER</td>
<td>CPT 71E67 MS</td>
</tr>
<tr>
<td>MEDICAL LABORATORY NCO</td>
<td>SFC 91K40 NC</td>
</tr>
<tr>
<td>SPECIALIST</td>
<td>SSG 91K30 NC (3)</td>
</tr>
<tr>
<td>SPECIALIST</td>
<td>SGT 91K20 NC</td>
</tr>
<tr>
<td>SPECIALIST</td>
<td>SPC 91K10 (2)</td>
</tr>
<tr>
<td>SPECIALIST</td>
<td>PFC 91K10 (4)</td>
</tr>
</tbody>
</table>

(1) Clinical laboratory officer (71E67). This officer is responsible to the Chief, Professional Services (or the designated chief of ancillary services) for management and operation of the laboratory section. He directs the performance of laboratory procedures used in the detection, diagnosis, treatment, and prevention of disease. He establishes and supervises an appropriate laboratory quality control program. He also supervises the blood bank activities.

(2) Medical laboratory noncommissioned officer (91K40). This NCO advises and assists the laboratory officer in laboratory operations, supply economy and inventory management, advanced technical procedures, and administrative requirements. He provides technical guidance and supervision to the
subordinate staff.

(3) Medical laboratory specialists (91K30). These specialists perform elementary and advanced examinations of patient-derived specimens (including suspect biological warfare specimens) to aid in the diagnosis, treatment, and prevention of disease.

(4) Medical laboratory specialist (91K20). This laboratory specialist performs clinical laboratory procedures in hematology, biochemistry, serology, bacteriology, parasitology, and urinalysis. He collects and processes specimens for shipment to supporting laboratories and stores and issues blood.

(5) Medical laboratory specialists (91K10) (ASI M4). These specialists perform elementary clinical laboratory and blood banking procedures under the supervision of the laboratory NCO.

x. Blood Bank. This section provides all routine blood grouping and typing, abbreviated cross-matching procedures, emergency blood collection, and blood inventory management. It has the capacity to store and issue liquid blood components and fresh frozen plasma. Staffing for this section includes a medical laboratory NCO and medical laboratory specialists (Table 2-24). All blood bank personnel hold the M4 ASI.

<table>
<thead>
<tr>
<th>Table 2-24. Blood Bank Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BLOOD BANK</strong></td>
</tr>
<tr>
<td><strong>MEDICAL LABORATORY</strong></td>
</tr>
<tr>
<td>NCO</td>
</tr>
<tr>
<td>SPECIALIST</td>
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<tr>
<td>SPECIALIST</td>
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<td>SPECIALIST</td>
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<tr>
<td>SPECIALIST</td>
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<tr>
<td>SPECIALIST</td>
</tr>
</tbody>
</table>

(1) Medical laboratory noncommissioned officer (91K30). This NCO is responsible to the Chief, Laboratory Services for the management and operation of this section. He performs advanced procedures in all phases of blood banking. He supervises subordinate specialists in the performance of their duties.

(2) Medical laboratory specialists (91K20/91K10). The duties and functions of the remaining staff are the same as the corresponding staff in paragraphs w(4) and (5).

y. Radiology Service. This section provides radiological services to all areas of the hospital and operates on a 24-hour basis. Staffing includes a radiologist, x-ray NCOs, and x-ray specialists (Table 2-25).

<table>
<thead>
<tr>
<th>Table 2-25. Radiology Service Organization</th>
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</thead>
<tbody>
<tr>
<td><strong>RADIOLOGY SERVICE</strong></td>
</tr>
<tr>
<td>DIAGNOSTIC RADIOLoGIST MAJ 61R00 MC</td>
</tr>
<tr>
<td>SPECIALIST</td>
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<tr>
<td>SPECIALIST</td>
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<tr>
<td>SPECIALIST</td>
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<td>SPECIALIST</td>
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</tbody>
</table>

(1) Diagnostic radiologist (61R00). This officer is responsible to the Chief, Professional Services (or the
designated chief of ancillary service) for the management and operation of this section. He performs and interprets all diagnostic radiological and fluoroscopic procedures, including special vascular studies and imaging, on patients referred by other physicians.

(2) Radiology specialist (91P30). This specialist assists the radiologist in the performance of his duties, to include technical guidance to subordinate personnel. He assists in the technical and administrative management of this section.

(3) Radiology sergeant (91P20). This NCO performs duties within his scope of training under the supervision of the radiology specialist.

(4) Radiology specialists (91P10). These specialists perform duties within their scope of training under the supervision of the x-ray NCOs. They also perform vehicle operator duties for the section.

z. Physical Therapy Service. This section provides inpatient physical therapy services and consultation for patients. The primary wartime role of this section is evaluating and treating neuromusculoskeletal conditions and providing burn/wound care to patients with potential for RTD within the corps evacuation policy. During mass casualty situations, physical therapy personnel may be utilized in managing minimal or delayed patients, or augmenting the orthopedic staff. The staff is composed of a physical therapist and physical therapy sergeants (Table 2-26).

<table>
<thead>
<tr>
<th>Table 2-26. Physical Therapy Service Organization</th>
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</thead>
<tbody>
<tr>
<td>PHYSICAL THERAPY SERVICE</td>
</tr>
<tr>
<td>PHYSICAL THERAPIST CPT 65800 SP</td>
</tr>
<tr>
<td>PHYSICAL THERAPY SERGEANT SGT 91820 (2)</td>
</tr>
</tbody>
</table>

(1) Physical therapist (65B00). This officer is responsible to the Chief, Professional Services (or the designated chief of ancillary service) for the management and supervision of physical therapy services. The physical therapist plans and supervises physical therapy programs upon referral from medical officers. This officer also provides guidance in the areas of physical fitness, physical training, and injury prevention.

(2) Physical therapy sergeants (91B20, ASI N9). These physical therapy sergeants are responsible to the physical therapist. They provide physical therapy treatment to patients within their scope of practice.

aa. Hospital Ministry Team. This section is composed of a chaplain, a senior chaplain's assistant, and a chaplain's assistant to provide religious support and pastoral care ministry for assigned staff and patients (Table 2-27).
Table 2-27. Hospital Ministry Team
Organization

<table>
<thead>
<tr>
<th>HOSPITAL MINISTRY TEAM</th>
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</thead>
<tbody>
<tr>
<td>HOSPITAL CHAPLAIN</td>
</tr>
<tr>
<td>CPT 56A00 CH</td>
</tr>
<tr>
<td>SENIOR CHAPLAIN'S</td>
</tr>
<tr>
<td>ASSISTANT SGT 71M20 NC</td>
</tr>
<tr>
<td>CHAPLAIN'S ASSISTANT</td>
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<tr>
<td>PFC 71M10</td>
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</tbody>
</table>

(1) Hospital chaplain (56A00). This chaplain, supervised by the hospital headquarters chaplain, coordinates the program of religious ministries, including workshops, pastoral counseling, and religious education for the hospital. He supervises the activities of the other ministry team staff.

(2) Senior chaplain's assistant (71M20). This senior chaplain's assistant is responsible to the hospital chaplain and assists him in his duties. He also supervises the activities of the chaplain's assistant.

(3) Chaplain's assistant (71M10). This assistant is responsible to the senior chaplain's assistant. He prepares the chapel for worship and prepares sacraments of Protestant, Catholic, Orthodox, and Jewish faiths.

2-6. The Hospital Unit, Surgical

The HUS augments the HUB to form the CSH. The HUS is composed of the following sections:

a. Unit Headquarters. This section provides augmentation to the HUB to assist in nursing supervision, hospital operation, and company headquarters operation. The staff is composed of the HUS commander, an assistant chief nurse, a field medical assistant, a detachment NCO, and a patient administration specialist (Table 2-28).

Table 2-28. Hospital Unit, Surgical Headquarters Organization

<table>
<thead>
<tr>
<th>UNIT HEADQUARTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMANDER LTC 61J00 MC</td>
</tr>
<tr>
<td>ASSISTANT CHIEF LTC 56A00 AN</td>
</tr>
<tr>
<td>NURSING SERVICE LTC 56A00 AN</td>
</tr>
<tr>
<td>FIELD MEDICAL ASSISTANT CPT 70B67 MS</td>
</tr>
<tr>
<td>DETACHMENT NCO SFC 91B40 NC</td>
</tr>
<tr>
<td>PATIENT ADMINISTRATION SPECIALIST SPC 71G10</td>
</tr>
</tbody>
</table>

(1) Hospital commander (61J00). This officer, in his capacity as the HUS commander, ensures a smooth and functional integration of unity of the HUS with the HUB. Once the two units are combined to form a CSH, this officer performs the duties of a surgeon in OR C.

(2) Assistant chief nursing service (66A00). This officer functions in unison with the chief nurse of the HUB in providing the necessary planning, execution, and direction for the HUS.

(3) Field medical assistant (70B67). This officer assists the HUS commander in the areas of organizational administration, supply, training, operation, transportation, and patient evacuation.
collocated with the HUB, this officer will perform duties as the hospital plans officer.

(4) Detachment noncommissioned officer (91B40). The detachment NCO is the principal enlisted assistant to the HUS commander. He maintains liaison between the HUS commander and assigned NCOs, provides guidance to enlisted members of the HUS, and represents them to the commander. When the HUB and HUS unite to form a CSH, he also functions as the first sergeant of the medical holding detachment. As such, he is supervised by the HUB company headquarters commander who functions as the commander, medical holding detachment.

(5) Patient administration specialist (71G10). This specialist works in concert with the PAD of the HUB in preparing and maintaining patient records, to include statistical data for required reports.

b. Supply and Service Division (Augmentation). Because of the increased work load associated with the HUS, this section augments the supply and service division of the HUB. Staffing includes a medical supply sergeant, a supply sergeant, medical supply specialists, and supply specialists (Table 2-29).

<table>
<thead>
<tr>
<th>Table 2-29. Supply and Service Division Organization</th>
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<tbody>
<tr>
<td>SUPPLY AND SERVICE DIVISION</td>
</tr>
<tr>
<td>MEDICAL SUPPLY SERGEANT</td>
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<tr>
<td>SUPPLY SERGEANT</td>
</tr>
<tr>
<td>MEDICAL SUPPLY SPECIALIST</td>
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<td>SUPPLY SPECIALIST</td>
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<tr>
<td>MEDICAL SUPPLY SPECIALIST</td>
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<tr>
<td>SUPPLY SPECIALIST</td>
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</tbody>
</table>

(1) Medical supply sergeant (76J20). This NCO is responsible to the medical supply NCO (HUB) for medical supply operations, stock control, and medical assemblage management. He is responsible for the development and preparation of plans, maps, overlays, sketches, and other administrative procedures related to employment of the HUS supply and service division.

(2) Supply sergeant (92Y20). This NCO is responsible for general supply operations, to include supervision of the supply specialists. He maintains accountability for all equipment organic to the HUS.

(3) Medical supply specialists (76J10). These specialists are responsible to the medical supply sergeant for performing designated medical supply and equipment functions.

(4) Supply specialists (92Y10). These supply specialists assist the supply sergeant in his duty performance. They request, receive, inspect, load, unload, segregate, store, issue, and turn in organizational supplies and equipment. One of the specialists will function as the armorer. The armorer maintains the weapons storage area, issues and receives small arms and ammunitions, and performs small arms unit maintenance.

c. Operating Room/Central Material Service Control Team. This team provides augmentation to the HUB to assist in supervising and scheduling the nursing staff and in preparing and maintaining the OR/CMS. The ranks and titles of the personnel (Table 2-30) are designed to interface with the HUB OR/CMS control team (Table 2-11) to provide support without duplicating duties and responsibilities.
Table 2-30. Operating Room/Central Materiel Service Control Team Organization

<table>
<thead>
<tr>
<th>OPERATING ROOM/CENTRAL MATERIEL SERVICE CONTROL TEAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANESTHESIOLOGIST LTC 60N00 MC</td>
</tr>
<tr>
<td>CLINICAL HEAD NURSE, ANESTHETIST LTC 66F00 AN</td>
</tr>
<tr>
<td>ANESTHESIOLOGIST MA 60N00 MC</td>
</tr>
<tr>
<td>ASSISTANT CLINICAL HEAD NURSE, OPERATING ROOM MAJ</td>
</tr>
<tr>
<td>66E00 AN</td>
</tr>
</tbody>
</table>

(1) Anesthesiologists (60N00). This physician administers or supervises administration of anesthetics to patients.

(2) Clinical head nurse, anesthetist (66F00). This officer performs nursing duties in the care of patients requiring general or regional anesthesia, respiratory care, cardiopulmonary resuscitation, and/or fluid therapy. Under the supervision of an anesthesiologist, he administers general and regional anesthesia for surgical patients as required.

(3) Assistant head nurse, operating room (66E00). This assistant head nurse performs nursing duties in any phase of the operative process for patients undergoing all types of surgery and provides safe supplies and equipment for operative services.

d. Triage/Preoperative/Emergency Medical Treatment Section. This section provides for the receiving, triaging, and stabilizing of incoming patients. The staff receives patients, assesses their medical condition, provides EMT, and triages them to the appropriate nursing unit or health service. The staff will be trained in both advanced ACLS and ATM. The staff monitors patient conditions and prepares those requiring immediate surgery for the OR. This section works in conjunction with the triage/preoperative/EMT section, located in the HUB, to handle the overall work load for the hospital. This section gives the hospital commander several options:

- Personnel can be used to supplement HUB EMT with its equipment remaining loaded for use as a jump or movement echelon.
- Part of the equipment and staff can be used to have a sick call or minor injury area with all major trauma sent to the main EMT.
- The hospital can have two fully operational EMTs. This would require the headquarters to carefully monitor and evaluate the admissions and OR requirements of these two sections if both were treating major trauma patients.

The staffing of this section is identical to that of the HUB (Table 2-9). The duties and responsibilities are the same for the corresponding positions as identified in paragraphs 2-51(1)--(8).

e. Operating Room C. This section provides general and ear, nose, and throat (ENT) surgical services with two OR tables for a total of 36 hours of table time per day. The staff for this section includes general surgeons, clinical and OR nurses, an OR NCO, and OR specialists (Table 2-31).
Table 2-31. Operating Room C Organization

<table>
<thead>
<tr>
<th>OPERATING ROOM C</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL SURGEON</td>
</tr>
<tr>
<td>LTC 61J00 MC*</td>
</tr>
<tr>
<td>GENERAL SURGEON</td>
</tr>
<tr>
<td>MAJ 61J00 MC (3)</td>
</tr>
<tr>
<td>OPERATING ROOM NURSE</td>
</tr>
<tr>
<td>CPT 66E00 AN</td>
</tr>
<tr>
<td>CLINICAL NURSE, ANESTHETIST</td>
</tr>
<tr>
<td>CPT 66F00 AN (5)</td>
</tr>
<tr>
<td>OPERATING ROOM</td>
</tr>
<tr>
<td>NCO SSG 91D30 NC</td>
</tr>
<tr>
<td>SPECIALIST SGT 91D20 NC</td>
</tr>
<tr>
<td>SPECIALIST SPC 91D10</td>
</tr>
<tr>
<td>SPECIALIST PFC 91D10 (3)</td>
</tr>
</tbody>
</table>

* THE HUS COMMANDER ALSO FUNCTIONS AS GENERAL SURGEON IN OR C.

(1) General surgeons (61J00). These surgeons examine, diagnose, treat or prescribe courses of treatment and surgery for patients having injuries or disorders with surgical conditions, and perform required surgery. As noted in Table 2-31, the commander, HUS also functions as a general surgeon in OR C. This requirement is accounted for in the unit headquarters and is not included in the total authorizations for the OR.

(2) Other assigned personnel. The duties and responsibilities of the OR nurse, clinical nurse (anesthetist), OR NCO, and OR specialists are the same as identified in paragraphs 2-51 (3) through (6).

f. Operating Room D. This section provides primarily orthopedic, thoracic, and urological surgical services with two OR tables for a total of 36 hours of table time per day. Staffing for this section includes a thoracic surgeon, a urologist, an orthopedic surgeon, a clinical nurse (anesthetist), an OR nurse, an OR NCO, and OR specialists (Table 2-32).

Table 2-32. Operating Room D Organization

<table>
<thead>
<tr>
<th>OPERATING ROOM D</th>
</tr>
</thead>
<tbody>
<tr>
<td>UROLOGIST MAJ 60K00 MC</td>
</tr>
<tr>
<td>THORACIC SURGEON MAJ 61K00 MC</td>
</tr>
<tr>
<td>ORTHOPEDIC SURGEON MAJ 61M00 MC (3)</td>
</tr>
<tr>
<td>CLINICAL NURSE, ANESTHETIST MAJ 66F00 AN</td>
</tr>
<tr>
<td>OPERATING ROOM NURSE CPT 66E00 AN (5)</td>
</tr>
<tr>
<td>CLINICAL NURSE, ANESTHETIST CPT 66F00 AN (4)</td>
</tr>
<tr>
<td>OPERATING ROOM</td>
</tr>
<tr>
<td>NCO SSG 91D30 NC</td>
</tr>
<tr>
<td>SPECIALIST SGT 91D20 NC</td>
</tr>
<tr>
<td>SPECIALIST SPC 91D10 (2)</td>
</tr>
<tr>
<td>SPECIALIST PFC 91D10 (3)</td>
</tr>
</tbody>
</table>

(1) Urologist (60K00). The urologist examines, diagnoses, and treats or prescribes courses of treatment or surgery for patients having diseases, injuries, or disorders of the genitourinary tract. He performs required surgery.

(2) Thoracic surgeon (61K00). This physician examines, diagnoses, and treats or prescribes courses of
treatment and surgery for patients having surgical diseases or injuries of the thorax and vascular system. He performs required surgery.

(3) Orthopedic surgeons (61M00). These surgeons examine, diagnose, and treat or prescribe courses of treatment and surgery for patients having disorders, malformations, diseases, or injuries of the musculoskeletal systems. They perform surgical operations as required.

(4) Clinical nurse, anesthetists (66F00). These anesthetists perform nursing duties in the care of patients requiring general or regional anesthesia, respiratory care, cardiopulmonary resuscitation, and/or fluid therapy. Under the supervision of an anesthesiologist, they administer general and regional anesthesia for surgical patients, as required.

(5) Operating room nurses (66E00). These nurses perform nursing duties in any phase of the operative process for patients undergoing surgery. They also provide safe supplies and equipment for operative services.

(6) Other assigned personnel. The duties and responsibilities of the remaining OR D staff will be the same as the corresponding staff in paragraph 2-5i, with one exception. The OR specialist, 91D10, is the designated vehicle operator for this section.

g. Orthopedic Cast Clinic. This section augments the orthopedic cast clinic of the HUB to provide casting, splinting, and traction services throughout the hospital. As with the multiple triage, preoperative, and EMT sections, this second orthopedic and cast clinic gives the hospital commander various employment options. The staffing consists of orthopedic NCOs and an orthopedic specialist (Table 2-33).

<table>
<thead>
<tr>
<th>Table 2-33. Orthopedic Cast Clinic Organization</th>
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<tbody>
<tr>
<td>ORTHOPEDIC CAST CLINIC</td>
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<tr>
<td>ORTHOPEDIC</td>
</tr>
<tr>
<td>NCO</td>
</tr>
<tr>
<td>NCO</td>
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<tr>
<td>SPECIALIST</td>
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</table>

(1) Orthopedic noncommissioned officer (91B30, ASI P1). This NCO supervises the orthopedic personnel in both the HUB and HUS and performs technical and administrative duties as directed by the orthopedic surgeon.

(2) Orthopedic noncommissioned officer (91B20, ASI P1). This NCO helps in the treatment of orthopedic patients and supervision of subordinate orthopedic specialists. He organizes work schedules, assigns duties, counsels personnel, and prepares evaluation reports under the supervision of the orthopedic NCO.

(3) Orthopedic specialist (91B10, ASI P1). The duties and responsibilities of this specialist are identical to those listed in paragraph 2-5n.

h. Central Materiel Service. This section operates two CMS units which provide for the sterilization of OR equipment, surgical instruments, and supplies, as well as for sterile supplies for other patient care areas. This section operates in conjunction with the CMS section of the HUB under the control of the OR/CMS control team. Normally, each CMS would function primarily to support the activities of its associated OR and wards.
The staffing, duties, and responsibilities are identical to those identified in Table 2-15 and paragraphs 2-5o(1) and (2).

i. *Intensive Care Ward.* These nursing units provide five ICUs of 12 beds each for critically injured or ill patients. The clinical nurses hold an ASI (8A) as ICU nurses. When functioning as a CSH, this section is under the supervision of the Nursing Service Control Team (HUB). The staff performs recovery room nursing care for those patients who require close observation, vital sign monitoring, IV fluid replacement, and respiratory assistance. The staff consist of a clinical head nurse, clinical nurses, a wardmaster, practical nurses, and medical and respiratory specialists (Table 2-34). The duties and responsibilities are the same as the corresponding positions identified in paragraphs 2-5r(1) through (8).

<table>
<thead>
<tr>
<th>INTENSIVE CARE WARD (15)</th>
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<tbody>
<tr>
<td>CLINICAL HEAD NURSE, ICU</td>
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<tr>
<td>CLINICAL NURSE, ICU</td>
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<tr>
<td>CLINICAL NURSE, ICU</td>
</tr>
<tr>
<td>WARDMASTER</td>
</tr>
<tr>
<td>PRACTICAL NURSE</td>
</tr>
<tr>
<td>RESPIRATORY NCO</td>
</tr>
<tr>
<td>PRACTICAL NURSE</td>
</tr>
<tr>
<td>RESPIRATORY SERGEANT</td>
</tr>
<tr>
<td>MEDICAL SPECIALIST</td>
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</table>

j. *Radiology Service.* This section provides augmentation to the radiology section of the HUB. Staffing consists of a radiologist, x-ray NCOs, and x-ray specialists (Table 2-35).

<table>
<thead>
<tr>
<th>RADIOLOGY SERVICE</th>
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<tbody>
<tr>
<td>DIAGNOSTIC RADIOLOGIST</td>
</tr>
<tr>
<td>NCO</td>
</tr>
<tr>
<td>SERGEANT</td>
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<tr>
<td>SPECIALIST</td>
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<tr>
<td>SPECIALIST</td>
</tr>
</tbody>
</table>

(1) *Diagnostic radiologist (61R00).* This officer conducts, interprets, and directs x-ray and fluoroscope examinations to include administration of ionizing radiation and patient care. He assists the radiologist, radiology service, HUB with the management of the section. He also provides technical supervision to the subordinate staff.

(2) *Other assigned personnel.* The duties and responsibilities of the remaining staff are the same as those identified in paragraphs 2-5y (2), (3), and (4).
CHAPTER 3
COMMAND, CONTROL, AND COMMUNICATIONS OF THE
COMBAT SUPPORT HOSPITAL

3-1. Command and Control

The medical command (MEDCOM) is the senior medical headquarters assigned to a TO. It controls the majority of its assigned units through subordinate COMMZ medical brigades. The medical brigade assigned to the COSCOM is the senior medical C2 headquarters in the corps; it controls non-divisional medical units assigned to the corps through its subordinate medical group headquarters. The medical group with its attached units provides corps-level support to the divisions and area CHS to troops operating within its sector of responsibility. The CSH is normally employed in DS of a division and GS of a corps. The hospital is assigned to a medical brigade for C2. It may be further assigned to a medical group. The designation of the type of C2 headquarters depends on factors such as mission, size of force, type of operation, anticipated duration, and medical resources assigned to the deployed force. When the CSH is DS, it will establish liaison and provide medical advice to the supported unit. During initial buildup or contingency operations, the senior medical C2 headquarters may be a medical brigade or medical group.

3-2. Communications

Management and control of CHS operations is dependent on the hospital headquarters' ability to communicate with its staff, the corps medical brigade or group, elements of the medical evacuation battalion, and other CSS units. Hospital communications assets include amplitude modulation (AM) and FM radios and mobile subscriber equipment (MSE). See Appendix E, Communications, Automation, and Position/Navigation Systems. Communications support is provided by the area support signal unit.

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

b. Mobile Subscriber Equipment Area Communications System. Mobile subscriber equipment is the area common-user voice communications system within the corps. It is the backbone of the corps system and is deployed from the corps rear boundary forward to the maneuver battalion's main command post. It provides a secure mobile, survivable communications system capable of passing voice, data, and facsimile (FAX) throughout the corps. Additionally, it provides a direct interface to echelon above corps, other Services, NATO, combat net radio (CNR), and commercial communications systems. This system is composed of multiple communications nodes with network features which automatically bypass and reroute communications around damaged or jammed nodes. It integrates the functions of transmission, switching, control, and terminal equipment (voice and data) into one system and provides the user with a switched telecommunications system extended by mobile subscriber radio telephones. It is integrated within the corps and division force structure. Nodes are deployed from the corps rear boundary forward to the maneuver brigade rear area based on geographical and subscriber density factors. Node centers (NCs) makeup the system's assemblage. Extension switches permit wire-line terminal subscribers (telephone, FAX, and data) to enter into the total area communications system. Radio access units (RAUs) let the users of mobile subscriber radiotelephone terminals (MSRTs) communicate with other mobile and wire telephone users throughout the AO. The system control centers (SCCs) provide the processing capability to assist in overall network management. The MSE system lets subscribers communicate with each other using fixed directory numbers regardless of a subscriber's battlefield location. The MSE system is comprised of the following five functional areas:
The CSH will participate in the first four of the above functional areas. Figure 3-1 shows how the system integrates the functions of transmission, switching, control, and terminal equipment.

**Figure 3-1. Typical mobile subscriber connectivity.**

(1) *Area coverage.* Area coverage means that MSE provides common-user support to a geographic area, as opposed to dedicated support to a specific unit or customer. Node centers are under the control of the corps signal officer.

(2) *Subscriber terminal (fixed).* The MSE telephone, mobile radiotelephone, FAXs, and data terminal, as part of the area common-user system (ACUS), are user-owned and operated. The hospital's communications chief is responsible for running wire to the designated junction boxes. These boxes tie the hospital MSE telephones into the extension switches which access the system. The subscriber terminals used by the hospital are digital, four-wire voice, as well as data ports for interfacing the AN/UXC-7 FAX, the TACCS and the Medical Transportable Computer Unit (MEDTCU) as depicted in Figures 3-2 and 3-3.
Figure 3-2. Example of fixed subscriber terminals.
Figure 3-3. Typical division small extension node deployment.

(3) Wire subscriber access. Wire subscriber access points provide the entry points (interface) between fixed subscriber terminal equipment owned and operated by users and the MSE area system operated by the supporting signal unit. Figure 3-4, Figure 3-5 and Figure 3-6 show the MSE switchboard configurations through which the hospital may tie into the area system. The two types of interface equipment are--
- The signal distribution panel (junction box) J-1077. Each panel provides up to 13 subscriber access points.
- Remote multiplexer combiners which provide access for 8 subscriber access points.

**Figure 3-4. Small extension node switchboard interface (V1).**
Figure 3-5. Small extension node switchboard interface (V2).
See FM 11-30 for definitive information pertaining to an MSE area communications system. Figure 3-7, Figure 3-8, and Figure 3-9 depict examples of the hospital's wire net diagram. The hospital commander will designate the hospital's wire net system based on the mission.
Figure 3-7. Wire net diagram, CSH, switchboard 1.
Figure 3-8. Wire net diagram, switchboard 2.
c. Mobile Subscriber Terminal. The MSE terminal is the AN/VRC-97 MSRT. The MSRT, which consists of a very high-frequency radio and a digital secure voice terminal, is a vehicle-mounted assembly. It interfaces with the MSE system through an RAU. The primary use of the MSRT is to provide mobile subscriber access to the MSE area network. The MSRTs also operate in command posts to allow access to staff and functional personnel. The MSRT user has a KY 99 minterm telephone connected to the radio mounted in his vehicle. As long as the radio unit has line of sight contact with the RAU and the operator has properly affiliated, it connects to the area system. The operational planning range is 15 kilometers from any RAU. Figure 3-10 is a typical MSRT interface into the area system.
The CNR equipment in the hospital includes both the improved high-frequency radio (IHFR) system and the single channel ground and airborne radio system (SINCGARS). These systems will serve as a primary means for voice transmission of C2 information and as a secondary means for data transmission. Data transmission will be required when data transfer requirements cannot be met by the MSE system. The improved high-frequency AM radio series provide mid-to-far-range communications capability. They interface with other AM high-frequency radios and have push-button frequency selection. The SINCGARS series' FM radios are designed for simple and quick operation using a 16-element keypad for push-button tuning. They are capable of short-range operation for voice or digital data communications and interfacing with the AN/VRC-12 series of FM radios. They also can operate in a jam-resistant, frequency-hopping mode.
e. 

**Combat Support Hospital Radio Nets.** The CSH and its staff depend on both AM and FM radios and area communications systems to operate. The hospital FM radio net is shown in Figure 3-11 (also see Appendix E). The hospital monitors the following FM nets:

- Hospital commander--medical brigade/group command net.
- S2/S3--medical brigade/group command net.
- Supported CSS FM nets.
- S4 (Supply Officer, [U.S. Army])--supporting and supported logistical CSS FM nets.
- Triage/preoperative/EMT--used to control operation of the medical evacuation and helipad operations.
- Commander, HUS--hospital command net.

![Figure 3-11. Combat support hospital net—FM.](image)

f. **Combat Support Hospital Operations Net—AM-IHFR.** The hospital operations net (Figure 3-12) uses an AN/GRC193A radio. This net is used to facilitate patient management, air and ground evacuation, and medical regulation of patients. This net links the hospital with the medical brigade/medical group which is the net control station (NCS) for the corps CHS operations net.
g. **Signal Security.** As part of the overall security program, CSH elements must practice signal security. The hospital operations section is responsible for signal and communications security. Some considerations include:

- Using terrain features such as hills, vegetation, and buildings to mask transmissions.
- Maintaining radio and radio-listening silence; using the radio only when absolutely necessary.
- Distributing codes on a need-to-know basis.
- Using only authorized call signs and brevity codes.
- Using authentication and encryption codes specified in the current signal operation instructions (S01).
- Keeping transmissions short (less than 20 seconds if possible).
- Reporting all COMSEC discrepancies to appropriate authorities.
CHAPTER 4

DEPLOYMENT AND EMPLOYMENT OF THE COMBAT SUPPORT HOSPITAL

4-1. Threat

a. The military threat facing the US Armed Forces is massive. For years, the Communist military forces were considered to be our major adversary. Now we must not only remain cognizant of the potential threat of major global powers, but we must also maintain an awareness of the various threats and trouble spots of Third World countries. Once considered not to be a major threat, the Third World regional powers pose a threat to US security and interests worldwide. These countries now have the capability of conducting hostile activities, and during wartime or periods of crisis, of supporting espionage, subversion, and sabotage operations. Highly destructive regional wars remain a danger. Potential aggressors will be well armed with modern aircraft and armored forces. They will likely be equipped with highly sophisticated and state-of-the-art weaponry systems. The proliferation and use of NBC weapons by developing nations will continue to pose a threat. They could attack using NBC weapons, powerful conventional weapons, or an assortment of both. The US Army will most likely face regional threats attempting to expand their sphere of influence by force.

b. Another major threat to US forces deployed outside continental United States (OCONUS) is that of a medical threat. Elements of the medical threat include naturally occurring infectious diseases (also referred to as endemic diseases), environmental extremes, and combat stress. For a detailed discussion of medical threat elements, see FM 8-10.

4-2. Planning Combat Health Support Operations

Combat health support is an integral part of the force structure and is vital to all contingencies for the sustainment of forces. Planning CHS is a continuous and demanding process. The hospital commander and his staff must constantly assess new information for its impact on current and future support requirements. Hospital commanders must understand how their actions should complement their higher headquarters plan. Misinterpretations can lead to counterproductive actions and potentially disastrous results. Two primary factors hospital planners must be knowledgeable of are the higher commander’s intent and the mission, enemy, terrain, troops, and time available (METT-T). The planning process for future missions should not be isolated from current support actions. The planning process should be flexible and adaptive to the situation and the hospitals’ mission. Combat health support elements should be deployed in the appropriate mix, in a logical sequence, based on the supported forces.

4-3. Mobilization

a. Concept of Operations.

(1) In the event of contingencies in support of OOTW or war, the DOD initiates appropriate action for the deployment of forces in response to the scenario. Based on the situation, selected Active Component (AC) and Reserve Component (RC) CSHs and other units are alerted through command channels. For those units located in CONUS, the United States Army Forces Command (FORSCOM) uses the appropriate CAPSTONE trace and programs, the Time-Phased Force Deployment Data List (TPFDDL) based on the theater commander’s requirements, and the air and sea resources available. For deployable AC hospitals, an increase in readiness posture (defense readiness conditions [DEFCON]) is directed by the post or installation commander, or by higher headquarters. For RC hospitals, mobilization notification
constitutes an increase in readiness posture.

(2) Deployment operations for hospital readiness validation are controlled through the post or installation emergency operations center (EOC) according to established plans and regulations. The EOC plans and coordinates all deployment preparation support for the deploying hospital and monitors and controls all facets of the deployment operation, to include reporting to higher headquarters.

(3) The hospitals may deploy by land, sea, or air (or a combination of these modes) from locations designated by higher headquarters. Priority of effort is given to those modes of movement outlined in current plans.

(4) Active Component hospitals maintain the capability for emergency deployment on short notice to execute assigned missions.

(5) RC hospitals must attain and maintain the capability for mobilizing on short notice and arriving at their designated mobilization site according to unit mobilization plans.

(6) Once mobilization is validated, hospitals prepare for deployment on short notice (72 hours or less). During validation, appropriate status reports are submitted to higher headquarters.

b. Conduct of Operations.

(1) Commanders of deploying hospitals develop movement plans and TSOPs to accomplish the necessary preparations for deployment. Provisions for accomplishing all required training and other requirements to be accomplished during all phases of the deployment are identified. The checklists contained in Appendix F can be used as a guide for developing deployment operation procedures in support of movement by air and surface modes, or a combination thereof. The checklists are applicable to both AC and RC units. The checklists are detailed only as a guide for commanders. Installation mobilization stations and/or higher headquarters may prescribe different procedures for your unit.

(2) Active Component hospitals maintain the capability necessary to achieve a deployment posture in the time required by any alert warning order or deployment instructions received. For planning purposes, the readiness posture maintained is consistent with the shortest notification period presented in the mobilization plan.

(3) Reserve Component hospitals maintain the readiness posture necessary to meet planned deployment dates contained in current FORSCOM and mobilization documents. Upon arrival at the designated mobilization site, hospitals are placed in an increased or advanced deployability posture based on the published priorities of plans for which the hospitals are listed. The hospitals are managed through the RC chain of command, with input by the mobilization installation commander during the premobilization period.

(4) All hospitals are scheduled for deployment validation by unit line number based on the published validation schedule. Hospitals can be expected to deploy within 72 hours following validation. Actual deployment date and times are as directed by higher headquarters.

4-4. Deployment

a. When directed by higher headquarters through the port call or airlift message, the CSH will move to the port of embarkation (POE) for deployment. Deployment from the POE will be as directed by the United States
Transportation Command. Upon arrival at the theater point of entry, it is essential that contact with the assigned medical brigade or group be made immediately. Normally, the medical brigade or group has liaison personnel to meet and assist the hospital staff with coordination and movement to its AO. As equipment and supplies are off-loaded, they are moved to a designated receiving area for consolidation and movement. An inventory for accountability and damage assessment is conducted. Vehicles are serviced and necessary repairs are made, or coordination is made with the supporting maintenance element for the repairs. Documentation for replacement of unusable supplies or equipment damaged beyond repair is initiated through the medical brigade or group headquarters element. Vehicle loads are adjusted for convoy operations. For equipment that was transported separately from the hospital, coordination is made for receiving and transporting it upon arrival. Once the hospital has moved to its AO, the medical brigade or group staff elements conduct formal personnel in-processing and an orientation on current operating policies and procedures. The orientation includes information on the following:

- Mission update, to include geographical support area.
- Combat health support issues.
- Host-nation (HN) support.
- Local laws and customs.
- Threat update.
- Security requirements.
- Personnel restrictions.
- Personnel replacements.
- Uniform requirements.
- Emergency warning signals.
- Religious support.
- Vehicle and unit movement requirements.
- Geneva Conventions (see Appendix G).
- Supply support activities and procedures (all classes).

b. In a force projection Army, METT-T will drive the amount of supplies required to support the force. For planning purposes, the hospital normally deploys with 10 days of medical supplies; the medical assemblage for each work area contains a basic load of 3 days of supply; and the medical supply set maintained by the supply and service division contains a 7-day basic load for the entire hospital. In a maturing theater, medical resupply is accomplished by preconfigured resupply packages until the corps MEDLOG battalion (forward) has been established. These "push packages" are throughput directly to the hospital via the transportation system. These packages may be pre-positioned "mobilization stocks," or may be built and shipped from the Defense Logistics Agency (DLA) depot system. Hospital logistics personnel coordinate with their next higher command headquarters for all logistical support to include resupply. Early deploying hospitals that arrive prior to their higher medical C2 headquarters must coordinate with port transportation personnel for shipment and receipt of supplies and equipment. Once the MEDLOG battalion (forward) has been established, hospital logistics personnel coordinate directly with the MEDLOG battalion for resupply of Class VIII materiel. All other resupply is requisitioned through higher headquarters with the appropriate supporting organization. Effective coordination is the key to responsible logistical support. To be effective it must be early and it must be often.

c. For maximum use of the CSH, the entire organization should deploy together. However, due to its limited mobility and availability of transportation support requirements, it may be necessary to deploy by echelons. If required to move by echelons, the following sequence is recommended:

(1) First echelon. Advanced/quartering party.

(2) Second echelon. This echelon should include--HUB:
- Hospital Headquarters
- Operating Room A Module
- Two ICWs
- Laboratory
- Blood Bank
- X-Ray
- Pharmacy
- Litter Bearer Section

--HUS:

- Supply and Service Division
- Triage/Preoperative/EMT
- Operating Room/CMS Control Team
- Two ICU Wards
- Two CMSs
- Ortho Cast Clinic

Elements of the following should also be included to provide necessary support: company headquarters (HUB), supply and service division (HUB), PAD, and nutrition care division. It is critical to the operation of the hospital that the first echelon include a heavy complement of utilities personnel and equipment.

(3) Third echelon. This echelon should include--HUB:

- Neuropsychiatric Service and Ward
- Operating Room B Module
- Inpatient Medicine A Module
- Two ICWs
- Two Minimal Care Wards
- Two CMSs

--HUS:

- Two ICU Wards

Elements of the following should be included in this echelon: company headquarters (HUB), supply and service division (HUB), and PAD.

(4) Fourth echelon. All remaining elements of the hospital.

4-5. Employment

a. The CSH is normally employed in the corps AO on the basis of 2.4 per division supported. It will provide hospitalization for those patients who require stabilization for further evacuation, or who will RTD within the corps evacuation policy. Patients are received from the MASH and supported corps area by air and ground ambulance. The patients are triaged, treated, and evacuated, or RTD.

b. It is estimated that the hospital will require an area approximately 350 meters X 350 meters to establish and operate. The total area is dependent upon the hospital's mission and terrain feature. This facility, by virtue of its dependency on other support units, must locate in an area where it can be easily supported by elements of the
corps support group, the corps signal brigade, the corps engineer brigade, and the COSCOM movement control center (MCC). Direct coordination between the CSH is usually required with--

- The multifunctional corps support battalion (CSB) and its subordinate elements for specific-type logistics support (to include mortuary affairs [MA] and evacuation support for deceased patients).
- The corps signal battalion or area support signal unit for external signal support.
- The corps engineer battalion or area support engineer unit for engineer support.
- The COSCOM MCC or servicing MCC for transportation support and highway clearance.
- The corps provost marshal or base commander for security.
- The medical brigade or group for air and ground ambulance support.

Appendix H depicts an example of a functional layout using the DEPMEDS tent, extendable, modular, personnel (TEMPER) and international organization for standardization (ISO) system. See TC 8-13 for a recommended design of these systems for hospital operations. Because of its size, relocating the CSH should be limited. With required personnel, it is estimated that 72 hours are needed to erect the hospital completely for operations. The same amount of time is needed to prepare for relocation. The commander may designate certain hospital elements to be erected on a priority basis to expedite the receiving of patients upon relocation.

c. The CSH can be tailored to support specific military operations. It may have surgical and/or medical teams attached to enhance its capabilities. When the HUS is employed separately from the CSH, it requires attachment to another unit for support.

d. The CSH may be employed to support rear operations in the corps or COMMZ.

e. The size and composition of health services in support of military operations will be tailored based on--

- Mission.
- Size of force being supported.
- Projected patient work loads.
- Anticipated civic action programs.
- Availability of evacuation assets.
- Evacuation policy.

f. During the initial stages of military operations, CHS to the US forces will be austere and limited to the unit's organic medical capabilities. A short theater evacuation policy is normally established and tailored hospital support is required. Projected patient work loads will dictate the composition of these hospitals. The modular design of these hospitals allow augmentation as needed.

4-6. Hospital Displacement

a. Concept of Operations.

(1) The medical brigade or group commander moves the CSH in support of sustainment operations. Hospital displacement may be in response to forward moves in support of tactical operations, or rearward moves during a retrograde to maintain appropriate distances from the forward line of own troops (FLOT). The medical brigade or group commander normally issues orders, either verbally or in writing, to the hospital commander. Frequently, the time to respond to orders is short; therefore, the hospital commander must disseminate his guidance to his staff in the most expedient method. Upon receiving the commander's guidance, the hospital staff conducts the mission analysis, incorporating changes based on new information or situation. The hospital saves time by rehearsing moves, using knowledge from past
experience, and maintaining a detailed TSOP.

(2) The hospital operations section develops the OPORD in accordance with the medical brigade's or group's plan, FM 101-5, FM 8-55, and the TSOP. The hospital commander, in consultation with the hospital XO, approves the OPORD. The hospital commander ensures that the move is coordinated with higher headquarters and all supported elements. All supported elements must be aware of when medical operations at the current location will be curtailed and the date and time of opening of the operation at the new site. Hospital displacement necessitates the transfer of patients and medical operations to other MTFs. To minimize hospital operations disruption, the CSH should move in echelons. Displacement by echelons is contingent upon the higher commander's intent, the tactical situation, and the availability of support requirements.

b. Conduct of Operations.

(1) Warning order.

(a) A move is usually initiated by a warning order issued by the medical brigade or group headquarters. The warning order serves notice of a contemplated action or order that is to follow. The amount of detail included in a warning order depends on the time available, the means of communications, and the information necessary for the hospital commander. Warning orders are brief oral or written orders.

(b) Upon receiving the warning order, the hospital commander analyzes the mission and provides planning guidance to his staff. Using the medical brigade's or group's service support annex, status reports, and other appropriate documents, the hospital staff formulates the hospital service support estimate for the commander's approval. (Field Manual 8-55 discusses staff estimates and functions in greater detail.) With the acceptance and approval of the staff estimates, the hospital commander provides his decision and concept of operations. Concurrently with the staff estimate sequence, other hospital personnel conduct preliminary equipment checks and equipment loading procedures. Based on the commander's decision, the PAD coordinates with the medical brigade or group to effect the transfer of patients to other MTFs.

(c) In preparation for displacement, the hospital commander should organize the hospital into manageable echelons, preserving hospital integrity as much as possible. Preparation for displacement requires--

- Identifying external support requirements; for example, MHE.
- Phasing down and transferring hospital operations.
- Performing map, ground, and/or air reconnaissance of the routes, and selecting the new site when possible.
- Selecting routes.
- Designating start points (SPs) and release points (RPs).
- Reconnoitering the route to the SP.
- Providing for security, maintenance, supply, and evacuation.
- Determining the march order (echelons), rate of march, maximum speed of vehicles, and distance between vehicles.
- Establishing checkpoints and halts.
- Establishing communications security procedures.
- Issuing strip maps.
- Dispatching reconnaissance and advanced parties.
• Controlling traffic.
• Issuing orders.

(2) Operation order.

(a) The operations officer has staff responsibility for formulating, publishing, and obtaining the commander’s approval of and distributing the OPORD. The OPORD provides hospital staff and personnel the information needed to carry out an operation. Preparation of this order normally follows the completion of area reconnaissance and an estimate of the situation. When time is available and the existing tactical situation conditions prevent detailed planning or area reconnaissance, the medical brigade or group prepares an initial march plan and issues fragmentary orders (FRAGOs) to modify these plans as needed. If conditions and time permit, information in the OPORD includes--

• Destination and routes.
• Rate of march, maximum speeds, and order of march.
• Start points and SP times.
• Scheduled halts, vehicle distances, and RPs.
• Required communications.
• Strip maps.

(Appendix I provides a sample OPORD with annexes; FM 101-5 contains more detailed OPORD information.)

(b) Each hospital division or section reports its supply, vehicle, equipment, work load, and maintenance status to the operations officer. This information is used in coordination with higher headquarters to finalize the convoy organization, compute additional transportation and external support requirements, and perform march computations. (For additional information on march computations, see FM 55-30.)

(3) Area reconnaissance.

(a) The medical brigade or group headquarters normally prescribes the reconnaissance route. The hospital operations section uses a map reconnaissance in such cases to confirm checkpoints, identify problem areas, and begin planning positions of the CSH in the new area. If the route is not prescribed and the CSH is not included as part of a reconnaissance party with other units, the operations section briefs the reconnaissance team on the displacement plan, provides the team with a strip map and the designated MOPP level, and notifies higher headquarters of the route selected. The composition of the reconnaissance team is directed by the hospital commander.

(b) The reconnaissance party wears the designated MOPP gear and monitors all radiological and chemical detection devices. It performs duties to--

• Verify map information.
• Note capabilities of road networks.
• List significant terrain features and potential problem areas.
• Compute travel times and distances.
• Perform route and ground reconnaissance to include hospital site selection and layout. (See TC 8-13 for a detailed discussion on site selection, layout, and support requirements.)

(4) Advanced party. The advanced party moves before the main body and is dispatched as directed by the
hospital commander. Its composition is recommended by the medical operations officer and approved by
the hospital commander. It normally consists of representatives from Echelon II of the convoy
organization (see paragraph 4-4c(2) above). It prepares the new site for arrival of the main body. The
advanced party performs duties to--

- Conduct a security sweep of the new site to ensure the area is free of enemy activity. This is
  normally done by security support forces.
- Position chemical alarms.
- Establish communications with higher headquarters and old location.
- Designate boundaries of hospital elements based on unit defense plan and consistency with types of
  weapons and personnel availability.
- Increase security by manning key points along the perimeter.
- Establish a command post.
- Stake the hospital layout (see TC 8-13).
- Establish landline communications for critical areas.
- Ensure personnel follow dispersion and other measures.
- Position personnel to guide main body from the RP to designated locations.

(5) Main body. The main body moves as directed in the OPORD. The last echelon normally closes out
any remaining operations, ensuring the old site is clear of evidence of intelligence valuable to the enemy,
and moves to the new site. This echelon includes maintenance elements to deal with disabled vehicles. It
also picks up guides and markers along the route. As the main body arrives at the new site, it is met by
the advanced party and guided to designated positions. Erection of the hospital and the establishment of
hospital operations follows the priorities set by the commander.

(6) Crossing a nuclear, biological, and/or chemical contaminated area. When the hospital commander is
directed by higher headquarters, or when the tactical situation dictates, the hospital may have to cross a
contaminated area or an area designated as a contaminated area. Should this situation occur, the following
are recommended procedures:

(a) Operations section.

- The operations officer conducts a map reconnaissance of the area and briefs the commander
  on the best possible route.
- Based on the commander's approval, a route reconnaissance is conducted prior to moving the
  convoy through the contaminated area.
- The reconnaissance team wears the appropriate MOPP level and carries monitoring
  equipment.
- The route selected should minimize hospital exposure when crossing the area.

(b) Convoy operations.

- The convoy travels at a maximum safe speed with no scheduled stops within the
  contaminated area.
- Prior to convoy operations, the commander designates the MOPP level.
- The lead vehicle of each segment of the convoy has monitoring capabilities and survey
  instruments, with a map indicating areas of contamination. The map includes data from the
  reconnaissance party report. Continuous monitoring is conducted through the contaminated
  area.
- Spacing of vehicles should take into consideration dust generated by the next forward
vehicle.
- Disabled vehicles are abandoned after personnel are recovered with notation of location.

(c) Decontamination.
- Immediately upon completion of the move, personnel and equipment are decontaminated. The hospital is responsible for decontaminating its personnel and equipment (see FM 3-5). Decontamination beyond the capability of the hospital will be requested from the supporting chemical company.
- The decontamination site is annotated on the map.

(d) Reports. Upon completion of the move, the operations officer reports immediately to the hospital commander and higher headquarters any contamination acquired during the move. Other required reports are also included.

4-7. Emergency Displacement

When confronted with an adverse tactical situation, anchor when directed by higher headquarters, the CSH may be required to relocate expeditiously. Movement procedures identified above may be modified to accommodate the situation. As soon as the threat appears inevitable, all available means are used for evacuation of casualties, hospital personnel, and equipment. Wounded soldiers have priority on transportation assets. The critically wounded who cannot be moved are left behind with medical personnel, supplies, and equipment. The decision to leave patients behind is made by the tactical commander. Medical supplies and equipment are not intentionally destroyed, even to prevent them from falling into enemy hands. Paragraph 5 of Article 12, Geneva--Wounded and Sick (GWS), provides that if we must abandon wounded or sick, we have a moral obligation to, "as far as military considerations permit," leave medical supplies and personnel to assist in their care.

4-8. Nuclear, Biological, and Chemical Operations

As stated earlier in the threat, the corps' and division's sustainment capabilities are prime targets for the enemy's NBC weapons. Although the hospital may not be specifically targeted, locating it close to other CS and CSS units, major airfields, and road junctions makes it vulnerable to NBC weapons. The hospital's TEMPERs are relatively permeable. Without increased protection, hospital assets can be expected to experience a significant amount of contamination and damage when exposed to NBC strikes. The distance of the CSH from other support units and interposed terrain features as protective factors must be balanced against accessibility and time required for patient transport. Prompt notification of, and reaction to, downwind messages in the event of NBC employment will enhance hospital operations and patient and individual protective measures. However, NBC defense includes all measures to minimize casualties and enhance the effectiveness of hospital operations under NBC conditions. These measures may be proactive or reactive in nature. They include contamination avoidance and control, protection, and decontamination. For a comprehensive discussion on hospital operations in a NBC environment, see FM 8-10-7 and FM 8-285.
APPENDIX A

TACTICAL STANDING OPERATING PROCEDURE FOR HOSPITAL OPERATIONS

A-1. Tactical Standing Operating Procedure

This appendix provides a sample TSOP for a CSH. It provides the tactics, techniques, and procedures for hospital operations; however, it should not be considered as all-inclusive. It may be supplemented with information and procedures required for operating within a specific command, contingency, or environment.

A-2. Purpose of the Tactical Standing Operating Procedure

The TSOP prescribes policy, guidance, and procedures for the routine tactical operations of a specific unit. It should cover broad areas of unit operations and be sufficiently detailed to provide newly assigned personnel the guidance required for them to perform their mission. A TSOP may be modified by TSOPs and operation plans (OPLANs)/OPORDs of higher headquarters. It applies to a specific unit and all subordinate units assigned and attached. Should a TSOP not be in conformity with the TSOP of the higher headquarters, the higher headquarters' TSOP governs. The TSOP is periodically reviewed and updated annually.

A-3. Format for the Tactical Standing Operating Procedure

a. There is not a standard format for all TSOPs; however, it is recommended that a unit TSOP follow the format used by its higher headquarters. The TSOP can be divided into sections (specific functional areas or major operational areas). The TSOP may contain one or more annexes, each of which may have one or more appendixes. The appendixes may each have one or more tabs. Appendixes can be used to provide detailed information on major subdivisions of the annex, and tabs can be used to provide additional information (such as report formats or area layouts) addressed in the appendix.

b. Regardless of the format used, the TSOP follows a logical sequence in the presentation of material. It should discuss the chain of command, major functions and staff sections of the unit, operational requirements, required reports, necessary coordination with higher and subordinate elements for mission accomplishment, programs (such as command information, PVNTMED measures, and CSC), and other relevant topics.

c. Pagination of the TSOP can be accomplished by starting with page 1 and numbering the remaining pages sequentially. If the TSOP is subdivided into sections, annexes, appendixes, and tabs, a numbering system that clearly identifies the location of the page within the document should be used. Annexes are identified by letters and are listed alphabetically. Appendixes are identified by numbers and arranged sequentially within a specific annex. Tabs are identified by a letter and are listed alphabetically within a specific appendix. After numbering the initial sections using the standard numbering system (sequentially starting with page 1 through to the end of the sections), number the annexes and their subdivisions. They are numbered as the letter of the annex, the number of the appendix, the letter of the tab, and the page number. For example, page 4 of Annex D is written as "D-4"; page 2 of Appendix 3 to Annex D is written as "D-3-2"; page 5 of Tab A to Appendix 3 of Annex D is written as "D-3-A-5." This system of numbering makes the pages readily identifiable as to their place within the document.

d. In addition to using a numbering system to identify specific pages within the TSOP, descriptive heading should be used on all pages to identify the subordinate elements of the TSOP.
1. The first page of the TSOP should be prepared on the unit's letterhead. The remaining pages of the sections should include the unit identification in the upper right hand corner of the paper (for example: "XXX Combat Support Hospital").

2. A sample heading for an annex is: "Annex Q (Nursing Service) to XXX Combat Support Hospital."

3. A sample heading for an appendix to Annex Q is: "Appendix 4 (Patient Food Service) to Annex Q (Nursing Service) to XXX Combat Support Hospital."

4. A sample heading for a tab to Appendix 4 to Annex Q is: "Tab C (Diet Roster) to Appendix 4 (Patient Food Service) to Annex Q (Nursing Service) to XXX Combat Support Hospital."

e. As the TSOP is developed there may be an overlap of material from one annex to another. This is due in part to similar functions that are common to two or more staff sections. Where overlaps occur, the material presented should not be contradictory. All discrepancies will be resolved prior to the authentication and publication of the TSOP. The TSOP will be authenticated by the hospital commander.

A-4. Sample Tactical Standing Operating Procedure (Sections)

The information contained in this paragraph can be supplemented. It is not intended to be an all-inclusive listing. Different commands will have unique requirements that need to be included.

a. The first section of the TSOP identifies the specific unit/headquarters that developed the TSOP.

(1) Scope. This paragraph establishes and prescribes procedures to be followed by the CSH and its assigned, attached, or operational control (OPCON) units/elements.

(2) Purpose. This paragraph provides policy and guidance for routine tactical operations of the headquarters and its assigned, attached, or OPCON units.

(3) Applicability. Except when modified by SOPs and OPLANS/OPORDs of higher headquarters, this paragraph applies to the hospital and all units assigned, attached, or OPCON for combat operations. These orders, however, do not replace judgment and common sense. In cases of nonconformity, the document of the higher headquarters governs. Each subordinate element will prepare a unit TSOP, conforming to the guidance herein.

(4) General information. This paragraph discusses the required state of readiness of the unit; primary, secondary, and contingency missions; procedures for operating within another command's AO; and procedures for resolution of conflicts with governing regulations, policies, and procedures.

(5) References. This paragraph can include any pertinent regulations, policy letters, higher headquarters TSOP, or other appropriate documents.

h. The second section of the TSOP discusses the hospital organization.

(1) Organization. The unit is organized and equipped in accordance with the applicable MTOE an/or other staffing documentation. The applicable MTOE and other staffing documentation should be listed in this paragraph.

(2) Succession of command. The guidance for determining the succession of command is discussed.
(3) **Task organization.** Task organization is contingent on the mission and will be approved by the headquarters ordering deployment.

(4) **Organizational charts.** Contained in Annex A.

c. The third section of the TSOP discusses hospital functions. It will supplement the hospital organizational chart(s). The functions of the various hospital divisions/sections, to include personnel and some of their responsibilities, are provided in Chapter 2 of this publication. For a more detail description of personnel duties, see FM 101-5, AR 611-201, and AR 611-101.

d. The fourth section of the TSOP pertains to division/section operations and is subdivided into annexes.

### A-5. Sample Tactical Standing Operating Procedure (Annexes)

Annexes are used to provide detailed information on a particular function or area of responsibility. The commander determines the level of specificity required for the TSOP. Depending upon the complexity of the material to be presented, the annex may be further subdivided into appendixes and tabs. If the annex contains broad guidance or does not provide formats for required reports, paragraphs may be used. The annex should not require further subdivision. However, as the material presented becomes more complex, prescribes formats, or contains graphic materials, the annex will require additional subdivision. Applicable references, such as ARs, FMs, and TMs, should be provided in each annex. The number of annexes and their subdivisions should be based on command/contingency requirements. Each annex should contain information relating to mission, organization, duties and/or responsibilities, and procedures. The following sample annexes are provided as a guide and are not considered all-inclusive.

**a. Annex B. Hospital Headquarters.** This annex discusses the hospital commander and his responsibilities. The hospital commander is the senior MC officer assigned or as appointed by higher headquarters. The hospital commander, assisted by the chiefs of surgery, nursing, and medicine, XO, chaplain, and CSM, provides the C2 necessary to accomplish the mission. The day-to-day operations shall include a review of hospital activities occurring during the preceding shift and the implementation of directives received from higher headquarters.

1. The daily assessment of hospital operations is accomplished via a report(s) on admissions, dispositions, bed census (by type), unusual occurrences, and significant seriously ill patients. The chief of professional services reports on bed availability by type bed and service capabilities that can be provided. This information must also be provided daily to the PAD for medical evacuation and patient regulating operations.

2. The commander and his staff, in the conduct of daily operations, can use personal and telephonic contact to become aware of personnel, logistical, and administrative problems which may affect the overall hospital operations.

3. Regularly scheduled meetings and review of reports and programs can be used to monitor the effectiveness and efficiency of hospital operations.

4. The hospital commander, during command visits or contacts with the medical group, can be apprised of the tactical situation. The hospital commander provides higher headquarters the hospital's overall status to include patient work load, hospital capability, personnel status, logistical requirements, and other information as he deems appropriate. The hospital commander maintains liaison with the MEDLOG battalion, medical evacuation battalion, MASH, and corps support organizations.
(5) The hospital commander may activate the TOC based on the tactical situation. (See Annex D for a discussion on TOC operations.)

(6) This annex should also address the hospital hours of operation, to include the hospital staff and personnel shifts.

b. Annex C, Company Headquarters. This annex discusses the C2 structure for all assigned or attached officers and enlisted personnel of the hospital. The annex outlines procedural guidance for, but not limited to, the following:

- Unit-level administration.
- Reenlistment and extension programs.
- Billeting, to include fire safety, sanitation, and key control.
- Security, assignment, accountability, and maintenance of weapons.
- Perimeter security.
- Life support and site improvement.
- Welfare and recreational activities.
- Unit supply.
- Duty rosters.
- Physical fitness.
- Training.
- Uniform Code of Military Justice actions.

c. Annex D, Tactical Operations Center. Areas covered by this annex include--

(1) Definition. The TOC is the command element of the hospital containing communications and personnel required to command, control, and coordinate hospital and CHS operations.

(2) Purpose. The purpose of the TOC is to provide a secure area where the commander and key staff can assemble to estimate the situation, assess the requirements, and react to varying problems such as area defense, NBC operations, mass casualty situations, and CHS operations.

(3) Responsibilities. The hospital commander has overall supervision and control over the TOC. The hospital XO has primary staff responsibility in the absence of the commander. Daily operations of the TOC are the responsibility of the operations section.

(4) Operations. The TOC operates on a 24-hour basis. It is principally staffed by each primary staff section, furnishing necessary manpower as required. The TOC will be adjacent to the communications facility, as well as in proximity to the emergency room and triage areas. The TOC should be of sufficient size to allow for establishment of maps, storage of individual weapons and chemical defense equipment, and facilitate communications among the staff. Telephone communications connect the TOC to other staff sections within the hospital, higher headquarters, and other appropriate units. The CNR will also provide the appropriate communications for CHS. Access to the TOC is strictly controlled by means of an access roster and, if available, security badges. Only essential personnel and authorized visitors are allowed to enter. Each hospital element maintains a TSOP on the organization and operation of its section. All elements within the TOC maintain, when appropriate, a current situational map of their specific operations. Discussion and portrayal of tactical plans outside of the security area are prohibited.

(5) Composition of the tactical operations center. This is a listing of those personnel comprising the TOC. It normally includes the commander, XO, CSM, principal staff members, and other specific staff
members as required.

(6) **Tactical operations center configuration.** This is a schematic representation of the physical layout of the TOC. It can be included as an appendix to the annex.

(7) **Message center.** This paragraph establishes procedures for the handling of classified messages; provides delivery and service of IMMEDIATE and FLASH messages to the appropriate staff section; and provides procedures for preparing outgoing messages and delivery service to the servicing message center for the transmission of outgoing messages.

(8) **Appendices.** The addition of appendixes to this annex is permissible and may cover topics such as--

- Schematics of the physical layout.
- Change of shift procedures.
- Security requirements, to include guard duties and identification badges.
- Briefing requirements.
- Overlay preparation.

(9) **Camouflage.** This paragraph discusses what camouflage procedures are required, to include type and amount of required camouflage materials (such as nets and terrain features); display of the Geneva Conventions distinctive emblem on facilities and vehicles; and other pertinent information. See FM 8-10 for information concerning the camouflaging of medical units.

d. **Annex E, Operations.** This annex establishes procedures for the operations section within the hospital and provides a basis for standardization of CHS operations in a tactical environment. It is essential that these procedures be standardized to ensure common understanding, facilitate control and responsiveness, and enhance mission accomplishment. Although intelligence and hospital defense are functions of the hospital operations section, they may be addressed in separate annexes. For simplicity and coherency, these areas are discussed in paragraphs e and f, respectively. Commanders may elect to consolidate the S2/S3 functions into a single annex. Appendixes to this annex should include the following areas:

(1) **Operational situation report.** Requirements for format, preparation, and submission of this report are discussed in this appendix.

(2) **Operations security.** This appendix provides the guidance and procedures for secure planning and conduct of combat operations.

   (a) **Responsibilities.** The commander is ultimately responsible for denying information to the enemy. The operations officer is responsible to the commander for the overall planning and execution of operations. He has the principle staff interest in assuming the required degree of OPSEC and has the primary staff responsibility for coordinating the efforts of all other staff elements in this regard. The operations officer is responsible for the preparation of the essential elements of friendly information (EEFI) and for providing classification guidance. Additionally, the OPSEC officer identifies the priorities for OPSEC analysis and develops OPSEC countermeasures. Coordination is effected with higher headquarters in planning an OPSEC analysis of operations and analyzing EEFI.

   (b) **Classified and sensitive information.** Document classification, downgrading, and declassification is the responsibility of the operations section. Classified and sensitive information, such as the status of the forces, readiness condition, equipment status, and other information...
relative to the hospital's ability to perform its mission, will be limited to those individuals with a security clearance and the need to know.

(3) *Hospital relocation.* This appendix provides the procedures for hospital relocation. Because of the hospital's limited mobility, transportation support and other site preparation are required from COSCOM assets. The operations officer, in conjunction with the supply and service division, plans and coordinates hospital movement. Considerations should include, but not be limited to, the following:

- Coordination with higher headquarters.
- Patient relocation.
- Tactical situation.
- Transportation requirements availability.
- Convoy operations (to include clearance and security).
- Terrain analysis and site selection.
- Availability of required support (engineer, communications, and supply).

(4) *Communications-electronics.* This appendix establishes communications policies, procedures, and responsibilities for the installation, operation, and maintenance of communications-electronics (CE) equipment. Responsibilities of the CE NCO include--

- Advising the hospital commander and operations officer on CE matters.
- Determining requirements for communications support.
- Radio communications.
- Radio teletypewriter communications.
- Message and communications center service.
- Message handling procedures.
- Wire communications.
- Switchboard operations.
- Communications security and operations.
- Security violations. This prescribes procedures for reporting any event or action which may jeopardize communications security.
- Daily shift inventory.
- Physical security of communications equipment.
- Transmission security.
- Security areas. This discusses access procedures and rosters, access approval requirements, and prohibited items.
- Communications security officers and custodians. The appointment procedures, orders requirements, and duties of personnel are described.
- Safety. This discusses requirements for the grounding of, handling, and storage of COMSEC equipment.
- Power units.
- Emergency destruction of classified operating instructions and associated materials.

\[ e. \text{Annex F, Intelligence and Security.} \text{This annex pertains to intelligence requirements and procedures and operational security considerations. Appendixes to this annex may include the following subjects:} \]

(1) *Intelligence.* The operations section has the responsibility of collecting information to assist the commander in reaching logical decisions as to the best courses of action to pursue. Essential elements of information (EEI) include, but are not limited to, the location, type, and strength of the enemy threat; location of area of casualty concentration; known or suspected NBC activity; and issues which the commander considers to be EEI.
(2) Intelligence reports. The operations section is responsible for disseminating all applicable estimates, analyses, periodic intelligence reports, and intelligence summaries generated within the hospital or received from higher headquarters. Information on submission of reports and suspenses on intelligence products and reports should also be addressed in this appendix.

(3) Counterintelligence.

- Camouflage. When ordered or directed by the tactical commander all units will initiate and continually strive to improve camouflage operations of positions, vehicles, and equipment. Noise and light discipline is emphasized at all times.
- Communications security. These measures are enforced at all times. Specific requirements and considerations are included.
- Signs and countersigns. This paragraph outlines procedures for establishing signs and countersigns to be used during hours of darkness. It also includes reporting requirements and procedures if the sign/countersign is lost or compromised.
- Document security. This paragraph discusses the procedures for inventorying, marking, safeguarding, and destroying classified material, both work documents and completed documents. Reporting requirements in the event of compromise are also included.

(4) Captured personnel, equipment, supplies, and documents. This appendix provides specific guidance on the handling of captured personnel, equipment, supplies, and documents. The disposition of captured medical equipment and supplies is governed by the Geneva Conventions and is protected against intentional destruction.

(5) Security. This appendix discusses weapons security, SOI (communications) security, TOC security, and Sensitive Item Status Report policies, guidance, or procedures.

f. Annex G, Hospital Defense. This annex describes procedures for security of the hospital in a wartime environment. Security should be a part of an integrated defense plan (base cluster commander and HN base defense plan). Within the theater area, the base cluster and base commanders are appointed by the area commander. These commanders have the overall responsibility for the base cluster defense and base defense organizations and plans. The hospital should be included as a part of the base cluster/base plan as established by the base cluster/defense commander. This annex addresses, as a minimum, the following:

- Sustainment operations.
- Defense reaction force(s).
- Hospital movement.
- Terrain management.
- Medical unit self-defense according to the Law of Land Warfare (see Appendix G). For a comprehensive discussion on the Law of Land Warfare, see FM 8-10 and FM 27-10.

g. Annex H, Administration and Personnel. This annex outlines procedures relating to administrative and personnel matters and associated activities. The theater surgeon has assignment, reassignment, and career management authority for all AMEDD officer and WO personnel arriving into or within the theater during mobilization and wartime. Request for personnel and administrative support will be submitted through the medical group (S1 [Adjutant, U. S. Army]) to the appropriate supporting regional personnel center. Paragraphs of the annex or attached appendixes should discuss the following:

(1) Personnel loss estimate. Initially, FM 101-10-1/1 and FM 101-10-1/2 will be used as a basis for the computation of gross and special personnel loss estimates. Factors and loss rate tables in the FMs may not
(2) *Emergency personnel replacements.* A request for hospital personnel replacement is submitted to the medical group S1 when there are unexpected losses for which no replacements are allocated.

(3) *Personnel daily summary (PDS).* This paragraph provides the procedures for filling out and submitting a daily personnel status report. The instructions may include requirements for encrypting the report prior to transmission, specific guidance on time of submission, corrections, or other administrative requirements.

(4) *Casualty reports.* This paragraph applies to all US military personnel who are serving within the hospital's area of support and become casualties in areas under US control. It is also applicable to EPWs and civilian internees who become casualties while under control of US units.

- Casualty feeder report. This report is submitted on DA Form 1156. Instructions on the completion of the form and submission requirements are included.
- Witness statements on individuals (DA Form 1155). This statement is completed only when the recovery of a body is not possible, or cannot be identified. It is to be submitted to the S1 within 24 hours of the incident. The paragraph should contain information on obtaining the form, instructions for completing it, and other relevant information or procedures.
- This section may also include other reports required by the command.

(5) *Personnel management.*

- **Replacements.** Individual replacements will not be readily available during the initial phases of operations. The administrative division will automatically initiate replacement requests for personnel who are reported on the PDS report as wounded in action, missing in action, or killed in action.
- **Assignments and reassignments.** This paragraph will address the actions required for patients and permanent party personnel.
- **Leaves.** Ordinary and emergency leave procedures are outlined in AR 630-5. Policies established by the theater will take precedence.
- **Personnel actions.** All personnel actions are channeled through the administrative division. Division/section chiefs and NCOICs are the hospital points of contact. Actions will be handled expeditiously and meet suspense dates (tactical situation permitting).
- **Efficiency reports.** This paragraph describes the pertinent information needed for the completion and submission of these reports.
- **Award recommendations.** This paragraph delineates the responsibilities and guidance for submitting recommendations for awards and for scheduling and conducting award ceremonies.
- **Promotions.** This paragraph discusses the procedures for submitting recommendations for promotion and for scheduling and conducting promotion ceremonies.
- **Correspondence.** All correspondence addressed to higher headquarters is submitted through the administrative division. Requirements for submission, preparation, and approval are also provided.
- **Personnel records.** This paragraph discusses requirements for coordination of this support. It also discusses the procedures for having correspondence included in the official military personnel records of personnel assigned and attached.

(6) *Personnel services.* Personnel services are those activities pertaining to soldiers as individuals. Unless prohibited by the tactical situation, the services listed below will be available to all assigned and attached units.
• Sporting activities and morale and welfare activities.
• American Red Cross.
• Finance. This service includes disbursements and currency control, payday activities, currency conversion, check cashing, and the appointment of Class A agents.
• Legal services. Information and specific guidance on administrative boards, courtmartial authority and jurisdiction, legal assistance, and general services should be provided.
• Religious activities. Religious activities include chaplain support, services available for different faiths, schedule of services, and hospital visitations.
• Postal services. This includes hours of operation and services available. Emergency destruction, prisoner of war mail, and mail restriction policies will be outlined. Postal services should be addressed in an appendix to this annex.
• Post exchange services. This includes hours of operation and availability.
• Distribution. Pick up and delivery schedules and any command-specific issues and procedures are provided.

(7) Mortuary affairs. Commanders at all levels are responsible for unit MA and the search, recovery, and evacuation of remains to collection points. Selected hospital personnel should be trained on MA tasks to ensure proper handling of remains and the deceased's personal effects.

• Responsibilities. This paragraph discusses hospital responsibilities and the relationship with the medical group and supporting MA activity.
• Disposition. Specific guidance on procedures, MA collection points, transportation requirements, and handling of remains is provided.
• Hasty burials. Specific requirements for conducting hasty burials and marking and reporting of grave sites are included.
• Personal effects. Guidance on accounting for personal effects and requirements for burial should a hasty burial be required is contained in this paragraph.
• Disposition of civilian and EPW remains. The local civilian government is responsible for the burial of remains of its citizens. The remains of EPWs are buried in separate cemeteries from US and allied personnel. If this is not possible, a separate section of the same cemetery is used and will be properly marked.
• Contaminated remains. This paragraph discusses handling and disposition requirements (to include protective clothing), procedures, and marking and reporting of burial site.

(8) Public information. This appendix contains procedures for obtaining approval on the public release of information to include the hometown news release programs.

(9) Maintenance of law, order, and discipline. This appendix should provide applicable regulations, policy, and command guidance on topics such as serious incident reports, notifications and submission formats, straggler control, confinement of military prisoners, and EPWs (also discussed in (10) below).

(10) Enemy prisoners of war. This appendix discusses the unit responsibility for EPWs captured by or surrendered to the unit. These procedures do not pertain to EPW patients captured by other units. Medical personnel do not guard, search, or interrogate EPWs while in the CHS system; guards are provided by nonmedical personnel designated by the tactical commander for these duties. Until EPW personnel can be evacuated to an EPW collection point, medical personnel should remember and enforce the basic skills: segregate, safeguard, silence, secure, speed, and tag. (The speed portion of evacuating EPWs to designated collection points is of paramount importance to medical units.)
The treatment of EPWs is governed by international and US law and the provisions of the Geneva Conventions. Personnel should be aware of these requirements and have ready access to the applicable regulations and policy guidance (see FM 8-10 and AR 190-8).

(11) Records disposal procedures. The emergency disposal of files, when hostile action is imminent and if retention is prejudicial to the interest of the US, will be outlined. Nonemergency disposal, to include lost or destroyed files, will be included.

(12) Appendixes. The following appendixes should be developed as part of this annex:

- Human relations and equal opportunity.
- Civilian personnel.
- Provost marshal.
- Safety (see Appendix D).
- Postal operations.
- Command message center.

h. Annex I, Chaplain. This annex outlines the duties and responsibilities of the hospital chaplain and the hospital ministry team. Although the chaplain reports directly to the hospital commander, his activities will be coordinated with the hospital adjutant.

(1) Chaplain support and coverage. This paragraph will address the following:

- Normal and emergency chaplain duties
- Religious services.
- Visitation.
- The seriously ill.
- Death.
- Burial services.
- Reports.

(2) Chaplain funds. Procedures will be outline for the establishment of a non-appropriated chaplain’s fund upon mobilization.

i. Annex J, Nuclear, Biological, and Chemical Defense. This annex provides general guidance regarding unit and individual defense against NBC attacks, decontamination procedures, and care of NBC casualties.

(1) The NBC NCO is the technical advisor to the hospital commander and the operations officer on all matters pertaining to NBC operations. Procedures should be developed for--

- Organizing and training the required NBC teams.
- Establishing a warning and alarm system. The system will include vocal, visual, and sound.
- Training hospital personnel on MOPP and other NBC defensive measures.
- Advising the hospital commander on activation of the appropriate MOPP level, to include masking and unmasking procedures, based on the tactical situation.
- Maintaining NBC records and submitting the required reports.
- Establishing collective shelters. The operations section will determine the requirements for NBC collective shelters, the responsibility for establishing and maintaining NBC shelters rest with the section being hardened.
- Publishing radiation exposure guidance. This includes methods to minimize exposure and protect
against electromagnetic pulses.
- Maintaining and distributing unit NBC defense equipment.
- Maintaining accountability and proper stockage of NBC defense equipment and PLL items.

(2) This annex should include the following appendixes:

- Appendix 1--NBC Teams.
- Appendix 2--Decontamination Procedures.
- Appendix 3--Operating in an NBC Environment.
- Appendix 4--Individual and Collective Protective Plan.
- Appendix 5--Handling and Patient Care of NBC Patients.
- Appendix 6--Handling Contaminated Patients.
- Appendix 7--Establishing Decontamination Sites.
- Appendix 8--Locating Contaminated Areas (to include traffic control in and out of the area).
- Appendix 9--NBC Reporting.
- Appendix 10--Hospital Recovery.
- Appendix 11--Radiation Exposure Guidance.
- Appendix 12--References.

i. Annex K, Nutrition Care. This annex outlines procedures relating to patient nutrition management and Army medical field feeding operations. The annex addresses the nutrition care division's organization and staff responsibilities. The organization and a detailed discussion of the following specific areas should be included as appendixes:

- Organization.
- Medical rations.
- Patient meal delivery.
- Staff and ambulatory patient feeding.
- Safety.
- Sanitation.
- Nutritional support.
- Nourishments, to include forced fluids.
- Ration accountability.
- Ration procurement.
- Equipment maintenance.
- Training.
- References.

k. Annex L, Logistics. This annex outlines sources, procedures, requirements, responsibilities, and planning guidance for logistical support for a CSH.

(1) Specific areas which are addressed are listed below. The discussion to the areas should be provided in appendixes with the inclusion of tabs, if appropriate.

- Supply and services.
- Medical supply.
- General supply.
- Maintenance (less medical).
- Medical equipment maintenance.
- Waste disposal.
• Linen.
• Interface with the MEDLOG battalion (forward).
• Transportation and mobility.
• Supply and distribution.
• Engineer support.
• Quartermaster support.
• Hospital safety.
• Blood component resupply.

Logistics applications of automated marking and reading symbols (LOGMARS), TACCS, MEDTCU, and test, measurement, and diagnostic equipment are included in the discussions when appropriate.

(2) Transportation and movement requirements. This appendix covers the following areas: applicability; responsibilities; policies on speed, vehicle markings, transporting flammable materials, transporting ammunition and weapons, convoy procedures; safety; and accident reporting.

(3) Fire prevention and protection. Guidance on the use of flammable materials, use of cigarettes, matches, and lighters, electrical wiring and appliances, safety of tents and occupants, spacing of tents, stoves and ranges, and firefighting equipment are presented in this appendix.

(4) Field hygiene and sanitation. This appendix provides uniform guidance and procedures for the performance of functions related to field hygiene and sanitation. It includes policies, communicable disease control, field water supply, water trailers and cans, fabric water storage containers, food sanitation, latrines, liquid waste disposal, and garbage and rubbish disposal. For additional information on field hygiene and sanitation, see FMs 21-10 and 21-10-1.

(5) Conventional ammunition down/upload procedures. This appendix delineates responsibilities; provides guidance and procedures for the requisition, storage, and distribution of ammunition and weapons, reporting requirements, and safety.

(6) Petroleum, oils, and lubricants accounting.

(7) Health service logistics support. The health service logistics concept of operations, requisition, and distribution procedures, accountability, and reports are provided in this appendix.

I. Annex M. Laboratory. This annex prescribes laboratory policies and procedures in support of the hospital. Procedural guidance will include, but not be limited to--

• Hematology and urinalysis.
  • Performing white cell count.
  • Performing complete blood count (red blood cell [RBC], white blood cell [WBC], hemoglobin [Hgb], and hematocrit [Hct]).
  • Determining Hct.
  • Determining WBC differential
  • Determining prothrombin time.
  • Determining partial thromboplastin time (APTT).
  • Performing cerebrospinal fluid (CSF) cell count and differential.
  • Performing urinalysis (dipstick).
  • Performing urinalysis (microscopic).
  • Performing platelet estimate.
- Performing platelet count.
- Determining fibrinogen level.
- Determining fibrin degradation products.

- Biochemistry.
  - Performing blood gas analysis.
  - Performing electrolyte levels (Na, K, Cl, and CO2).
  - Determining total serum protein.
  - Determining serum creatinine.
  - Determining serum amylase.
  - Determining serum AST activity.
  - Determining serum ALT activity.
  - Determining serum CK activity.
  - Determining serum glucose.
  - Determining serum T. bilirubin.
  - Determining serum calcium.
  - Determining CSF glucose.
  - Determining CSF protein.
  - Determining urine protein.
  - Determining urine glucose.

- Microbiology and serology.
  - Performing occult blood test.
  - Performing thick and thin smears for malaria.
  - Performing gram stains.
  - Performing RPR test (syphilis).
  - Performing IM (infectious mononucleosis) tests.
  - Examining feces for ova, cysts, and parasites.
  - Performing potassium hydroxide (KOH) preps
  - Performing pregnancy tests.

- Microbiology (capabilities available with specific augmentation).
  - Performing urine cultures (colony counts and sensitivity).
  - Performing wound culture and sensitivity.
  - Performing culture and sensitivity for gonorrhea.
  - Performing throat cultures.

- Quality control procedures.
- Reports.
- Infectious, chemical, hazardous, and solid waste disposal.
- Safety.

m. Annex N, Blood Bank Services. This annex prescribes hospital blood bank policies and procedures. It addresses procedures for--

- Storing, collecting, and administering blood and blood products.
- Performing blood group and type (ABO, RH).
- Performing abbreviated blood crossmatching procedures.
- Thaw and issue fresh frozen plasma.
- Blood planning factors.
- Reports.
- Automated blood management system.

n. Annex O, Dental Services. This annex outlines policies and procedures for dental clinic operations in a CSH. Procedures include--
- Priority of treatment.
- Dental records.
- Narcotics and drug control.
- Dental supply and maintenance operations.
- Precious metal control.
- Mercury hygiene and syringe and needle security.
- Sterilization and infection control.
- Safety.

o. Annex P, Pharmacy Service. The pharmacy operation is centered around an inpatient and outpatient system, distribution of bulk drugs, and the IV-additive program. This annex addresses the following procedures:

- Storing, safeguarding, labeling, and dispensing pharmaceutical and drug products.
- Operating an IV-additive program.
- Controlling drugs (Q and R).
- Preparing signature cards.
- Accessing letters.
- Rotating stockage of drugs and medication.
- Requisitioning drugs and supplies.
- Preparing reports.

p. Annex Q, Patient Administration Division. This annex outlines the general functions for the PAD. Procedural guidance is identified for the following:

- Maintenance and accountability for clinical records.
- Admittance, discharge, and transfer of patients (surface and air movement).
- Processing and disposition of weapons, ammunition, maps, and classified and sensitive documents taken from patients admitted to the hospital.
- Medical statistics and reports.
- Claims.
- Processing hospital deaths.
- Theater Army Medical Management Information System MEDPAR and MEDREG.

q. Annex R, Nursing Service. This annex provides administrative and operational guidance for all nursing service personnel throughout the hospital. It provides nursing care standards, policies, and procedures which are applicable to all wards, to include ORs and the triage, EMT, and preoperative treatment sections. Areas addressed should include, but not be limited to, the following:

- Nursing documentation.
- Scope of nursing practices.
- Standards of nursing practice.
- Standards of patient care.
- Assignment of personnel.
- Infection control.
- Special category patients.
- Procedures available in radiology.
- Procedures available in laboratory.
- Admission and discharge.
- Procedures for cardiopulmonary resuscitation.
- Mass casualty plan.
- Preoperative care of the patient.
Postoperative care of the patient.
Care of patient with indwelling catheters
Care of patient with central IV lines.
Care of patient with tracheostomy.
Care of patient with chest tube.
Death procedures.
Hazardous and medical waste disposal.
Bedpan and urinal washing and disinfecting procedures.

r. Annex S, Radiological Services. This annex establishes policies and procedures for requesting radiological services, preparation of patients, and use of x-ray films.

(1) Request for diagnostic procedures is outlined for the following examinations:

- Routine.
- Emergency.
- Bedside.
- Special (upper gastrointestinal series, gallbladder).
- Urological.
- Preoperative chest x-rays.

(2) Appendixes to the annex may include other information to assist daily operations. Suggested areas are--

- Radiation safety.
- Radiation protection.
- Equipment records.
- Radiographic film security.
- Filing procedures.

s. Annex T, Medical Services. This annex prescribes the duties and procedures for medical services in the treatment of all patients admitted to the hospital. Areas to be addressed include, but are not limited to--

- Treatment protocols.
- Examination procedures.
- Evaluation and treatment of infectious diseases.
- Evaluation and treatment of internal medicine disorders.
- Evaluation and treatment of skin disorders.
- Treatment of patients with gynecological diseases, injuries, or disorders.
- Medical supply and resupply procedures.
- Consultation services.
- Infection control (procedures to be followed to reduce the threat of infection in an austere environment).
- Fire evacuation plan.
- Reports.

t. Annex U, Surgical Services. This annex outlines diagnostic and surgical treatment procedures for the hospital. It should include, but not be limited to, the following:

- Scheduling procedures, to include after-hours and emergency cases.
- Aseptic (sterile) techniques.
- Maintenance of registry.
- Scrub attire and surgical hand-scrub procedures.
- Environmental safety.
- Electrosurgical unit safety.
- Operating room environmental sanitation.
- Counts of sponges and sharps.
- Bullet removal evidence and property custody document.
- Death procedures.
- Notifications.
- Autopsy, to include coordination with HN health officials or compliance with valid agreements.
- Disposition.
- Cardiac arrest procedures.
- Traffic patterns.
- Transportation of patients to and from the OR.
- Transportation of sterile, clean, and dirty equipment.
- Evacuation of personnel and patients during contingencies.
- Handling contaminated needle and syringes.

u. Annex V, Operating Room/Central Materiel Service Control Team. This annex outlines the functional procedures of the OR, CMS, and anesthesia services, and the preparation and maintenance of OR-related equipment. With exception of CMS, the OR and anesthetists are not a separate paragraph in the L-edition series TOE. As an entity, these elements are under the supervision of the senior anesthesiologist or the officer appointed by the hospital commander. The operational guidance includes, but is not limited to--

(1) Operating room service.

- Verifying personnel qualifications for assigned duties.
- Scheduling nursing staff.
- Providing immediate postoperative care of surgical patients (recovery room/ICUs).
- Availability of ORs.
- Operating room space utilization.
- Medical resupply, to include time lines.
- Medical maintenance, to include organic and depot.

(2) Anesthesia services.

- Standards.
- Duty roster and on-call requirements.
- Master list of clinical procedures.
- Equipment checklists.
- Classification of patients.
- Narcotics control.
- Infection control in work area.
- Anesthesia carts.
- Disposition of hazardous or infectious waste.
- Storage of combustibles and cleaning schedule.
- Quality control procedures for equipment.
- Verifying personnel qualifications for assigned duties.

(3) Central materiel service.
• Loading and unloading the steam sterilizer.
• Monitoring the sterilization process.
• Labeling and monitoring shelf life of sterile items.
• Providing tray setup and wrapping procedures, to include cleaning and preparing equipment and supplies for sterilization.

v. Annex W, Emergency Medical Services. This annex outlines the procedures for receiving patients, performing patient assessments, providing EMT, and transporting patients to the appropriate element of the hospital. Procedures include--

• Continuous 24-hour emergency treatment service.
• Verification of personnel qualification.
• A 24-hour physician and nursing service coverage plan.
• Patient registration ledger.
• Triage.
• Scope of practice of MOS 91B personnel.
• Routine patient care management.
• Emergency patient care management.
• Care of HN military and dependents (as required).
• Care of HN contract civilian and other HN medical care requirements.
• Admission and transfer of patients.
• Mass casualty operations.
• Medical treatment for chemical and biological agent patients.
• Medical evacuation.
• Utilization of the hospital litter team.
• Medical resupply and maintenance.
• Care of refugees and displaced persons.
• Assessment and emergency treatment of patients undergoing and awaiting NBC decontamination.

w. Annex X, Neuropsychiatric Service and Ward. This annex outlines procedures for hospital NP service including diagnosis and consultation to all areas within the hospital and to others as may be directed by the command. Procedures include, but are not limited to--

• Screening of patients by a psychiatrist.
• Ward support for nonambulatory or secluded patients.
• Patient ledger and transfer coordination.
• Patient restraining.
• Enemy prisoner of war patient support augmentation.
• Records and administration.
• Drug control.
• Identifying and monitoring suicidal and homicidal patients.
• Neuropsychiatric and combat fatigue-related casualties.
• Medical supplies and maintenance.
• Stress control to patients and staff of other wards.

x. Annex Y, Physical Therapy. This annex outlines procedures for the utilization and support of physical therapy services. Areas to be addressed include, but are not limited to, the following:

• Verification of personnel qualification.
• Scope of practice of physical therapy personnel.
• Assignment of physical therapy personnel.
- Services provided.
- Referral procedures.
- Mass casualty role.
- Utilization of radiology and pharmacy services.
- Injury prevention programs.
- Logistical support.

y. **Annex Z, Mass Casualty.** This annex outlines procedures to enable the hospital to respond effectively to a variety of emergency, external, and internal disaster situations. In any situation, the hospital must be prepared to receive, triage, treat, and hospitalize large numbers of casualties within a short period of time. The development of this plan is the responsibility of the operations section, or as directed by the hospital commander. Procedures include--

- Planning and training requirements.
- Medical cadre positions.
- Nonmedical personnel positions and duties, including litter teams, perimeter guard, crowd control, and information personnel.
- Location of services, to include triage, delayed care, immediate care, minimal care, and expectant care areas.
- Support requirements beyond hospital capability.
- Evacuation.
- Discharge of patients.
- Records and reports.

z. **Annex AA, Civil-Military Operations.** This annex discusses participation in civil-military operations (CMO). Medical elements are often involved in CMO, humanitarian assistance, and disaster relief operations. The activities which may be covered include providing medical treatment within the capabilities of the hospital and providing training to a HN's medical infrastructure. The responsibility for this annex is the operations officer, or as directed by the hospital commander.
APPENDIX B

HOSPITAL PLANNING FACTORS

B-1. General

This appendix provides information for the hospital commander, his staff, and assigned personnel. It contains planning factors for personnel, transportation and movement, supply, personnel service support, CHS planning for hospitalization, engineer, and force requirements as of 1 January 1993. The data is an estimate and is not intended to be all inclusive. Fluctuations and changes in the data presented are contingent upon modifications to the TOE, its mission, and the scenario. The data is based upon TOE 08-705L00, Medical Force 2000 Hospital Planning Factors prepared by the Directorate of Combat and Doctrine Development, Army Medical Department Center and School; FM 101-10-1/2 (Staff Officers' Field Manual--Organizational, Technical, and Logistical Data Planning Factors, Volume 2); and mobilization planning factors obtained from the US Air Force (USAF).

B-2. Personnel and Equipment Deployable Planning Factors

a. Personnel.

Officer 175
Enlisted 429
TOTAL 604

b. Weight and Cube--Personnel and Equipment.

Personnel-weight (combat equipped, includes 15 lb hand-carry bag) 190 lb/man (303) 57,570 lbs
Personnel-weight (with M-16) 200 lb/man (275) 55,000 lbs
Personnel-weight (with 9 MM) 195 lb/man (26) 5,070 lbs
Personnel-cube 11 cu ft/man 6,644 cu ft
Mobilization bag-weight 25 lb/man 15,100 lbs
Mobilization bag-cube 1 cu ft/man 604 cu ft
Check-in baggage-weight 70 lb/man 42,280 lbs
Check-in baggage-cube 3 cu ft/man 1,812 cu ft

TOTAL

Personnel-weight and cube with all gear 175,020 lbs 9,060 cu ft
Weight and cube TOE equipment 1,373,943 lbs 339,175 cu ft
Weight and cube, common table of allowances

ACLU-RDI 320 p.89

DODDOA-004303
(CTA) deployable equipment 245,763 lbs 25,296 cu ft

Weight and cube of personnel, TOE equipment and CTA deployable equipment 1,794,726 lbs 373,531 cu ft

c. Transportation Reference Data.

(1) Semitrailer requirements.

M871 semitrailer, platform, break-bulk, container transporter, 221/2 ton,
length = 29.8 ft; width = 8 ft,
height = 4.6 ft 30 each

(2) Railcar transportation requirements.

Railcar = 80 ft 38 each

(3) Tactical aircraft airlift requirements.

Cargo compartment data: C-141 vs C-5A

<table>
<thead>
<tr>
<th>Cargo Compartment</th>
<th>C-141</th>
<th>vs</th>
<th>C-5A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (inches)</td>
<td>840</td>
<td></td>
<td>1,454</td>
</tr>
<tr>
<td>Width (inches)</td>
<td>123</td>
<td></td>
<td>228</td>
</tr>
<tr>
<td>Height (inches)</td>
<td>109</td>
<td></td>
<td>162</td>
</tr>
<tr>
<td>Allowable cargo load (lbs)</td>
<td>50,000</td>
<td></td>
<td>150,000</td>
</tr>
<tr>
<td>Troop Seats</td>
<td>102</td>
<td></td>
<td>20/73</td>
</tr>
<tr>
<td>Aircraft Requirement</td>
<td>15</td>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

Strategic Deployment

(4) Commercial cargo capacities and configurations.

<table>
<thead>
<tr>
<th>Cargo Capacity</th>
<th>Bulk Bin</th>
<th>Number of Containers</th>
<th>Maximum Capacity CargoBins</th>
<th>Cargo Door Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(cu ft)</td>
<td>(cu ft)</td>
<td></td>
<td>(lbs)</td>
<td>(inches)</td>
</tr>
<tr>
<td>THISTAR L-1011-250</td>
<td>2,385</td>
<td>700</td>
<td>16 (LD-3)</td>
<td>53,850 FWD 70W 68H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AFT 70W 68H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bulk compartment 44W 48H</td>
</tr>
<tr>
<td>THISTAR L-1011-500</td>
<td>2,851</td>
<td>435</td>
<td>19 (LD-3)</td>
<td>61,500 FWD 104W 68H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AFT 70W 68H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bulk compartment 44W 48H</td>
</tr>
<tr>
<td>Cargo Capacity</td>
<td>Bulk Bin Capacity</td>
<td>Number of Containers</td>
<td>Maximum Capacity</td>
<td>Cargo Door Sizes</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td>----------------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>(cu ft)</td>
<td>(cu ft)</td>
<td></td>
<td>(lbs)</td>
<td>(inches)</td>
</tr>
<tr>
<td><strong>BOEING 767-200</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,508</td>
<td>430</td>
<td>22 (LD-2)</td>
<td>46,650</td>
<td>FWD 70W 69H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AFT 70W 69H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bulk compartment 38W 48H</td>
</tr>
<tr>
<td><strong>BOEING 767-300</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4,770</td>
<td>430</td>
<td>30 (LD-2)</td>
<td>60,850</td>
<td>FWD 70W 69H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AFT 70W 69H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bulk compartment 38W 48H</td>
</tr>
<tr>
<td><strong>BOEING 757-200</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,728</td>
<td></td>
<td></td>
<td>25,700</td>
<td>FWD 55W 42H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AFT 55W 44H</td>
</tr>
<tr>
<td><strong>DOUGLAS DC-9-32</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,068</td>
<td></td>
<td></td>
<td>12,985</td>
<td>FWD 48W 24H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AFT 48W 35H</td>
</tr>
<tr>
<td><strong>DOUGLAS DC-9-32</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>750</td>
<td></td>
<td></td>
<td>11,150</td>
<td>FWD 53W 31H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AFT 36W 30H</td>
</tr>
</tbody>
</table>
COMMERCIAL CONTAINER DESCRIPTION

LD-3
CARRIER OWNED
155 CUBIC FEET
3,500 LBS MAXIMUM GROSS WEIGHT
CARRIED ON L-1011 AIRCRAFT
(TYPE 8 - WHEN USING INTERNATIONALLY)

LD-11
CARRIER OWNED
280 CUBIC FEET
7,000 LBS MAXIMUM GROSS WEIGHT
CARRIED ON L-1011 AIRCRAFT

LD-2
CARRIER OWNED
124 CUBIC FEET
2,700 LBS MAXIMUM GROSS WEIGHT
CARRIED ON 767 AIRCRAFT

L-7
PALLETS
3,500 LBS MAXIMUM GROSS WEIGHT
(TYPE 5 FOR INTERNATIONAL USE ONLY)
CARRIED ON L-1011 500 AIRCRAFT

EH
SHIPPER OWNED
18 CUBIC FEET
500 LBS MAXIMUM GROSS WEIGHT
CARRIED ON ALL DELTA AIRCRAFT

(5) Sealift planning factors.

Ship Type
Fast-sealift ship
Roll-on/roll-off
Break-bulk
Container ship

Square Foot Capacity
150,000 sq ft
100,000 sq ft
40,000 sq ft
600 containers

B-3. Hospital Operational Space Requirements

It is estimated that the hospital will require an area approximately 350 meters X 350 meters for its full
complement of personnel and equipment.

B-4. Logistics Planning Factors (Class I, II, III, IV, VI, VIII)


(1) Planning factor rates.

<table>
<thead>
<tr>
<th>Class</th>
<th>A Ration</th>
<th>B Ration</th>
<th>T Ration</th>
<th>MRE</th>
<th>Medical B Ration</th>
<th>RSSP</th>
<th>LRPP</th>
<th>FHC</th>
<th>PMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.410 lbs/meal</td>
<td></td>
<td>1.278 lbs/meal</td>
<td>2.575 lbs/meal</td>
</tr>
<tr>
<td>Class II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.670 PMD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class III</td>
<td>(Packaged)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.590 PMD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class IV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class VI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.060 PMD (Temperate)</td>
<td></td>
<td>3.400 PMD (Tropic/Arid)</td>
<td>1.790 PMD (Arctic)</td>
</tr>
<tr>
<td>Class VIII</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:

- **MRE**: Meal(s), Ready to Eat
- **RSSP**: Ration Supplement Sundries Pack
- **LRPP**: Long-Range Patrol Pack
- **FHC**: Female Health and Comfort Items
- **PMD**: Pounds Per Man Per Day

(2) Class VI requirements (personal demand items).

<table>
<thead>
<tr>
<th>Departments</th>
<th>Arid/Tropic</th>
<th>Temperate</th>
<th>Arctic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco Products</td>
<td>0.055</td>
<td>0.055</td>
<td>0.055</td>
</tr>
<tr>
<td>Snacks</td>
<td>0.455</td>
<td>0.455</td>
<td>0.455</td>
</tr>
<tr>
<td>Beverage</td>
<td>2.800</td>
<td>1.467</td>
<td>1.186</td>
</tr>
<tr>
<td>Personal Hygiene</td>
<td>0.047</td>
<td>0.047</td>
<td>0.047</td>
</tr>
</tbody>
</table>
Female health and comfort packets are made available in a TO for issue, pending establishment of adequate exchange facilities. A packet weight is not available, but planners can use an estimated factor of 0.03 lbs/person/day based on the FHC items listed in AR 700-23.

(3) **Female health and comfort items.**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Item Description</th>
<th>Unit of Issue</th>
<th>Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cream, Cleansing, 2 oz Tube</td>
<td>Tube</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>Lotion, Hand/Body, 2 oz Tube</td>
<td>Tube</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>Napkin, Sanitary, 12S Box</td>
<td>Box</td>
<td>25</td>
</tr>
<tr>
<td>4</td>
<td>Paper, Toilet, 24 Sheets Package</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Tampon, Sanitary, 12S Box</td>
<td>Box</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>Tissue, Cleansing, 12S Package</td>
<td>250</td>
<td></td>
</tr>
</tbody>
</table>

(1 Pack/25 Females/30 Days)--Federal Stock Number 8970-01-185-2590

**b. Class I Subsistence. Description of rations and packets.**

(1) A Rations consist of both perishable and semiperishable food. It is intended for use primarily under stable conditions and during static phases of military operations when normal cooking and refrigeration are available.

**A Ration Planning Factors**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percent of Total Weight</th>
<th>Per Man Per Day</th>
<th>Per 100 Men Per Day</th>
<th>Per 1,000 Men Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average weight including packing</td>
<td>100</td>
<td>7.23</td>
<td>723</td>
<td>7,230</td>
</tr>
<tr>
<td>Semiperishable</td>
<td>35</td>
<td>2.56</td>
<td>256</td>
<td>2,560</td>
</tr>
<tr>
<td>Perishable</td>
<td>65</td>
<td>4.67</td>
<td>467</td>
<td>4,670</td>
</tr>
<tr>
<td>Chill</td>
<td>48</td>
<td>3.50</td>
<td>350</td>
<td>3,500</td>
</tr>
<tr>
<td>Freeze</td>
<td>16</td>
<td>1.18</td>
<td>118</td>
<td>1,180</td>
</tr>
<tr>
<td>Ventilated</td>
<td>9</td>
<td>0.67</td>
<td>67</td>
<td>670</td>
</tr>
</tbody>
</table>

(2) B Rations consist of approximately 100 semiperishable items, mainly canned and dehydrated, and are supplied in bulk. B Rations are used when there are kitchen facilities but no refrigeration.

**Standard B Ration Planning Factors**
<table>
<thead>
<tr>
<th>Factor</th>
<th>Per Man Per Day</th>
<th>Per 100 Men</th>
<th>Per 1,000 Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Weight</td>
<td>3.198</td>
<td>319.80</td>
<td>3,198.0</td>
</tr>
<tr>
<td>Alternate Menu Items</td>
<td>3.683</td>
<td>368.30</td>
<td>3,683.0</td>
</tr>
<tr>
<td>Gross Weight (Pounds)</td>
<td>3.834</td>
<td>383.40</td>
<td>3,834.0</td>
</tr>
<tr>
<td>Alternate Menu Items</td>
<td>4.368</td>
<td>436.80</td>
<td>4,368.0</td>
</tr>
<tr>
<td>Gross Cube (Cubic Feet)</td>
<td>0.1226</td>
<td>12.62</td>
<td>122.6</td>
</tr>
<tr>
<td>Alternate Menu Items</td>
<td>0.1200</td>
<td>12.00</td>
<td>12.0</td>
</tr>
</tbody>
</table>

(3) The MRE is designed for use as individual meal packets, or in multiple of three for a complete ration. This packet is not to be used for extended periods. It comes in a pouch that can be torn open. Heating of meat components is desirable. Twelve different menus are available.

(4) The MRE is not authorized as the sole ration source for a period in excess of 10 days per guidance from the current Surgeon General. They are not authorized for patient use at any level within the theater medical system unless it is the only ration available because the effect on immobilized, traumatized patients is unknown.

(5) T Ration is a ready-to-heat and serve tray pack. It is used under conditions when kitchen facilities and normal refrigeration do not exist. The container package is designed for immersion heating in boiling water. Included are disposable eating utensils. There are a total of 28 T Rations menus: 10 breakfasts with 4 alternates, and 10 dinners with 4 alternates. T Rations are not authorized for feeding hospitalized patients except in emergencies when other rations are not available.

(6) Ration supplement sundries pack is composed of items necessary to the health and comfort of troops such as essential toilet articles, tobacco, and confections that are usually obtained at an exchange. This packet is made available in a TO for issue, pending establishment of adequate service facilities. (See AR 700-23.) National Stock Number (NSN): 8970-00-268-9934.


<table>
<thead>
<tr>
<th>Time</th>
<th>Rations Served Daily</th>
<th>Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>D--D-10</td>
<td>3 MRE</td>
<td>Order pouch bread, and flameless ration heater</td>
</tr>
<tr>
<td>D-11--D-30</td>
<td>2 MRE, 1 T Ration</td>
<td>Augment with milk, fresh fruit, vegetables, and pouch bread</td>
</tr>
<tr>
<td>D-31--D-90</td>
<td>1 MRE, 2 T Rations</td>
<td>Augment with milk, fresh fruit, vegetables, and</td>
</tr>
</tbody>
</table>
### Characteristics of Rations and Subsistence Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Contents</th>
<th>Net Weight (Pounds)</th>
<th>Volume (Cubic Feet)</th>
<th>Cases Per Pallet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard B Ration Regular Menu</td>
<td>300 Meals (100 men per day)</td>
<td>319.8</td>
<td>12.26</td>
<td></td>
</tr>
<tr>
<td>MRE</td>
<td>12 meals</td>
<td>17</td>
<td>0.83</td>
<td>48</td>
</tr>
<tr>
<td>NSN 8970-00-149-1094</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unitized Tray Pack (T-Ration)</td>
<td>36 trays</td>
<td>80--90</td>
<td>2.67</td>
<td></td>
</tr>
<tr>
<td>LRP Food Packets NSN 8970-00-926-9222</td>
<td>40 packets</td>
<td>36</td>
<td>1.84</td>
<td>24</td>
</tr>
<tr>
<td>Ration Supplement Sundries Pack NSN 8970-00-268-9934</td>
<td>1 packet (100 men per day)</td>
<td>41</td>
<td>1.67</td>
<td>24</td>
</tr>
<tr>
<td>Ration Supplement Beverage Pack NSN 8970-01-108-2858</td>
<td>2 packs serve 200 men</td>
<td>22</td>
<td>0.99</td>
<td></td>
</tr>
<tr>
<td>Ration Supplement Aid Station NSN 8970-00-128-6404</td>
<td>1 packet (100 8-OZ drinks)</td>
<td>16</td>
<td>1.01</td>
<td>39</td>
</tr>
<tr>
<td>General-Purpose Food Survival Packet NSN 8970-00-082-5665</td>
<td>24 packets</td>
<td>20</td>
<td>0.43</td>
<td>90</td>
</tr>
</tbody>
</table>

**e. Army Medical Field Feeding Policy.** The medical Army feeding policy for hospitalized patients is three hot meals daily. The meals will consist of Medical B Rations. A Ration meals or components will be used when the tactical and logistical situation permits. Meals, ready to eat and T Rations are **NOT AUTHORIZED** for feeding hospitalized patients **EXCEPT IN EMERGENCIES** when other rations are not available.

**f. Army Medical Field Feeding Inpatient Census and Accounting.**

1. Inpatient census is obtained from the Recapitulation Table of the Admissions and Disposition Report, which is prepared daily by the hospital PAD. Inpatient figures reflect the number of hospital beds occupied as of 2400 hours of the previous day.

2. Inpatient (accounting) strength will be recorded in the Remarks Section of the DA Form 5913-R (Strength and Feeder Report) for information purposes. Patient strength will not be included in the present-for-duty section of DA Form 5913-R.

**g. Standard Medical B Ration Purpose/Policy.**

1. Standard Medical B Ration is planned for subsisting patients in Armed Forces MTFs when
semiperishable food is required.

(2) Patients are exempt from the theater ration policy and will receive three hot prepared meals per day.

(3) Staff assigned to medical units will be fed according to the service theater ration policy. To simplify procurement, menu preparation, and service when hot meals are served to medical personnel, they will be served the regular diet from the Medical B Ration.

(4) In unusual circumstances (for example, facility relocation/movement), operational rations may be required for staff (not to exceed ten days).

h. Standard Medical B Ration Meals.

(1) To support 24-hour patient care, the hospital must prepare four meals per day: breakfast, lunch, dinner, and a night meal. The night meal may utilize a breakfast or lunch/dinner menu according to local procedures.

(2) Patients requiring late meals will be served as complete a meal as possible with items from the preceding meal.

(3) Late meals will be served in accordance with dietary constraints, local procedures, and PVNTMED sanitation guidelines.

i. B Ration Weight and Cubage.

<table>
<thead>
<tr>
<th>Net Weight of Ration</th>
<th>3.0857 lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Weight of Ration</td>
<td>3.6390 lbs</td>
</tr>
<tr>
<td>Gross Cube of Ration</td>
<td>0.1173 cu ft</td>
</tr>
</tbody>
</table>

j. Estimated Combat Support Hospital Logistics Planning Factors (Class I, II, IV, VI, and VIII).

<table>
<thead>
<tr>
<th>Class</th>
<th>Lbs/Man/Day</th>
<th>Lbs/Unit/Day</th>
<th>STUNS/Unit Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Subsistence</td>
<td>4.47</td>
<td>2,599.88</td>
</tr>
<tr>
<td>II</td>
<td>Supplies</td>
<td>3.67</td>
<td>2,216.68</td>
</tr>
<tr>
<td>IV</td>
<td>Barrier</td>
<td>4.00</td>
<td>2,416.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>2,727.00</td>
</tr>
<tr>
<td>VI</td>
<td>Personal</td>
<td>2.06</td>
<td>1,244.24</td>
</tr>
<tr>
<td>VIII</td>
<td>Medical</td>
<td>1.66</td>
<td>936.20</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>12,240.00</td>
</tr>
</tbody>
</table>

k. Planning Combat Support Hospital Blood Requirements.

(1) The management and distribution of resuscitative fluids in the TO, including blood and blood products, are functions of health service logistics. In the mature theater, blood management is based on resupply of needs from the CONUS donor base. In a developing theater during the buildup period, immediate blood requirements may be provided by pre-positioned frozen blood. These pre-positioned stocks are designed to meet initial blood requirements until the logistical system can deliver liquid blood.
(2) Blood and blood products enter the theater through the USAF Blood Transshipment Centers for further distribution to the Army blood bank platoons located in the MEDLOG battalion (forward or rear). The CSH is supplied with blood and blood products by a blood bank platoon assigned to the MEDLOG battalion (forward).

(3) Blood shipped into the AO will be packed RBCs only. Frozen plasma and platelets are also available. Subject to availability, RBCs shipped from CONUS are packed with the following unit group and type distribution:

<table>
<thead>
<tr>
<th>Blood Group/Type</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>O Rh Positive</td>
<td>40%</td>
</tr>
<tr>
<td>O Rh Negative</td>
<td>10%</td>
</tr>
<tr>
<td>A Rh Positive</td>
<td>35%</td>
</tr>
<tr>
<td>A Rh Negative</td>
<td>5%</td>
</tr>
<tr>
<td>B Rh Positive</td>
<td>8%</td>
</tr>
<tr>
<td>B Rh Negative</td>
<td>2%</td>
</tr>
</tbody>
</table>

(4) Blood planning factors.

<table>
<thead>
<tr>
<th>Blood Component</th>
<th>Planning Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBCs</td>
<td>*4 units for each wounded in action (WIA) and each nonbattle injury (NBI) casualty initially admitted to a hospital</td>
</tr>
<tr>
<td>Frozen Plasma</td>
<td>0.08 units for each hospitalized WIA or NBI</td>
</tr>
<tr>
<td>Frozen Platelet Concentrate</td>
<td>0.04 units for each hospital WIA or NBI</td>
</tr>
</tbody>
</table>

* For blood planning purposes, only count the WIA or NBI once in the system, not each time the patient is seen or admitted.

(5) The expected admission rates per day are critical in computing initial blood requirements. These rates, along with the above blood planning factors, provide the planner with an initial estimate of daily blood requirements.

Sample Calculations for Initial Blood Requirements.

- Expected Initial Admission Rate for WIA and NBI = 8 per 1,000 per day
- Total Personnel = 10,000
- RBC Planning Factor = 4 units
Formula:

\[(\text{Total Personnel}/1,000) \times \text{Admission Rate Per Day} \times \text{Factor} = \text{Blood or Blood Component Per Day}\]

Example: \((10,000/1,000) \times 8 \times 4 = 320\) units of RBCs per day

(6) It is estimated that the CSH will require 113 units of blood per day. It has the capability to store 160 units. It stores RBCs of various groups and types. The CSH has emergency blood collection capability but does not have the capability to perform serological testing of the donor units (for example, hepatitis, human immunodeficiency virus, and syphilis testing). Blood collection in the theater is governed by theater policy, but normally is done to provide platelets for emergency situations. Limited testing of blood drawn in the theater is done to minimize danger to recipients.


(1) *Estimated planning factors.*

<table>
<thead>
<tr>
<th>Category</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR Table</td>
<td>2.8 liter/min during operational time.</td>
</tr>
<tr>
<td>ICU Beds</td>
<td>4.5 liter/min for 17 percent of the total ICU beds (patients on resuscitator/ventilator).</td>
</tr>
<tr>
<td>ICU Beds</td>
<td>3.1 liter/min for 17 percent of the total ICU beds (patients on nasal cannula/mask).</td>
</tr>
</tbody>
</table>

**Miscellaneous Requirements:** An additional factor of 10 percent is applied to the total of OR and ICU requirements to account for oxygen requirements in other areas of the hospital.

(2) *Oxygen conversion factors.*

<table>
<thead>
<tr>
<th>Conversion Factor</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 gallon (gaseous oxygen)</td>
<td>0.1333 cu ft</td>
</tr>
<tr>
<td>95 gallon &quot;D&quot; cylinder</td>
<td>12.7 cu ft</td>
</tr>
<tr>
<td>1,650 gallon &quot;H&quot; cylinder</td>
<td>220 cu ft</td>
</tr>
<tr>
<td>1 cu ft (gaseous oxygen)</td>
<td>28.317 liters</td>
</tr>
<tr>
<td>95 gallon &quot;D&quot; cylinder</td>
<td>359.63 liters</td>
</tr>
<tr>
<td>1,650 gallon &quot;H&quot; cylinder</td>
<td>6229.74 liters</td>
</tr>
</tbody>
</table>

(3) *Estimated oxygen requirements.*
m. Class VIII Planning Factor.

(1) Class VIII composition.

<table>
<thead>
<tr>
<th>FSC</th>
<th>Item</th>
<th>Percentage of PMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>6505</td>
<td>Drugs/biologicals and other official reagents</td>
<td>77.1</td>
</tr>
<tr>
<td>6510</td>
<td>Surgical dressings</td>
<td>6.8</td>
</tr>
<tr>
<td>6515</td>
<td>Medical/surgical supplies</td>
<td>8.0</td>
</tr>
<tr>
<td></td>
<td>X-ray film/development lab reagents, test kits, patient care accessories</td>
<td>8.1</td>
</tr>
</tbody>
</table>

(2) Class VIII PMD planning factors (based on TAA 93 NATO scenario).

<table>
<thead>
<tr>
<th>Troop Level</th>
<th>Weight Strength</th>
<th>Planning Factor (lbs/day)</th>
<th>PMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
<td>412,001</td>
<td>269,413</td>
<td>0.65</td>
</tr>
<tr>
<td>Combat Zone</td>
<td>668,607</td>
<td>978,712</td>
<td>1.46</td>
</tr>
<tr>
<td>Theater</td>
<td>834,014</td>
<td>1,297,156</td>
<td>1.55</td>
</tr>
</tbody>
</table>

(3) Supply requisitions.

924 per day 10,499 per month

(4) Class VIII weight and cube (Codes P, G, W, and Q and R).

<table>
<thead>
<tr>
<th>Code</th>
<th>Weight</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>29,369.59 lbs</td>
<td>1,013.496 cu ft</td>
</tr>
<tr>
<td></td>
<td>(potency period/expiration date)</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>1,493.14 lbs</td>
<td>67.15 cu ft</td>
</tr>
<tr>
<td></td>
<td>(between 35 to 46 degrees Fahrenheit)</td>
<td></td>
</tr>
</tbody>
</table>
Code W
0.04 lbs
0.003 cu ft

(must be frozen for preservation)

Code Q/Code R
573.11 lbs
32.111 cu ft

n. Estimated Combat Support Hospital Petroleum, Oil, and Lubricants/Fuel Consumption:

(1) HUB

<table>
<thead>
<tr>
<th></th>
<th>Gal/Day</th>
<th>Weight</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>661.10</td>
<td>4,098.87 lbs</td>
<td>88.388 cu ft</td>
</tr>
<tr>
<td>Diesel</td>
<td>1,129.09</td>
<td>7,957.36 lbs</td>
<td>161.203 cu ft</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,790.19</td>
<td>12,056.23 lbs</td>
<td>249.591 cu ft</td>
</tr>
</tbody>
</table>

(2) HUS

<table>
<thead>
<tr>
<th></th>
<th>Gal/Day</th>
<th>Weight</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>68.88</td>
<td>427.66 lbs</td>
<td>8.225 cu ft</td>
</tr>
<tr>
<td>Diesel</td>
<td>254.61</td>
<td>1,791.31 lbs</td>
<td>34.144 cu ft</td>
</tr>
<tr>
<td>TOTAL</td>
<td>323.49</td>
<td>2,218.97 lbs</td>
<td>42.373 cu ft</td>
</tr>
</tbody>
</table>

(3) HUB/HUS TOTAL

<table>
<thead>
<tr>
<th></th>
<th>Gal/Day</th>
<th>Weight</th>
<th>Cube</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline</td>
<td>729.98</td>
<td>4,525.92 lbs</td>
<td>97.817 cu ft</td>
</tr>
<tr>
<td>Diesel</td>
<td>1,383.87</td>
<td>9,728.59 lbs</td>
<td>185.437 cu ft</td>
</tr>
</tbody>
</table>

(4) Petroleum storage capability (based on hospital TOE):

<table>
<thead>
<tr>
<th>Lin/Nomenclature</th>
<th>Quantity</th>
<th>Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>V15086</td>
<td>1</td>
<td>3,000</td>
</tr>
<tr>
<td>Tank fabric collapsible 3,000 gallons</td>
<td>1</td>
<td>3,000</td>
</tr>
<tr>
<td>Z94047</td>
<td>1</td>
<td>1,500</td>
</tr>
<tr>
<td>Truck tank POL MTV W/E 1,500 gallons</td>
<td>1</td>
<td>1,500</td>
</tr>
<tr>
<td>Total Storage capability (gallons):</td>
<td></td>
<td>4,500</td>
</tr>
</tbody>
</table>

o. Water Planning Factors (Gallons of Water Per Day).
(1) Total patients (beds) \( \times 17.25 \text{ gal} = \) _______
Surgical cases \( \times 13.0 \text{ gal} = \) _______
Staff \( \times 10.25 \text{ gal} = \) _______
Bed patients \( \times 22.0 \text{ gal} = \) _______
Minimal care patients \( \times 10.0 \text{ gal} = \) _______
Staff \( \times 9.4 \text{ gal} = \) _______
Decontamination
7 gallons per individual
380 gallons per major end item
Vehicle maintenance
1/2 gal per vehicle (temperate)
1 gal per vehicle (hot climate)
Loss/waste factor = 10 percent of total requirement

(2) Hospital water requirement (consumptive factors).

<table>
<thead>
<tr>
<th>Staff</th>
<th>Water Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking</td>
<td>1.5 gal/man/day</td>
</tr>
<tr>
<td>Hygiene</td>
<td>1.7 gal/man/day</td>
</tr>
<tr>
<td>Food prep</td>
<td>1.75 gal/man/day</td>
</tr>
<tr>
<td>Extra showers</td>
<td>5.3 gal/man/day</td>
</tr>
<tr>
<td>Unit wastewater generation</td>
<td>7 gal/man/day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Care</th>
<th>Water Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleanup</td>
<td>1.0 gal/bed/day</td>
</tr>
<tr>
<td>Heat treatment</td>
<td>0.2 gal/bed/day</td>
</tr>
<tr>
<td>Bed bath</td>
<td>5.0 gal/bed/day</td>
</tr>
<tr>
<td>Hygiene</td>
<td>1.7 gal/bed/day</td>
</tr>
<tr>
<td>Bed pan wash</td>
<td>1.5 gal/bed/day</td>
</tr>
<tr>
<td>Laboratory</td>
<td>0.2 gal/bed/day</td>
</tr>
<tr>
<td>Sterilizer</td>
<td>0.2 gal/bed/day</td>
</tr>
<tr>
<td>X-ray</td>
<td>0.2 gal/bed/day</td>
</tr>
<tr>
<td>Handwashing</td>
<td>2.0 gal/bed/day</td>
</tr>
<tr>
<td>Cleanup</td>
<td>1.0 gal/bed/day</td>
</tr>
<tr>
<td>Unit wastewater generation</td>
<td>12 gal/bed/day</td>
</tr>
</tbody>
</table>

ACLU-RDI 320 p.102
<table>
<thead>
<tr>
<th></th>
<th>Surgical Water Requirement</th>
<th>Hospital Laundry Water Requirement</th>
<th>Decontamination Water Requirement</th>
<th>Menu</th>
<th>Alternate Menu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scrub</strong></td>
<td>8.0 gal/case/day</td>
<td><strong>Bed patients</strong></td>
<td><strong>Individual</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Instrument wash</strong></td>
<td>2.0 gal/case/day</td>
<td><strong>Ambulatory patients</strong></td>
<td><strong>Major end item</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OR cleanup</strong></td>
<td>3.0 gal/case/day</td>
<td><strong>Staff smocks</strong></td>
<td><strong>Vehicle</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Unit wastewater</strong></td>
<td>13 gal/case/day</td>
<td><strong>Unit wastewater generation</strong></td>
<td><strong>Wastewater generation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>To be determined</td>
</tr>
</tbody>
</table>

(3) Water usage table for food and beverage preparation patient menu (gallons per meal per 100 portions).

<table>
<thead>
<tr>
<th>Day</th>
<th>B</th>
<th>L</th>
<th>D</th>
<th>Total</th>
<th>B</th>
<th>L</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>32</td>
<td>29</td>
<td>32</td>
<td>113</td>
<td>45</td>
<td>28</td>
<td>25</td>
<td>108</td>
</tr>
<tr>
<td>Day 2</td>
<td>30</td>
<td>40</td>
<td>39</td>
<td>129</td>
<td>44</td>
<td>30</td>
<td>23</td>
<td>111</td>
</tr>
<tr>
<td>Day 3</td>
<td>48</td>
<td>34</td>
<td>32</td>
<td>114</td>
<td>28</td>
<td>33</td>
<td>15</td>
<td>71</td>
</tr>
<tr>
<td>Day 4</td>
<td>56</td>
<td>40</td>
<td>37</td>
<td>132</td>
<td>45</td>
<td>34</td>
<td>34</td>
<td>114</td>
</tr>
<tr>
<td>Day 5</td>
<td>49</td>
<td>42</td>
<td>35</td>
<td>128</td>
<td>48</td>
<td>37</td>
<td>34</td>
<td>118</td>
</tr>
<tr>
<td>Day 6</td>
<td>53</td>
<td>34</td>
<td>35</td>
<td>122</td>
<td>35</td>
<td>34</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>Day 7</td>
<td>51</td>
<td>35</td>
<td>36</td>
<td>132</td>
<td>45</td>
<td>38</td>
<td>33</td>
<td>117</td>
</tr>
<tr>
<td>Day 8</td>
<td>44</td>
<td>38</td>
<td>35</td>
<td>127</td>
<td>41</td>
<td>36</td>
<td>31</td>
<td>107</td>
</tr>
<tr>
<td>Day 9</td>
<td>51</td>
<td>35</td>
<td>36</td>
<td>132</td>
<td>44</td>
<td>33</td>
<td>37</td>
<td>114</td>
</tr>
<tr>
<td>Day 10</td>
<td>62</td>
<td>36</td>
<td>35</td>
<td>127</td>
<td>46</td>
<td>31</td>
<td>31</td>
<td>108</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>1225</td>
<td></td>
<td></td>
<td></td>
<td>1079</td>
</tr>
</tbody>
</table>
Note: Per 100 patients an additional 30 gallons of water per meal is required to preheat insulated food and beverage containers for decentralized ward service.

(4) Water usage table for food and beverage preparation staff menu (gallons per meal per 100 portions).

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>L</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menu</td>
<td>B</td>
<td>L</td>
<td>D</td>
<td>Total</td>
</tr>
<tr>
<td>Day 1</td>
<td>36</td>
<td>27</td>
<td>28</td>
<td>91</td>
</tr>
<tr>
<td>Day 2</td>
<td>35</td>
<td>29</td>
<td>33</td>
<td>97</td>
</tr>
<tr>
<td>Day 3</td>
<td>31</td>
<td>32</td>
<td>30</td>
<td>93</td>
</tr>
<tr>
<td>Day 4</td>
<td>42</td>
<td>39</td>
<td>35</td>
<td>116</td>
</tr>
<tr>
<td>Day 5</td>
<td>32</td>
<td>44</td>
<td>32</td>
<td>108</td>
</tr>
<tr>
<td>Day 6</td>
<td>42</td>
<td>31</td>
<td>34</td>
<td>107</td>
</tr>
<tr>
<td>Day 7</td>
<td>36</td>
<td>34</td>
<td>34</td>
<td>104</td>
</tr>
<tr>
<td>Day 8</td>
<td>28</td>
<td>38</td>
<td>35</td>
<td>99</td>
</tr>
<tr>
<td>Day 9</td>
<td>33</td>
<td>37</td>
<td>33</td>
<td>103</td>
</tr>
<tr>
<td>Day 10</td>
<td>36</td>
<td>34</td>
<td>34</td>
<td>104</td>
</tr>
<tr>
<td>TOTAL</td>
<td>36</td>
<td>33</td>
<td>38</td>
<td>105</td>
</tr>
</tbody>
</table>

Daily water consumption (patient and staff): 12,180 gal/day.
Laundry daily water consumption (patient and staff): 11,650 gal/day.
TOTAL water consumption: 23,830 gal/day.

(5) Estimated water consumptive factors (under chemical environment, 72 hour scenario).

<table>
<thead>
<tr>
<th>Staff</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking (1.5 gal/man/day)</td>
<td>905</td>
</tr>
<tr>
<td>Hygiene (1.0 gal/man/day)</td>
<td>604</td>
</tr>
<tr>
<td>Feeding (0.25 gal/man/day)</td>
<td>453</td>
</tr>
<tr>
<td>Patient Care (4 gal/patient/bed/day)</td>
<td>1,184</td>
</tr>
<tr>
<td>Surgical (3 gal/case/day)</td>
<td>72</td>
</tr>
</tbody>
</table>

TOTAL DAILY WATER REQUIREMENT: 3,218 gal/day.

(6) Water storage capability (based on hospital TOE):

<table>
<thead>
<tr>
<th>Lin/Nomenclature</th>
<th>Quantity</th>
<th>Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>D69050 Drum, fabric, collapsible, 500 gal</td>
<td>6</td>
<td>3,000</td>
</tr>
<tr>
<td>C69988 Drum, fabric, collapsible, 250 gal</td>
<td>4</td>
<td>1,000</td>
</tr>
<tr>
<td>T19038 Tank assembly, fabric, collapsible, 3,000 gal</td>
<td>6</td>
<td>18,000</td>
</tr>
<tr>
<td>W98825 Trailer tank 11/2 ton 2 wheel 400 gal</td>
<td>2</td>
<td>800</td>
</tr>
</tbody>
</table>

TOTAL STORAGE CAPABILITY (GAL.): 22,800 gal.

p. Laundry.
(1) The Surgeon General's policy statement (theater hospital laundry support). Hospitals operating in the CZ will have a basic organic laundry capability to meet mission needs. As a minimum, this is the capability to process hospital linens, patient hospital clothing, and unit-owned duty personnel work garment. Bath capability and laundry support for hospital staff may be obtained from available quartermaster sources.

(2) Basic formulas for determining laundry requirements for permanent party hospital personnel are--

- **Formula 1:** 42 lbs (6 lbs clothing per person per day X 7 days) X 75 percent of assigned personnel = weekly laundry requirement for patient care personnel.
- **Formula 2:** 6 lbs clothing per person per week X 25 percent of assigned personnel = weekly laundry requirement for hospital support personnel.
- Weekly laundry requirement (Formula 1 + Formula 2) divided by number of assigned personnel = average laundry requirement per person per week.

q. **Showers.** Minimum frequency for showering and laundering from a health maintenance perspective is deemed to be once weekly regardless of location, season, or level of combat activity. (Source: Office of The Surgeon General, Department of the Army, 31 January 1983.)

r. **Solid Waste Factors.**

(1) Solid waste calculation (estimated):
Total patients (beds) X 15 lbs = total patient solid waste
Staff X 12.5 lbs = total staff solid waste

(2) Hospital infectious waste planning factors (estimated):
3 lbs per cubic foot of infectious waste
3 lbs of infectious waste generated per bed per day

(3) Hospital infectious waste:

888 lbs per day  296 cu ft per day

s. **Wastewater Planning Factors.**

Wastewater calculations (estimated):

Total wastewater 21,394 gallons per day (estimated).

Assume that 80 percent of patient care and staff water requirements become wastewater, and all laundry water requirements become wastewater.

*Power Requirements.* It is estimated that 823.1317 kilowatts of power will be required on a daily basis.
APPENDIX C

FIELD WASTE

The accumulation and disposal of waste of all types is a major problem on the modern battlefield. Not only does this waste impact on military operations, but it also serves as a breeding ground for rodents and arthropods. Further, the accumulation of waste contributes to environmental contamination.

Section I. OVERVIEW

C-1. General

Army policy is that all solid and hazardous waste will be disposed of in an environmentally acceptable manner consistent with good sanitary engineering principles and the accomplishment of unit mission. While operating OCONUS, either in training or actual contingency operations, the theater commander will determine the applicability of both US and host-country policies.

C-2. Responsibility for Disposal of Waste

a. Depending on the nature and volume of waste created, units generating the waste are normally responsible for its collection and disposal.

b. Certain types of waste require special handling that may be beyond the capability of the unit or facility. Units generating larger amounts of waste, such as hospitals, may not have the resources or equipment to properly dispose of solid waste. In these cases, supporting engineer units should be contacted to provide waste disposal support.

C-3. Categories of Waste

Waste can be subdivided into five distinct categories: general waste (including solid waste), hazardous waste, medical waste, human waste, and wastewater. Nonmedical solid waste (general and hazardous waste) is generated by all military units. Medical waste is only generated by medical elements, such as treatment, research, and laboratory.

a. General Waste. This category includes all waste not specifically classified as medical waste or hazardous waste. It includes such items as--

   • Paper and plastic products (which are by far the most abundant solid waste generated in a field environment).
   • Garbage (generated by dining facilities).
   • Scrap material (wood, metal, and so forth).

b. Hazardous Waste. This includes waste which is ignitable, corrosive, reactive, or toxic, especially POL and some chemicals, and which requires special handling, transportation, disposal, and documentation. Supporting engineer and PVNTMED personnel can provide guidance and assistance on the handling and disposing of hazardous waste.

c. Medical Waste. This waste, produced in an MTF (nongeneral), contains pathogens of sufficient quantity and virulence to result in an infectious disease in a susceptible host.
d. Human Waste. This waste is comprised of feces and urine.

e. Wastewater. This includes liquid waste generated by laundry, shower, food service, and routine MTF operations.

Section II. GENERAL AND HAZARDOUS WASTE

C-4. General

General and hazardous waste are produced by all military units. Control and disposal of these types of waste requires planning and the development of unit standing operating procedures.

C-5. Sources of General and Hazardous Waste

a. The primary sources of general and hazardous waste are--

- Routine troop support operations.
- Maintenance and motor pool operations.
- Administrative functions.
- Dining facility operations.
- Medical treatment facilities.

b. In all of these operations or functions, a major effort must be made to reduce the amounts of waste generated and, thus, to lessen the burden on the disposal system.

C-6. Disposal of General and Hazardous Waste

Most general waste is buried or burned by the generating element. It can be transported in organic vehicles to a waste disposal point (sanitary landfill). It is important to remember that vehicles used to transport waste must be properly cleaned and sanitized before being used for other operations. During training exercises, supporting engineers are responsible for the construction and operation of the landfills.

a. Putrescible waste from dining facilities, while not hazardous or infectious in and of itself, can become both a serious aesthetic problem, as well as a breeding site for disease-carrying rodents and arthropods. This class of solid waste must be removed and disposed of after every meal. Burial of this type waste should be at least 30 yards (or meters) from the food service facility. Normally, one garbage pit is required per 100 soldiers per day (FM 21-10-1).

b. Used oil and POL products are classified as hazardous wastes. Disposal methods for this waste must comply with federal, state, local, and HN regulations. Military engineer and PVNTMED support elements can advise on required disposal procedures.

Section III. MEDICAL WASTE

C-7. General

A component of medical waste, infectious waste is defined as any waste generated by a hospital and capable of producing infectious disease. For a waste to be infectious, it must contain (or potentially contain) pathogens of sufficient virulence to result in an infectious disease in a susceptible host.
C-8. Responsibility for Disposal of Medical Waste

a. The hospital commander, assisted by his PVNTMED advisors, is responsible for implementing policies for medical waste management to include--

- Identification.
- Detection.
- Segregation.
- Handling.
- Storage.
- Disposal.

b. The hospital commander will normally designate a member of his staff to serve as the Infectious Disease Control Officer. This officer assists the hospital commander in establishing infectious disease control procedures. Infectious disease control procedures are established to preclude the spread of infection within the hospital and to prevent the spread of infectious disease outside the facility.

C-9. Types of Medical Waste

All medical waste may be subject to an infectious nature. There are six types of medical waste requiring specific handling and disposal techniques.

a. Isolation Waste. This type waste is generated by patients who are isolated to protect others from highly communicable diseases. It includes all discarded materials contaminated with blood, excretions, exudates, or secretions.

b. Microbiological Waste. This waste comes from cultures and stocks of infectious agents from medical laboratory elements, such as specimens or discarded vaccines from treatment areas.

c. Blood and Blood Products. This waste results from the use of all blood and blood-related products, including blood bags, blood tubes, and material contaminated with blood.

d. Contaminated Sharps.

(1) This particular waste includes, but is not limited to, used--

- Hypodermic needles and syringes.
- Pipettes.
- Glass tubes.
- Scalpel blades.

(2) In addition to the physical hazards of sharps, there is the potential for transmission of pathogenic organisms from puncture wounds. Unused sharps should be considered dangerous as the same puncture hazard exists.

e. Surgical Waste: Surgical waste is the material that has been contaminated as the result of surgical procedures. Examples of this category include--

- Soiled dressings.
- Used sponges.
Soiled surgical drapes.
- Contaminated drainage tubes.
- Other material discarded after completion of a procedure.

**Pathological Waste.** This waste is comprised of tissue, organs, body parts, and fluids removed during a surgical procedure. Human corpses (remains), however, are not considered pathological waste and are handled by MA elements.

**C-10. Source of Medical Waste**

The major sources of medical waste are patient care areas, especially the emergency room or EMT/triage areas, ORs, and ICUs. Medical wards and laboratories are also medical waste generators. The actual amount of medical waste generated is dependent on the intensity and nature of medical operations.

**C-11. Handling and Transporting Medical Waste**

a. Proper handling is the key to an effective hospital waste program. Segregation of infectious waste from general waste at the point of generation is a must. Procedures for handling medical waste are as follows:

- Personnel who transport and dispose of infectious waste wear a disposable mask, butyl rubber apron, and gloves.
- Infectious waste is collected in double-lined impervious containers with tight-fitting lids, if available; otherwise double plastic bags are used. The containers are clearly marked as infectious waste. All bags, after being filled to only two-thirds capacity, are sealed by lapping the gathered open end and binding it with tape or a closure device. This ensures that liquid waste cannot leak. A method of segregating infectious waste from general waste is the use of distinctly colored bags (red) for infectious waste, if available (AR 40-5).
- Sharps are placed in a rigid, clearly marked, puncture resistant container.

**NOTE**

Needle/syringe clippers are no longer authorized.

- Blood, blood products, and semisolid waste are placed in unbreakable capped or stoppered containers.
- Medical waste is stored in designated areas, either secured or under direct physical control.
- Infectious waste is removed from the point of generation and is disposed of at least every 24 hours.

b. The transportation of medical waste within the hospital is in rigid, leakproof containers, marked and used exclusively for its transport. Vehicles used to transport medical waste to disposal sites should not be used to transport rations, clean laundry, or medical supplies. Before the vehicle is used for other purposes, it must be thoroughly cleaned and sanitized using a 5 percent chlorine solution (48 ounces of chlorine granules in 5 gallons of water).

**C-12. Disposal of Medical Waste**

The purpose of properly treating and disposing of medical waste is to render it nonpathogenic and make it inaccessible. Depending on the quantity and type of waste, command policies, and availability of disposal facilities and engineer support, a variety of options exists. Every effort should be made to use the safest and most complete method of disposing of this waste.
a. Training and Tactical Deployment. During training deployment in CONUS and training/tactical deployment in many OCONUS locations (such as European), the HN environmental regulations are such that disposal of medical waste via field expedient methods is not permitted. Furthermore, the quantities and types of medical waste generated during training are relatively limited due to the amount of actual patient care. As such, the option of choice is to haul the medical waste, via military vehicle or contract services, to fixed installations (preferably large fixed medical facilities) for treatment and disposal according to command policies. While this option does not provide the most ideal training, it may be the only viable option available. The requirements for segregating and handling waste are critical and remain an essential part of training.

b. Steam Sterilization. Some types of medical waste, especially in small quantities, can be rendered nonpathogenic by autoclave (steam sterilization). This technique or system is particularly appropriate for small amounts of waste generated in EMT areas and the laboratory element (for example, contaminated dressings, needles, syringes, cultures, culture plates, pipettes, and blood tubes). To ensure complete disinfection, the steam sterilizer must operate at a minimum of 250 degrees Fahrenheit (121 degrees centigrade), under 15 to 17 pounds of pressure per square inch, for 45 minutes. Two factors must be kept in mind when using the autoclave: the size of the load placed in the chamber and the exposure time. There are a number of different types of autoclaves; therefore, for detailed information on the operation of a specific autoclave, refer to the manufacturer’s instructions or TM.

c. Controlled Incineration. Incineration is the method of choice for most types of medical waste, but it must be controlled. Burning medical waste requires incinerators specifically designed for the various types of medical waste. During OCONUS mobilization deployment, an inclined plane incinerator (Figure C-1) is a field expedient when no other option is available. For the hospital to build and use this incinerator, there should be no immediate plans to relocate the hospital. This field expedient incinerator is a controlled open air burning method that can be used for burning small amounts of medical waste; however, command approval must be given prior to its use. Thorough consideration must be given to all available options before deciding to implement the open air burning method.
NOTE

In all cases, ash from waste incineration must be buried.

d. Disposal by Burying. As a last resort, and with command approval, medical waste can be buried. Engineer support is required for construction of the waste disposal site. The waste must be covered immediately after disposal to ensure inaccessibility. All previous options are considered before accepting burial as the final option. Close coordination with PVNTMED personnel and HN authorities is essential.

Section IV. HUMAN WASTE

C-13. General

Human waste (feces and urine) disposal is essential to prevent the spread of diseases caused by direct contact, contamination of water supplies, or dissemination by rodents or arthropods. It is even more critical in a hospital environment because patients are more susceptible to diseases transmitted through fecal contact. All human waste must be disposed of in a manner consistent with command policy and good sanitary engineering practices.
C-14. Responsibility for Disposal of Human Waste

The hospital commander is responsible to provide human waste disposal facilities. This may require the supporting engineer element to assist in the construction of latrine facilities.

a. Field Medical Treatment Facilities. In some locations, construction and use of actual field expedient waste facilities may be prohibited. In this case, one option is to obtain engineer support. The option of choice is to establish the hospital in an area with permanent or semipermanent latrine facilities already constructed and connected to an established sanitary sewer system. However, this may only be possible in areas designated as deployment sites. In many instances, it may be possible for hospitals to contract waste removal or latrine facilities through a HN support contract. Procedures will vary depending on the command policy and local (HN) agreements, but waste will still have to be separated into types by the unit. The use of chemical or self-contained toilets is another option instead of constructing field expedient latrines. In all types of arrangements, the hospital field sanitation team and PVNTMED personnel are responsible for monitoring the achievement of field sanitation requirements (FM 21-10-1).

b. Field Expedient Facilities.

(1) Type selection.

(a) The type of field latrine selected for a given situation depends on a variety of factors, such as--

- Number of personnel (staff and patients).
- Duration of stay at the site.
- Geological and climatic conditions.

(b) Supporting PVNTMED personnel and the hospital's field sanitation team can assist the commander in determining the appropriate type of latrines, their locations, and size.

(c) Specific guidance on selection criteria is provided in FM 21-10 and 21-10-1.

(2) Location. Location of hospital latrines is a compromise between the requirement for physical separation from dining facilities, water sources, and the like and the convenience of access for staff and ambulatory patients. For the CSH, multiple latrine sites are required due to the size of hospital layout and distances between patient care, administrative, and sleeping areas.

(3) Maintenance. Sanitation and maintenance of the hospital's latrine facilities are critical to prevent disease transmission. Handwashing facilities must be placed at each latrine.

c. Closing and Marking. Closing and marking of latrines will be in accordance with command policy and good field sanitation practices.

C-15. Patient Facilities

a. Ambulatory patients will use the same latrines as the staff. The number of latrines established will be based on both the number of staff and the anticipated patient load. However, male and female latrines are required. Latrines need to be close enough to the ward areas for convenience of access while maintaining distances from dining facilities, water sources, and the like.

b. Nonambulatory patients require the use of bedpans and urinals. Disposal (of fecal and urine) and sanitation of
bedpans and urinals for the nonambulatory patient is a major concern. One or more of the hospital latrines should be designated for bedpans and urinals, to include their cleaning and sanitizing. Once the bedpans and urinals are emptied, they are washed (using a brush) with the wastewater disposed of in the latrine or designated area. The bedpan is then sanitized by submerging it into hot boiling water for 30 seconds.

NOTE

A hook or some device should be used to prevent hand contact with the boiling water.

The bedpan is placed on a tent peg or some hanging device to air dry. The sinks within the hospital will not be used for bedpan or urinal disposal or washing. An area should be established similar to that of a mess kit laundry line, using metal garbage cans and immersion heaters. One can must have warm soapy water and the other can must have clear boiling water. These cans must be clearly marked for use in cleaning bedpans and urinals only.

NOTE

Personnel working with immersion heaters should be aware of the safety precautions and be trained in immersion heater operation and lighting.

An alternative consideration is the use of plastic bedpan liners. If plastic liners are used, they will reduce the requirement for cleaning and sanitizing the bedpan. The plastic linings will then be managed as infectious waste.

Section V. WASTEWATER

C-16. General

Water usage generally results in the production of waste water which requires disposal. Depending on the source, wastewater may contain suspended solids and particulate matter, organic material, grease, dissolved salts, biological, pathological, and pathogenic organisms, and toxic elements. Just the volume of wastewater alone, without consideration of the various contaminants, can cause significant operational problems in the field environment.

C-17. Requirement for Disposal

a. All wastewater and waterborne wastes generated in a field environment must be collected and disposed of in a manner that--

- Protects water resources from contamination.
- Preserves public health while minimizing mission impairment or adversely impacting on the readiness of the force.

b. When operating OCONUS, units may have to comply with applicable HN laws and procedures; this is determined by the theater commander. In an actual contingency operation, the theater commander (with input from the command surgeon) determines the applicability of local environmental laws in the AO. Irrespective of laws and regulations, proper disposal of wastewater is essential to protect the health of the force by precluding contamination of water supplies and development of rodent and arthropod breeding sites.
C-18. Responsibility for Disposal

Units generating wastewater in the field are responsible for their own wastewater collection and disposal. Large volume wastewater generators, such as hospitals, may require engineer support. Theater combat engineers will provide support during OCONUS deployments or contingency operations. In any case, the hospital commander has the final responsibility for coordinating disposal of his unit’s wastewater.

C-19. Wastewater Sources and Collection

Hospitals generate a significant volume of wastewater corresponding to the volume of water consumed. A conservative estimate of wastewater volume for planning purposes is that 80 percent of all water used (other than human consumption) will end up as wastewater. The largest volumes of wastewater are generated by support operations of the hospitals such as laundry, shower, and food service operations. While wastewater is not unique to a hospital, it contributes to an enormous volume requiring collection and disposal. However, wastewater generated from direct patient care functions is unique to the hospitals and may be contaminated with blood, other body fluids, particulate matter, and potentially infectious organisms. In addition to the quantity of wastewater, an added problem is the multiplicity of sources within the hospital that contribute to the complexity of collection.

a. Field Sinks. Field sinks are a primary source of wastewater from staff handwashing, patient hygiene, instrument cleaning, and the like. This liquid waste is generated intermittently and the volume is highly variable depending on the functional area and patient work load. The sinks can operate with the drain line placed in an empty 5-gallon water can. This can must be periodically emptied into a disposal system.

WARNING

Extreme care must be taken to ensure that 5-gallon cans used for waste-water are not mistaken or confused with 5-gallon cans used for potable water; clear labeling is critically essential.

If wastewater collection cans or the DEPMEDS wastewater collection system are not used, the sinks will drain to the immediate exterior of the hospital shelter, resulting in an unacceptable pooling of wastewater throughout the hospital area.

b. Medical Treatment Facility Sources. Sources of wastewater other than the sinks are limited and will generate relatively small volumes of waste liquids. In most cases, this wastewater can be collected and discharged into a nearby sink. An exception may be the water used for facility and major equipment sanitation: for example, wastewater from washing OR tables, OR floors, litters, ambulances, and other medical materiel.

c. Field Showers.

(1) While not an actual part of the hospital system, quartermaster field showers may collocate or be near the hospital to support both patient and staff. These showers may also support personnel of other units within the area. The quartermaster personnel operating field showers are responsible for wastewater collection and disposal. In some situations, the disposal of this wastewater may be in conjunction with that of the hospital.

(2) If quartermaster support is not available, hospital personnel must provide their own showers (FM 21-
The hospital is responsible for the collection and disposal of this wastewater. 

**d. Field Laundries.** The field laundry is one of the largest generators of wastewater. Field laundries may be collocated with or near hospitals to provide support and can present an inordinate wastewater disposal problem. Like the showers, quartermaster personnel operating laundries are responsible for wastewater collection and disposal. Because of the large volume of water required for laundry operations, the facility may have to be located away from a hospital and closer to a water source. In effect, this location would reduce or remove what may be a wastewater disposal problem from the immediate area of the hospital. (Preventive medicine personnel must ensure that laundry personnel are trained in and properly implementing procedures for handling contaminated linens.)

**e. Field Kitchen.** Army field kitchens are also significant sources of wastewater. In addition to the volume, the greases and particulate matter in wastewater from a field kitchen must be dealt with in a much more deliberate manner. For instance, grease traps must be constructed to remove food particles and grease from the kitchen wastewater before disposal. Information for the construction and operation of the filter and baffle grease traps is provided in FM 21-10 and FM 21-10-1. Also, hospital commanders may obtain technical assistance from the supporting PVNTMED element.

**C-20. Disposal of Wastewater**

**a.** In disposing of wastewater, a number of factors should be considered. These include--

- Volume and characteristics of the wastewater.
- Operational considerations (for example, duration of stay in a given location and the intensity of combat operations).
- Geological conditions (for example, type of terrain and soil characteristics, or depth of the water table).
- Climatic conditions.
- Availability of engineer support.
- Accessibility of established sewage collection, treatment, and disposal systems.
- Applicability of command environmental programs.

**b.** In light of the above factors, there are a number of wastewater disposal alternatives that a hospital commander may select. These include--

- Connection to established sanitary sewer system.
- Collection and holding wastewater for engineer or HN agency removal to a fixed treatment facility.
- An engineer-constructed semi-permanent wastewater collection and disposal system.
- A unit-constructed field expedient wastewater disposal system (FM 21-10-1).

**c.** In many OCONUS noncombat operations, especially in the more developed countries, use of existing installation disposal facilities should be the method of choice. Even in some contingency operations, preplanned siting of hospitals can take advantage of preestablished connections to the existing sewer system. Assistance from supporting engineers is required to establish the necessary connections and access to the sewer system. However, grease traps or filters may still have to be used in some areas, such as the dining facility's wastewater stream. Traps and filters will be required to remove grease and particulate matter that would adversely affect the operation of the wastewater pumps.

**d.** If use of a HN sewer is possible, but direct connection is not readily available, an alternate approach is to consolidate and collect wastewater in containers for eventual removal to a sewage treatment plant or a sanitary sewer access by supporting engineers or HN agency. As these storage containers are not part of the hospital's
TOE and the wastewater tank trucks and pumping equipment are not standard engineer equipment, this option requires extensive prior planning and coordination.

e. All AMEDD personnel are required to know how to construct and operate field expedient waste facilities. For the hospital, some engineer support in the form of excavation equipment is almost always required. This requirement will be due, in part, to the inordinate volumes of wastewater generated by the hospital and its associated (kitchen, shower, and laundry) facilities. Engineer support must be coordinated and included in the site preparation planning.

f. Traditional field expedient methods of wastewater disposal consist of soakage pits, soakage trenches, and/or evaporation beds. The effectiveness of these methods depends on the geological conditions and the climate. While these disposal devices, especially soakage pits, are generally constructed for small volumes of wastewater, with proper design and operation they can be effective for larger volumes. Because these methods result in final disposal, it is necessary to remove grease, particulate matter, and other such organic material that could reduce the effectiveness of the process. Guidance on designs and construction of these devices is available in FMs 21-10 and 21-10-1 and from supporting engineer and PVNTMED personnel.

g. In arctic environments, or when geological or climatic conditions are to such extreme that soakage or evaporation is not possible, the only alternative may be to collect the wastewater in containers for removal by Army engineer or HN operators.
D-1. Safety Policy and Program

An effective safety program is essential to any unit. Leaders must stress the importance of constant vigilance to detect potential hazards and reduce or eliminate these hazards.

a. Policy. The safety policy of the Army is to reduce and keep to a minimum accident manpower (and monetary) losses, thus providing more efficient use of resources and advancing combat effectiveness.

b. Program. The unit safety program should be designed to cover all operations and take into consideration all conditions peculiar to the specific operation of the unit. Implementation of the program includes the establishment of a safety organization consisting of a unit safety officer responsible for the supervision and coordination of all unit safety activities and other personnel as required to assist him (see AR 385-10).

D-2. Responsibility for Accident Prevention

a. Commander. The hospital commander must establish and promote safety and occupational health directives and policies to protect personnel and equipment under his command. He must coordinate and integrate these directives and policies with those of higher headquarters and other commands and Services. The hospital commander appoints a qualified individual as the hospital safety officer (see AR 385-10).

b. Hospital Safety Officer. The hospital safety officer serves as an advisor to the commander. He manages the safety program by integrating safety into all functions conducted within the hospital. He must continuously monitor the safety program for effectiveness and identify new methods for accident prevention.

c. Supervisors. Supervisors enforce command safety directives and policies through specific training programs, routine inspections of work areas, accident investigations, and prompt evaluation and action to eliminate or minimize potential hazards identified by personnel.

d. Individuals. All personnel should be made to realize that safety rules have been established for their protection. It is their responsibility to report all unsafe conditions/acts, accidents, and near misses to their immediate supervisor; to follow all instructions; and to properly use all personal protective equipment and safeguards.

D-3. Principles of Accident Prevention

An effective safety program depends on the proper application of the following principles of accident prevention:

a. Stimulation of Interest. Emphasis on safety must be vigorous and continuous, and it must originate with the hospital commander. Group discussions, safety meetings, bulletin board notices, posters, and recognition of individuals for participation create interest in the safety program.

b. Applicability. Practical safety controls should be provided in all planning, training, tactical operations.
professional activities, and off-duty activities.

c. Fact Finding. This refers to the assembly of information bearing upon the occurrence and prevention of accidents. For each accident, the following facts should be determined:

(1) Who was injured, and what was damaged.

(2) The time and place where the accident or injury occurred.

(3) The severity and cost of the accident or injury.

(4) The nature of the accident or injury.

(5) Measures that can be instituted to guard against future recurrences.

d. Corrective Action Based on Facts. Any corrective action that is adopted should be based on available and pertinent facts surrounding the accident or injury. Near accidents also should be reported with all available information so that hazards and unsafe procedures or conditions can be eliminated. Similarly, any procedure or condition which might be dangerous should be reported so that remedial action can be instituted.

e. Safety Education and Training. The objective of safety education and training is to develop the individual’s safety awareness so he performs his tasks with minimal risk to himself and to others.

f. Inspections. The purpose of safety inspections is to eliminate the cause of accidents through specific, methodical procedures.

D-4. Safety Plan

Many items that can be included in any safety plan are listed below, but the list is neither all-inclusive nor restrictive. Certain conditions or geographical areas may require guidance to conform with those needs. Precautions for certain medical/dental procedures or equipment are included here.

a. Accident Reporting. Basic to any safety plan is accident reporting. A definite procedure should be established that emphasizes prompt and complete reporting of all accidents or injuries (AR 385-40). Supervisors must investigate all accidents and injuries, and when needed, seek the assistance of the safety officer to determine the cause(s) and take corrective action to prevent their recurrence. Any accident resulting in damage to equipment should be reported immediately. Continued operation of damaged equipment can subsequently result in injuries to personnel.

b. Safety Color Code Markings and Signs. Safety color code prescribes the use of color combinations that are effective in preventing accidents and in improving production, visual perception, and housekeeping. The code defines the application of colors for such specific purposes as the uniform markings of physical hazards, showing the location of safety equipment, identifying fire-fighting equipment, and designating colors to be used if local conditions warrant the use of color coding (AR 385-30).

c. Fire Prevention.

(1) A hospital fire plan or a fire standing operating procedure should be included in the safety program. It should contain fire prevention guidance and information on what to do if a fire occurs.
(2) NO SMOKING signs should be posted wherever fire hazards exist, such as oxygen administration and flammable materials storage areas. Smoking should be permitted only in designated safety areas. Fire-fighting equipment should be available, and all personnel should be familiar with its location and operation. This equipment should be inspected frequently to determine if it is serviceable and operable. Fire drills should be conducted often enough for all personnel to be familiar with the procedures. Guard personnel should be alert to fire hazards at night. Gasoline, oil, paint, and other flammables should be stored in approved locations and in authorized containers. Oxygen and acetylene tanks must be stored separately and apart from other flammables.

d. Generators. Generators in the field produce the same potential electrical hazards that are found with electricity at permanent installations and demand the same precautions. Personnel working around generators or electrical wiring should remove rings and watches. Generators should be grounded and not refueled while they are in operation. Generators used for patient treatment areas should be located to reduce, as much as possible, their noise in the operative area.

e. Housekeeping. Professional and administrative areas must be kept clean and orderly at all times. Hazards to personnel and equipment can be eliminated or controlled by enforcing high housekeeping standards.

f. Heaters. When heaters are used, they should be watched closely for potential tent fire. Spark arresters or flue guards on stove exhaust pipes and metal shields in stovepipe openings in tents should be used when heaters are in operation. Fire guards are required when stoves are in use to monitor stoves for correct operations and alert others of any potential fire hazards.

g. M-2 Burners. The M-2 burner unit is a heat source used in the nutrition care division and CMS. These units require safety precautions and trained operators who know what to do if the burners malfunction or a fire starts. The commander may require a licensed operator to operate the burners. The burner units have a U-shaped tank containing fuel under pressure. When burners are used, they should be closely monitored because of potential fire and safety hazards. Burners must be used in well-ventilated areas because of the buildup of carbon monoxide gas.


i. Weapons and Ammunition. Continual command emphasis should be directed toward training each individual in the hospital in the handling of weapons and ammunition. Training should begin when an individual joins the hospital. Commanders should ensure that all personnel are briefed on the handling of weapons which accompany patients to the treatment facility. Weapons of hospital personnel should be cleared and placed on safety until required otherwise. Army Regulation 190-11 and FM 19-30 provide guidance on the physical security of weapons and ammunition.

D-5. Accident Investigation and Reporting

a. Investigations. Accident investigation is necessary for accident prevention. Investigation seeks to determine the cause of accidents by finding the elements and sources from which accidents develop. Corrective measures may then be instituted.

b. Reporting. In accordance with AR 385-40, the Army accident reporting system provides for the initial reporting of accidents at unit level. This is done to notify the higher echelon of the command that a mishap has occurred; to record information that will identify causes and corrective actions, indicate trends, and provide a basis for formulating future plans; and to evaluate progress in accident prevention.
Section II. DEPLOYED MEDICAL UNIT SAFETY CONSIDERATIONS

D-6. X-ray Protective Measures and Standards

a. General. Every possible safety precaution must be used when operating radiographic equipment. If all safety rules are strictly adhered to, medical personnel should receive virtually no radiation dose and the patient's exposure will be minimized.

b. Medical Personnel Protection and Standards.

(1) Radiation monitoring. Army Regulation 40-14 prescribes monitoring practices for Army personnel. It requires each person who is occupationally exposed to ionizing radiation and who may receive an accumulated dose equivalent in excess of 62 rem/quarter to wear a dosimeter. The unit's medical supply personnel should coordinate dosimeter support through the U. S. Army Ionizing Radiation Dosimetry Center, ATTN: AMXTM-SR-DCR, Lexington, KY 40511-5102, Defense Switched Network (DSN) 745-3948 or commercial (606) 293-3948. The dosimeter monitors the amount of radiation received by the individual. The whole body dosimeter will be worn below the shoulders and above the hips on the outside of the clothing but under the lead apron, if worn. The results are recorded on an automated dosimetry record by the U. S. Army Ionizing Dosimetry Center. The automated dosimetry record will be reviewed by the hospital radiologist quarterly and then the record is kept permanently as part of the individual's health record.

(2) Care and handling of dosimeter. When not being used, dosimeters will be stored in a manner that avoids accidental exposure. Dosimeters should be marked to preclude personnel using each other's dosimeters.

(3) Radiation standards. For the personnel operating radiographic equipment, an accumulated whole body dose, in reins, must not exceed 5 rem per year and 1.25 rem in a continuous 3-month period (for example, quarter).

(4) Protective shielding. Fixed facilities use lead shielding to protect those working in the area where X rays are taken. However, the potential of finding lead-lined facilities in a deployed environment is limited. When deployed hospitals use buildings of opportunity, the following should be considered:

- When using field x-ray apparatus in a building of opportunity, a major consideration is the location of a room or an isolated area where access can be easily controlled. This area should have at least one, preferably two, walls common to the building exterior. Adjoining rooms should be unoccupied.
- The upright chest bucky should be oriented towards the outside wall and away from the operator.
- The x-ray apparatus should be positioned to maximize the distance from the back of the x-ray tube head to the operator. The apparatus should be positioned so that the x-ray beam will not routinely be directed toward occupied space or heavily traveled passage ways.
- The operator should wear a lead apron or stand behind a lead-lined protective barrier when the apparatus is used.
- The unoccupied area outside the building should be cleared of personnel for at least 50 feet from the x-ray head. This exclusion area should include all potential areas toward which the x-ray beam may be directed. The 50-foot exclusion area fulfills the requirements of Technical Bulletin Medical (TB MED) 521 for both the Siemens and the hand-held field x-ray units and is meant to control the continuous occupancy of this area.
(5) **Patient protection.** Use all means available to reduce the patient's exposure to ionizing radiation. The following practices will help:

- Take only those X rays that are required for diagnosis and treatment.
- Avoid improper positioning, improper exposure techniques, and faulty film processing techniques.
- Use a lead apron or gonadal shielding, if practical, to protect portions of the patient's body which are not in the direct x-ray beam.
- Check the patient's medical history.
- Use the most sensitive emulsion film available.

(6) **X-ray processing.** When working with the film-processing chemicals, personnel will use protective eyewear, gloves, and aprons.

**D-7. Hearing Conservation**

*a.* Technical Bulletin Medical 501 provides the guidance on unit hearing conservation programs.

*b.* Units should contact the PVNTMED activity of the area medical support activity for identification of noise hazardous equipment, job sites, and exposed personnel. This is to be accomplished by conducting sound level surveys on field equipment (that is, compressors, generators, medical and dental handpieces, field laboratory equipment, and military vehicles). These data are used to identify individuals who will require hearing protection fitting, medical surveillance, and health education.

*c.* Personnel identified in this survey are entered in the hearing conservation program and monitored by the medical unit for response to noise exposure and adequacy of hearing-protective devices by the periodic testing of hearing levels. Audiograms are conducted annually, as a minimum.

*d.* Hearing protectors are issued to all unit personnel. Their use will be required when operating or in proximity to noise hazardous equipment such as (but not limited) to generators, compressors, field laboratory equipment, and tactical vehicles, 21/2 tons and larger. Areas around this equipment should be identified by placing NOISE HAZARDOUS AREA, HEARING PROTECTION REQUIRED signs as directed in the hospital's TSOP.

**D-8. Compressed Gas Cylinders**

All compressed gas cylinders should be considered full for handling purposes. They should never be dropped or struck by any object. While cylinders are being transported in vehicles, they should be restrained to prevent them from falling. Cylinders must be protected from dampness and excessive temperatures. Smoking is prohibited near a cylinder. Valve protection caps must be installed on each cylinder. Oxygen should be stored in areas separated from other gases by at least 50 feet. Oxygen should be separated from acetylene by at least 100 feet. Gases used in laboratory procedures require caution in handling. All compressed gas cylinders should be labeled and tagged with the contents of the container to avoid confusion of what material is in each cylinder.

**D-9. Flammable, Explosive, or Corrosive Materials**

These materials must be kept in approved safety containers and away from any potential source of ignition. Acids used in laboratory procedures should be stored in noncorrosive containers and cabinets designed to hold caustic/corrosive material.

**D-10. Special Equipment**
Individuals using high-speed medical/dental units and those working in the laboratory should use piano cylinder or prescription safety eyewear to prevent injuries to their eyes.


Department of Defense Instruction 6050.5 directed the elements of DOD to develop a training program to meet the requirements of the Occupational Safety and Health Act (OSHA) Hazard Communication Standard (29 C. F. R. 1910.1200). The OSHA issued this standard to ensure everyone's right to work in a safe environment. It requires that everyone understand the hazards of the materials they work with and know how to minimize these hazards. It requires supervisors to develop and maintain current listings of all hazardous materials used at a work site and the specific hazards of each material. Material Safety Data Sheets must be maintained at each work location, and personnel should be trained in the hazards of their occupation.

D-12. United States Army Environmental Hygiene Agency

There are PVNTMED assets located within each division and at corps level. These units have subject matter experts in most areas of environmental health, sanitation, industrial hygiene, and occupational health. The mission of PVNTMED is to provide guidance to unit commanders on compliance with DA and federal requirements in these areas. Additionally, the U. S. Army Environmental Hygiene Agency (USAEHA) has the mission of looking out for the soldiers' welfare worldwide. The USAEHA is an excellent source for advice and assistance in areas related to environmental quality or occupational health. Any official Army safety representative (for example, unit safety officer) can request assistance from this organization. Potential areas for assistance include, but are not limited to--

- Technical assistance on monitoring the use of ionizing radiation, telephone DSN 584-3548/3502.
- Hospital hazardous waste management on-site CONUS/OCONUS visits, DSN 584-3651.
- Hospital safety program on-site visits, CONUS/OCONUS, DSN 584-3040. The USAEHA also provides document review services which may be of assistance in evaluating a unit safety program.

D-13. Infection Control

Special precautions must be taken during patient treatment procedures to avoid the transmission of infections. Infection control, to include medical waste disposal, is covered in Appendix C. Detailed guidance on infection control will be provided in the department’s, division’s, and section’s TSOP.

ACLU-RDI 320 p.122
E-1. Operational Facility Rules and Equipment

a. The ability to communicate is essential to C2 and the accomplishment of the assigned mission. To ensure effective communications, a system has evolved which authorizes specific types and numbers of radios for a unit or element. This appendix contains those operational facility (OPFAC) rules applicable to the CSH.

b. The OPFAC rule is the tool used to determine where, type, and numbers of communication devices are needed. The OPFAC rule is the smallest element of a TOE to which a piece of communications equipment is assigned; such as the commander, staff officer, or section or platoon.

c. The OPFAC rules are the basis for documenting command, control, communications, and computer equipment in the basis of issue plans (BOIPs) and TOEs. These determine the correct type and distribution of radios, MSE, position/navigation (POS/NAV) devices, and tactical computers for each TOE. The OPFAC rule system is an ongoing validation. These rules are subject to change. The rules discussed here are current as of the date of this publication. Tables E-1 and E-2 depict the OPFAC distribution of equipment for the CSH.

<table>
<thead>
<tr>
<th>PARA</th>
<th>USER/POSITION</th>
<th>OPFAC RULE#</th>
<th>FM RADIO</th>
<th>AM RADIO</th>
<th>MSE</th>
<th>FAX</th>
<th>POS/NAV EQUIPMENT</th>
<th>ADP EQUIPMENT</th>
<th>ADP USE</th>
<th>COMM TOE/Terminal</th>
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<td>D1202</td>
<td>92A</td>
<td>TA-1026</td>
<td>EMS</td>
<td>PLGR</td>
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</table>

These rules are subject to change. The rules discussed here are current as of the date of this publication. Tables E-1 and E-2 depict the OPFAC distribution of equipment for the CSH.
E-2. Communications Equipment

The OPFAC rules expressly impact on four types of communications equipment:

a. Radios. Frequency modulation AM radios comprise the family of radios discussed in this appendix as CNRs. When dealing with OPFAC rules, the SINCGARS radios constitute the FM slice and the IHFR radio constitutes the AM component. The Alpha series of the FM SINCGARS radios have built-in capabilities for encrypting/decrypting voice traffic. The AM radios have secure voice capability when used and with the KY-99 minterm (Figure E-1). For the purposes of this manual, the discussion of radios will be restricted to those authorized for the CSH: the ANVRC-89A, AN/VRC-90A, and the AN/GRC-193A.

![Figure E-1. KY-99 minterm.](image)

(1) *Single channel airborne radio system.* The SINCGARS radios, AN/VRC-89A and AN/VRC-90A, operate in the 30-to 88-megahertz (MHz) frequency range in 25-kilohertz (kHz) steps for a total of 2,320 channels. They can operate in either a single-channel or frequency-hopping mode.

(a) **AN/VRC-89A.** The AN/VRC-89A radio is a vehicular-mounted, dual configuration radio consisting of one short-range (approximately 8 kilometers [km]) and one long-range (approximately 35 km), solid state, securable transceiver mounted in a single vehicular mount.
(Figure E-2). It is basically two vehicular-mounted, short-range radio sets with an added power amplifier that provides one of the radio sets with a long-range communications capability. This radio is used by the HUB hospital operations section.

(b) AN/VRC-90A. The AN/VRC-90A radio is an AN/VRC-87A with a power amplifier added for long-range capability. It is used where the communications range must normally operate over long distances (up to 35 km) (Figure E-3). This radio is authorized for the hospital commander, HUB; the triage/EMT, HUB; the hospital unit commander, HUS; and the triage/EMT, HUS.
(2) Improved high-frequency, amplitude modulation radio.

(a) The AN/GRC-193A is the AM radio that is designed to provide reliable, long-range, high-frequency voice and data communications for both mobile and fixed stations (Figure E-4). This radio is used by the HUB hospital operations section. This net is used to facilitate hospital operations. It links the hospital with higher headquarters and the CHS operations net.
Figure E-4. Improved high frequency radio.

(b) The KY-99 minterm is for employment with the AN/GRC-193A. One KY-99 minterm is required for each AN/GRC-193A. It is designed to provide half-duplex, narrow-band secure voice and data communications for a variety of military applications.

b. Mobile Subscriber Equipment.

(1) Digital nonsecure voice telephone (DNVT): TA-1035/U. The DNVT TA-1035/U (Figure E-5) is a prime subscriber terminal that provides full-duplex digital voice communications and voltage reference signal for data subscribers in the MSE system. It is also equipped with a data port that allows users of the lightweight digital facsimile (LDF) AN/UXC-7 to access MSE network. The DNVT is found in the HUB and the HUS.
(2) Tactical lightweight digital facsimile: AN/UXC-7. The tactical LDF AN/UXC-7 (Figure E-6) is a lightweight digital facsimile set, rugged, waterproof, low power system capable of operating from standard alternating current and vehicle direct current power. It enables electronic transmission/reception of typed or handwritten record traffic, view graphs, map overlays, transparencies, and hand-drawn copies up to 8 1/2 by 11 inches in black and white format (two shades of gray). The LDF will operate over existing and proposed voice radios and wire circuits; full digital or analog data/voice capability. Its brief transmission (burst) reduces the chance of detection by the enemy. The critical advantages are made possible by the LDF set's ability to store data in memory, and then send in a short, high-speed transmission requiring 7 to 15 seconds to transmit a full page. The AN/UXC-7 is found in the HUB hospital operations section. It is used to send and receive hard-copy data for supporting CHS at echelons above brigade.
c. Tactical Computers.

(1) Medical transportable computer unit. The MEDTCU is the specific computer hardware system configured to perform the TAMBIS software applications of MEDPAR, MEDREG medical supply (MEDSUP), MEDMNT and medical blood (MEDBLD). The Army Tactical Command and Control System-Combat Health Support is also a computer hardware system configured to perform the TAMBIS software applications; it will be replaced by the MEDTCU. The MEDTCU is used in the PAD, supply and service, and blood bank sections of the HUB. It is comprised of a transportable computer unit, color monitor device, printer unit, and an archive device (Figure E-7).
Figure E-7. Medical transportable computer unit.
(a) *Transportable computer unit*. This unit connects with the archive device and printer unit and provides multitasking software resources for computational and graphic capability, word processing, and data base management. It operates from standard 115 or 230 volt alternating current (AC). The unit comes with a full-size, hinged/detachable keyboard that can be detached and relocated up to 24 inches from the computer unit.
(b) Color monitor device. This monitor device has four to eight color planes and is driven by a video card installed in the host computer.

(c) Printer. This unit is a rugged printer designed to satisfy 80-column printer applications in an adverse environment where size, weight, and power consumption are prime considerations. The printer unit is a portable device. It employs solid state, dot matrix printing technology.

(d) Archive device. The archive device is a rugged 1/4-inch (disk drive) streaming magnetic tape cartridge system intended to provide backup or archiving. The capacity is limited with each cartridge accommodating 67 megabytes. The archive device tape system is supported on the transportable computer unit.

(2) Tactical Army Combat Service Support Computer System. The TACCS is the tactical hardware which operates the SIDPERS and the SPBS-R (Figure E-8). This system is used in the HUB supply and service and the administrative divisions.

(3) Remote keyboard visual display unit. This unit is a remote (COMMO terminal) monitor and keyboard designed for use with the TACCS equipment. It provides the capability for data to be retrieved or entered by more than one operator simultaneously. The remote keyboard visual display unit is used in the HUB supply and service division.

d. Position Location/Navigation Device. The precision lightweight global positioning system (GPS) receiver
(Figure E-9) is a hand-held, battery-powered POS/NAV set that receives its signal from GPS satellites. The device provides a very accurate position location capability for determining and/or reporting self-location; however, it is not a communications device. The GPS is authorized for selected sections of the HUB and the HUS. The device is designed for individual or vehicle use.

**Figure E-9. Precision lightweight global positioning system receiver.**

e. Mobile Subscriber Radio Telephone. This telephone is issued with MSE for primary use in vehicles. It is allocated to the HUB hospital commander (see Figure E-10).

**Figure E-10. Typical mobile subscriber radiotelephone installation.**
APPENDIX F
COMMANDERS' CHECKLIST

Section I. PERSONNEL CHECKLIST--MOBILIZATION

F-1. Personnel and Administration

a. Maintain individual records alphabetically by last name. If records are maintained by an activity separate from the hospital, provide that activity an updated personnel roster as of the 15th of each month to arrive not later than the 20th. Reserve Component hospitals use the most current DA Form 1379.

b. Identify nondeployable personnel and initiate procedures for reassignment and/or separation.

c. Identify and color code all reference publications to be taken with the hospital upon deployment.

d. Maintain personnel readiness folders and review them quarterly.

e. Ensure that hospital members' (to include professional officer filler system [PROFIS]) identification tags and Geneva Convention cards are on hand and are in serviceable condition.

f. Identify files to accompany the hospital in case of deployment, as well as those to be destroyed.

g. Maintain a 60-day supply of blank forms for deployment.

h. Maintain a deployment set of DA Form 3955 on all assigned personnel in alphabetical order.

i. Appoint a (unit) family member's assistance officer.

j. Conduct personal affairs briefing according to AR 220-10.

k. Identify personnel shortages by grade and MOS.

l. Submit requisition for personnel shortages.

m. Ensure that assigned personnel have enrolled their dependents in defense eligibility enrollment system (DEERS).

n. Ensure that dependent care plans are on file and adequate for service members and PROFIS personnel who are sole-parents, or are married to another service member and have children.

o. Appoint unit mail clerk.

p. Requisition and maintain recreational equipment and supplies.

q. Appoint a unit safety officer and NCO.

r. Maintain in a current status the personnel data cards (PDCs) for all personnel assigned to include designated
PROFIS personnel.

s. Appoint a unit records management coordinator to pick up and transport the hospital's individual records (personnel, medical, dental, and finance) in case of a deployment.

t. Ensure assigned personnel maintain current MOS evaluation scores; where personnel have failed to verify their MOS, conduct training in deficient tasks.

u. Establish procedures to recall personnel absent from the unit in the event of increased readiness conditions.

v. Obtain sufficient boxes to carry unit files and personnel, dental, and medical records.

w. Maintain records (PDC files) on PROFIS personnel.

F-2. Finance

a. Maintain a current roster of all assigned and PROFIS personnel.

b. Ensure that orders for purchasing officer and Class A agent are current and that each individual is thoroughly briefed on his duties.

c. Upon mobilization, ensure that the Class A agent contacts the mobilization station finance and accounting office (FAO) and identifies any immediate finance requirements.

d. Establish contact with FAO upon arrival at the mobilization station to enhance personnel processing.

e. Arrange for emergency financial assistance as required.

f. Advise personnel to adjust or initiate allotments for dependents, as appropriate.

g. Upon mobilization and deployment notification, advise personnel of the amount of cash and/or credit cards they should bring.

F-3. Medical

a. Ensure that the home station medical and dental treatment facilities (supporting mobilization/deploy merit operations) record the deploying soldier's essential health-and dental-care information on DA Form 8007, Individual Medical History. The health record (DA Form 3444 or DA Form 8005-series [Medical and Dental Treatment Record]) folders of deploying soldiers will not accompany them to combat areas. For additional information, see AR 40-66.

(1) The preparation and use of DA Form 8007 is applicable to deploying military personnel as well as civilian employees who may accompany the unit.

(2) If the health record is not available, DA Form 8007 will be completed based on soldier interviews and any other locally available data. A health record may not be available for Individual Ready Reserves, Individual Mobilization Augmentees, and retired personnel because their health records may be on file at the US Army Reserve Personnel Center.

(3) The CSH will maintain the DA Form 8007 in an outpatient field file for reference as needed. The field
file will consist of, in part, DA Form 8007, and possibly, SF 600 (Health Record--Chronological Record of Medical Care), SF 558 (Medical Record--Emergency Care Treatment), SF 603 (Health Record--Dental), or DD Form 1380 (U.S. Field Medical Card).

b. Ensure that immunizations for unit personnel are current.

c. Verify temporary physical profiles every three months.

d. Maintain a record copy of all permanent physical profiles.

e. Ensure all personnel requiring spectacles have at least two pairs, as well as optical inserts for their protective mask.

f. Ensure that each individual has a duplicate panographic dental X ray on file.

g. Requisition and maintain medical supplies based upon MTOE, mission(s), and contingency plans.

h. Ensure that each individual has an ample supply of all personal medications and other personal supplies.

i. Ensure that the correct blood type is posted to individual records.

j. Request information on the medical threat in the deployment area.

F-4. Discipline, Law, and Order

a. Prepare plans for security of unit equipment, weapons, and ammunition.

b. Designate unit physical security officer.

c. Brief unit personnel on policy which prohibits bringing privately owned firearms to the mobilization station.

d. Conduct a shakedown inspection for contraband prior to movement to mobilization station.

e. Dispose of privately owned vehicles (POVs), firearms, pets, and other personal property.

F-5. Religion

a. Ensure that religious services are available.

b. Provide necessary training for chapel activity specialists.

c. Obtain appropriate religious equipment and supplies.

F-6. Legal

a. Seek assistance from the staff judge advocate in preparing unit for deployment.

b. Ensure that personnel have access to an attorney to have a Power of Attorney prepared and executed.
c. Ensure that personnel see an attorney to have a Last Will and Testament prepared and executed. Advise personnel of the importance of a Will.

d. Dispose of all disciplinary actions pending against personnel; for example, take action or forward to higher commander for action.

e. Ascertained from the convening authority which personnel will remain at the mobilization site because of pending investigations or courts-martial.

f. Arrange for the release of individuals from pretrial confinement, if appropriate.

g. Dispose of claims and military justice cases.

F-7 Public Affairs

a. Make provisions to recall unit personnel through the use of electronic media outlets; that is, radio and television stations.

b. Brief personnel on the nature and background of the emergency which has required the mobilization.

c. Brief unit personnel on the history, geography, religion, language, and customs of the country or area of eventual military operations.

d. Make sure assigned personnel are aware of required actions to take if contacted by members of the news media.

e. Inform personnel of actions to take and agencies available to support their family members after mobilization: for example, legal assistance, health care, financial arrangements, and so forth.

f. Advise personnel not to discuss sensitive information outside of the unit; for example, movement dates, times, departure points, troop lists, means of transportation, special training, special equipment, status of morale, and so forth.

Section II. OPERATIONS CHECKLIST--MOBILIZATION

F-8. Operations

a. Maintain current alert notification rosters (both telephonic and nontelephonic); update monthly and conduct exercises periodically.

b. Brief key personnel on contingency plans and exercise requirements.

c. Report attainment of deployability posture according to FORSCOM alert and deployment procedures and plans and policies of the mobilization site.

d. Monitor unit preparation for oversea movement (POM) operations and request guidance and assistance as required.

e. Provide current access roster to the EOC and update as needed.
f. Prepare hospital movement plans.

g. Establish liaison and communications with the EOC.

h. Obtain mission briefing and plans required for execution of deployment mission.

F-9. Security and Intelligence

a. The S2 officer accomplishes all duties related to security and intelligence matters. The commander is briefed as required.

b. Review the personnel security status of the unit and request, in order of priority, interim security clearances to ensure the correct personnel have proper clearance consistent with mission requirements, to include classified material escort responsibilities.

c. Ensure appropriate hospital personnel are familiar with duties and responsibilities in conjunction with movement and shipment of classified material, protection of movement data, and execution of classified moves, as applicable.

d. Prepare to enforce primary Wartime Information Security Program.

   (1) Appoint primary censors (one for every 100 personnel).

   (2) Prepare requisition for censor—ship stamp.

   (3) Initiate censorship education program.

e. Conduct OPSEC training according to AR 530-1 and local supplements.

f. Prepare briefing for hospital personnel to be conducted when movement is imminent. Include the following:

   - Subversion and Espionage Directed Against US Army and Deliberate Security Violations (SAEDA).
   - Procedures for classified moves.

   Ensure access rosters are current; prepare and submit access rosters to the appropriate mobilization site staff and higher headquarters, if appropriate.

h. Expedite processing of pending security clearance actions.

i. Ensure all personnel, including fillers, are briefed on OPSEC practices.

j. Brief command and staff personnel on the nature of the threat of electronic warfare (EW) and signal intelligence.

k. Ensure personnel are aware of intelligence acquisition tasks, responsibilities, techniques, and reporting procedures.

l. If sealed-off staging areas are used--

   - Conduct mission briefings at the latest possible time prior to out-loading.
• Restrict briefed personnel to sealed-off area.
• Establish and enforce controlled pass procedures.
• Monitor and control telephone use.

m. Identify classified documents which will not accompany the hospital.

n. Review plans for the conduct of a counterintelligence (CI) inspection of the hospital area upon departure.

o. Ensure timely transfer or destruction of classified material not to accompany the hospital.

p. Request assistance for security briefings.

q. Ensure all plans contain OPSEC and CE security planning considerations.

r. Maintain a list of map requirements and prestock. Submit requirements to the appropriate staff section at the mobilization site.

s. Ensure signals security (SIGSEC) plans include--

• Nature and amount of information to be transmitted or protected.
• Communications system capabilities and limitations.
• Selection of available SIGSEC kits and instructions for use.
• Basic load, source, and manner of resupply for key cards, authentication codes, and other security-related codes.
• Operating procedures to include electronic counter-counter measures (ECCM) techniques and any special requirements.
• Emergency destruction of classified operating instructions and associated materials.

t. Identify all intelligence requirements and submit to the appropriate security staff at the mobilization site.

u. Identify all linguist-qualified personnel and potential translator needs based upon mission(s) and contingency plans.

v. Review plans for the conduct of a classified move according to AR 380-55 and AR 220-10.

w. If deployment is from a civilian port, make a request for port security to Intelligence and Security Command (INSCOM) through the appropriate staff at the mobilization site or home station.

x. Coordinate with the appropriate staff for any unique unit requirements.

F-10. Training

a. Train field sanitation teams (FM 21-10-1).

b. Conduct training in air and rail movement.

c. Conduct MOS training as required.

d. Conduct preventive medicine refresher training (FM 21-11). Training should include--
- Endemic and epidemic diseases prevalent in the AO.
- Poisonous plant, wild animals, and reptiles (land and water).
- Pest management.

e. Conduct weapons qualification and NBC training.

f. Conduct training for potential civic action programs which include medical operations (FM 8-42).

Section III. LOGISTICS CHECKLIST--MOBILIZATION

F-11. Subsistence

a. Complete basic load of Class I (DA Form 3161) and forward to troop issue subsistence officer.

b. Complete ration requirements for air deployment: 3-days subsistence for pre-positioning of materiel configured to unit sets (POMCUS) hospitals and 5 days for non-POMCUS hospitals.

c. Identify rations required for personnel to accompany sea-deploying equipment.

d. For hospitals operating their own dining facility--
   - Coordinate with the appropriate staff section to close accounts and turnin or transfer dining facility supplies and equipment.
   - Coordinate for subsistence support of hospital personnel during the period between the closure of the hospital's dining facility and hospital deployment.

e. For CSHs currently subsisting in another organization's dining facility--
   - Coordinate with the supporting dining facility manager to withdraw hospital food service personnel during deployment preparations.
   - Prepare plans to collect and turn in meal cards to the supporting facility prior to unit deployment.
   - Prepare a roster of all deployable and nondeployable personnel receiving basic allowance for subsistence; for example, separate rations. For deployable personnel, establish a termination date for the basic allowance for subsistence and coordinate with the supporting dining facility and the finance officer.

f. Ensure ration requirements for patient feeding in the AO have been planned for and are available. Planning for a basic load of unique patient-feeding items may be needed until the TO can support these items.

F-12. Supplies and Equipment

a. Ensure assigned personnel have all required individual clothing. Cover shortages by requisition, cash collection voucher, or scheduled individual purchase.

b. Ensure personnel have all required organizational clothing and equipment and items are marked as required. Cover shortages by requisition, cash collection vouchers, or individual purchases.

c. Expendable supplies.
   - Prepare a list of expendable supplies required for 15-day usage.
(2) Ensure all expendable supplies required are on hand, requisitioned, or readily available through the self-service supply center (SSSC).

(3) Ensure hospital draft loading plan makes provisions for carrying the 15-day supply of expendable to accompany troops (TAT) baggage.

d. Medical sets, kits, and outfits and tools.

(1) Have all sets, kits, and outfits on hand or on order, follow up with status card or upgrade the priority.

(2) Prepare shortage annexes for all sets, kits, and outfits on hand.

(3) Document all shortages by shortage annex, report of survey, statement of charges, or cash collection voucher.

(4) Place all shortages on requisition.

(5) Ensure all supply catalogs are on hand and current.

e. Identify all station property and coordinate to ensure turn in during deployment preparation.

f. Ensure supply personnel are familiar with procedures to close out SSSC and other accounts.

F-13. Petroleum, Oils, and Lubricants

a. Determine requirements for packaged products for deployment. Ensure necessary items are on hand, requisitioned, or readily available through the SSSC.

b. Bulk POL.

(1) Have required 5-gallon fuel cans on hand or on requisition.

(2) Have bulk POL containers serviceable, or initiate appropriate repair or replacement action.

(3) Coordinate with the appropriate staff element for the purging of bulk containers prior to deployment. Have replacement filters on hand or on requisition for this equipment.

F-14. Ammunition

a. Compute unit basic load and have computations verified by the appropriate staff element at the mobilization site/home station.

b. Prepare and submit DA Form 581 for basic load.

c. If appropriate, include that portion of the basic load in hospital TAT load plans.

d. Identify requirements for guard ammunition for equipment and classified material escorts.

F-15. Major End Items
a. Ensure all TOE/MTOE-required items are on hand or on requisition.
b. Have all excesses identified and turned in prior to deployment.
c. Have all requisitions for shortages screened for status, proper unit movement data, and priority.
d. Identify impact of shortages to the appropriate headquarters and in unit readiness report.

F-16. Medical Supplies and Equipment

a. Have all required medical supplies and equipment items on hand, or requisitioned through the supporting Class VIII organization.
b. Have requisitions for shortages validated and obtain latest status.
c. Address the effect of shortages to the appropriate headquarters and in unit readiness report.
d. Ensure that enough refrigerated and heated storage is available for the temperature-controlled items for shipment.
e. Ensure that medical supplies (such as cylinders containing oxygen and anesthesia gases, Code R items, and other hazardous materials) requiring special handling are identified and on hand or on requisition.

F-17. Prescribed Load List

a. Review hospital's PLL on all equipment.
b. Provide PLL to the appropriate supporting staff.
c. Have all PLL items on hand or on requisition.
d. Include PLL in hospital loading plans.
e. Include blocking, bracing, packing, crating, and tie-down (BBPCT) necessary to protect PLL in the hospital's BBPCT forecast.
f. Adjust PLL to reflect continuous equipment operations.
g. Provide list of PLL shortages having or anticipated to have an impact on unit readiness to the appropriate staff element or higher headquarters.

F-18. Maintenance

a. Initiate equipment records for all newly received items in accordance with DA Pamphlet (Pam) 738-750.
b. Identify all excess equipment and coordinate with the support activity for turn in.
c. Have all items requiring DS-or GS-level maintenance, to include equipment to be purged, job-ordered to the appropriate support activity.
d. Ensure calibration of equipment is completed, or scheduled for completion.

e. Upgrade job order priorities to reflect anticipated deployment dates.

f. Notify the EOC or higher headquarters of any conflict or shortfalls between estimated completion date of equipment repairs versus the required-to-load date for deployment.

g. Request maintenance assistance in conducting final inspection of major equipment prior to movement and loading.

F-19. Laundry

a. Review procedures necessary to close out laundry account; prepare and submit paperwork as necessary.

b. Notify laundry manager of anticipated deployment date.

F-20. Transportation

a. Keep the hospital's automated unit equipment list and computerized movement and status system reports current.

b. Train hospital personnel in the following areas:

   (1) How to load unit equipment on aircraft, trucks, and railcars for deployment, including hazardous materials certification.

   (2) Preparation of packing lists.

   (3) Marking of containers.

   (4) Preparation of the transportation control and movement document (TCMD) (DD Form 1384).

   (5) Preparation of personnel manifests as required by the Air Mobility Command (AMC).

   (6) Use of BBPCT material.

   (7) Determining center of gravity and marking vehicle and cargo loads.

   (8) Loading vehicles for air and/or sea deployment as appropriate.

   (9) Preparation of movement documents for items requiring special handling and packing and hazardous materials certification.

c. Review with the Installation Transportation Officer, Port Support Activity, or Arrival/Departure Airfield Control Group the support requirements for the following areas:

   (1) Preparing, packing, and marking loads.

   (2) Augmenting vehicle requirements to support movement to POE and other transportation requirements.
(3) Providing MHE support to assist in loading.

(4) Load team and driver team requirements.

(5) Application of LOGMARS labels.

(6) Operation of marshaling area at POE.

d. Prepare hospital movement plans to include the following:
   (1) Convoy or move to POE.
   (2) Logistical support of hospital elements at POE.
   (3) Guard personnel and equipment at POE.
   (4) Handling of hazardous and special cargo and preparation of necessary certificates.
   (5) Preparation of equipment and items which use or store combustibles; that is, generators, water heaters, and so forth for shipment.

F-21. Miscellaneous Logistics

a. Establish guidance and plans for the establishment of a rear detachment, to include transfer of property and signature cards (DA Form 1687).

b. Establish procedures to terminate all signature cards and authorizations on departure of the last hospital element.

c. Personal property.
   (1) Dispose of all civilian clothing and personal property.
   (2) Have on hand or on order sufficient C-boxes and inventory forms for packing and storing of personal items which cannot be disposed of by the individual.
   (3) Train supply personnel in inventorying, packing, marking, and transferring personal property.

d. Provide personnel with a list of personal comfort items that should be obtained and a list of prohibited items based upon projected deployment locations, local customs and religion, and PVNTMED guidance.

e. Establish a list of personnel support items to be obtained based upon projected deployment locations such as lip balm, bug repellent, sunscreen, and mosquito netting.

F-22. Engineer

   (1) Compute hospital BBPCT requirements for both air and sea deployment. Have requirements validated...
by the transportation support activity and place a job order for BBPCT.

(2) Analyze supplemental packing and crating requirements and, if required, submit appropriate request to the USAF for those requirements which cannot be met. This request should be for fabrication of supplemental packing and crating for--

- Air deployment.
- Rail deployment.
- Surface (sea) deployment.

(3) Maintain supplemental packing and crating items.

b. Billeting

(1) Advise personnel who reside in bachelor officers’ quarters (BOQ), bachelor enlisted quarters (BEQ) and off-post housing of necessary termination and clearance procedures on notification of deployment.

(2) Prepare a listing of personnel who will have their basic allowance for quarters (BAQ) terminated upon deployment.

c. Real Property Facilities.

(1) Maintain a current roster of real property facilities (RPF) managers for all RPF assigned to the hospital.

(2) Identify interim RPF managers who will not deploy and will assume accountability for assigned RPF.

F-23. Contracting

Notify the contracting activity of the anticipated termination date of any supply or service support provided by civilian contractors.

Section IV. PERSONNEL CHECKLIST--DEPLOYMENT

F-24. Personnel and Administration

a. Upon notification of deployment, recall all personnel, including those on leave, special duty, and temporary duty (except MOS-producing schools).

b. Submit personnel status report.

c. Conduct final preparation of replacements for oversea movement (POR) qualification. Identify nondeployable personnel and initiate procedures for reassignment and/or separation.

d. Have unit records management coordinator assist the officer in charge at the POR processing site.

e. Clear nondeployable personnel from the hospital after final POR. Return their records and update the personnel roster.
f. Following final POR, receipt for medical and dental records. Pack them in boxes to accompany the hospital. Personnel records will remain at the installation for 90 days pending determination of where to ship them. Dental records (necessary for identification of remains) will not be transported on the same vessel or airplane as service members.

g. Ensure that a set of DA Form 3955 accompanies the hospital for filing at the postal activity in the AO.

h. If not initiated, submit DA Form 17 for publications and blank forms.

i. Pack files, publications, and blank forms which will accompany the hospital. Retire or destroy remaining files. Turn in excess publications and blank forms.

j. Carry copies of the movement orders with the hospital.

k. Carry a copy of the current enlisted promotion list with the hospital.

l. Ensure that personnel are cleared of post activities; follow-up on discrepancies.

m. Conduct safety orientation for all unit personnel regarding the deployment operation.

n. Orient personnel on the Status of Forces Agreement in the AO.

o. Conduct personal affairs briefing in accordance with AR 220-10.

p. Close unit Morale Support Fund account and dispose of fund property.

q. Arrange for emergency financial assistance of hospital personnel, as needed, with Army Emergency Relief and Red Cross, or other appropriate agencies.

r. Inform the installation postal officer, in writing, of the day and time of the last postal pick up; provide the postal officer a copy of the movement orders.

s. Initiate action to terminate separate rations as of the day the hospital departs the installation.

t. Turn in recreational services clothing and equipment except for items accompanying the hospital.

F-25. Medical

a. Ensure convoy and serial commanders know the sources and methods of obtaining emergency medical support while en route and at the POEs.

b. Identify medical personnel to provide EMT during convoy and stationary operations. Ensure that enough air bags, litters, and other equipment are set aside for their support.

c. Identify evacuation and medical treatment support (usually on an area basis) for each stage of deployment and movement.

F-26. Discipline, Law, and Order

a. Have service members’ POVs placed in temporary storage or ensure that other suitable arrangements have
been made for disposal or upkeep. For POVs temporarily stored on the installation, have service member provide Power of Attorney authorization to a responsible individual to pick up the vehicle, or have the service member arrange for long-term commercial storage at his own expense.

b. Report assigned personnel who are absent without leave.

c. Prepare for disposition of privately owned weapons stored in the unit arms room.

d. Dispose of weapons, pets, and other personal property.

F-27. Religion

Ensure that religious services are available to all personnel.

F-28. Legal

a. Have hospital personnel provide their dependents with a Power of Attorney which permits acceptance and termination of government quarters.

b. Dispose of claims and military justice cases.

c. Orient personnel on Status of Forces Agreement.

d. Advise personnel on importance of a Power of Attorney and having a Will.

F-29. Public Affairs

a. Keep hospital personnel appraised of the current overall emergency situation requiring the mobilization and deployment.


c. Apprise personnel of any operational changes to the hospital's mission.

d. Brief personnel on their eventual AO.

e. Use the hometown news release program, if warranted.

f. Continue coordination with installation.

g. Continue command information program throughout the period of mobilization and deployment.

Section V. OPERATIONS CHECKLIST--DEPLOYMENT

F-30. Operations

a. Conduct overseas orientation in accordance with AR 220-10.
b. Report attainment of deployability posture in accordance with FORSCOM emergency action procedures and installation EOC policies and procedures.

c. Monitor hospital POM operations, and provide guidance and assistance, as required.

d. Prepare appropriate plans and orders.

e. Coordinate hospital movement.

f. With the approval of the hospital commander, appoint an officer or NCO as rear detachment commander.

F-31. Security and Intelligence

a. Review the personnel security status to ensure sufficient numbers of personnel are properly cleared consistent with mission requirements to include classified material escort responsibilities.

b. Ensure appropriate personnel are familiar with the duties and responsibilities in conjunction with classified movement and shipment, if applicable.

c. Initiate censorship education program.

d. Conduct OPSEC program.

e. Prepare briefing for unit personnel to be conducted when movement is imminent. Briefing will include, but not be limited to, the following:

   (1) Dissemination of movement data on a need-to-know basis.

   (2) Procedure for handling movement documents.

   (3) Procedures for handling classified material in transit.

   (4) Subversion and Espionage Directed Against US Army and Deliberate Security Violations.

   (5) Procedures for classified moves.

f. Ensure all personnel, including fillers, are briefed on OPSEC practices.

g. Brief command and staff personnel on the nature of the threat's EW/signals intelligence capabilities.

h. If sealed-off staging areas are used--

   - Establish strict security.
   - Enforce blackout camouflage.
   - Conduct mission briefing at the latest possible time prior to out-loading.
   - Restrict briefed personnel to sealed-off area.
   - Establish and enforce controlled pass procedures.
   - Monitor and control telephone use.
   - Ensure personnel hospitalized or confined during staging are isolated until public announcement of the operation.
• Collect letters and other personal mail and place in sealed mail bags until public announcement of the operation.

i. Identify classified documents which will not accompany the hospital.

j. Ensure timely transfer or destruction of classified material not to accompany the hospital.

k. Review plans for the conduct of a CI inspection of the area upon departure.

l. Review plans for the return of cryptographic material, not accompanying the hospital, to the office of record or issue; transfer as appropriate.

m. Ensure all plans contain OPSEC, communications, and electronic security planning considerations.

n. Plan for the distribution of maps and related topographical materials.

o. If deploying from a civilian port, forward request for port security to INSCOM through appropriate channels.

Section VI. LOGISTICS CHECKLIST--DEPLOYMENT

F-32. Subsistence

a. Draw unit basic load of rations and store with TAT cargo.

b. Draw rations to support deployment (3 days for POMCUS units, 5 days for nonPOMCUS units) and load in a readily accessible manner.

c. Arrange subsistence support to any portion of the unit that will not accompany the main body.

d. For hospitals operating their own dining facility--

• Close out all accounts and hand receipts.
• Turn in or transfer all unused rations and condiments.
• Make arrangements to subsist assigned personnel at another activity from the closure of the dining facility until deployment.

e. For hospitals supported at another activity’s dining facility--

• Make arrangements with the supporting facility for final turn in of meal cards.
• Coordinate with supporting dining facility for the release of deploying food service personnel.

f. Submit the necessary paperwork to the finance office to terminate basic allowance for subsistence for any personnel receiving it; arrange to subsist personnel on the termination of their basic allowance for subsistence.

F-33. Supplies

a. Pack the hospital’s 15-day supply of expendable with TAT cargo.

b. Report significant shortfalls in expendable supplies to the supporting element.
c. Report shortfalls in individual clothing items to the supporting element.

d. Report shortfalls in organizational clothing and equipment to the supporting element.

e. Report shortfalls in tools and/or test equipment to the supporting element.

f. Close out all station property accounts.

g. Close out SSSC account, and complete credit and turn in.

F-34. Ammunition

a. Draw basic load of ammunition; include in the TAT cargo load plans.

b. Draw necessary ammunition to guard equipment during deployment.

F-35. Major End Items

a. Turn in all excess items and other equipment not accompanying the hospital.

b. Pick up all incoming items of equipment on the property records.

c. Report shortages to the EOC and the supporting element.

F-36. Medical Items

a. Ensure all medical items and supplies are received and included in the loading plans.

b. Report shortages to the EOC and the supporting element.

c. Ensure that all medical supplies requiring special handling (paragraph F-16) are on hand and included in the loading plans.

F-37. Repair Parts

a. Adjust PLL to reflect any equipment increases and expected increased utilization; have PLL at 100 percent fill; if not, report critical shortage to the supporting element.

b. Prepare loading plans which place the PLL in a readily available location.

F-38. Maintenance

a. Complete calibration.

b. Close out DS and GS job orders at the maintenance support facility.

c. Conduct inspection of vehicles and other major end items to ensure that they are ready for deployment. Take corrective action as required.
d. Complete equipment records for newly received equipment according to DA Pam 738-750.

e. Have unit mechanics available to support convoy moves to the POE. Arrange for tool boxes.

f. Arrange for recovery support, both internal and external, and address in the movement plans.

g. Maintain floats for those that cannot be taken out of support maintenance.

F-39. Transportation

Transportation planning and requirements represent the most detailed and transient elements of the deployment process. As a result, a complete checklist of all possible requirements would be too bulky for meaningful use by the commander. Therefore, the commander and the unit movement coordinator must be thoroughly familiar with FORSCOM and installation mobilization requirements. Presented below are major topics that are common to the various modes of deployment.

a. General.

(1) Configure unit vehicle loads for air and/or sea deployment, as appropriate.

(2) Mark all vehicles, crates, and pallets as required.

(3) Have all vehicles clean and free from leaks and seeps.

(4) Have fuel pods and bladders prepared and certified.

(5) Have all required BBPCT on hand and properly used.

(6) Mark all TAT cargo with 3-inch red or yellow disk and stencil "TAT" on the disk.

(7) Prepare packing lists (DD Form 1750).

(8) Designate armed guards for classified and sensitive cargo.

b. Convoy Operations.

(1) Submit road clearances (DD Form 1265) and oversized cargo clearance (DD Form 1266) to the supporting transportation element for unit moves to POE.

(2) For movement to seaport POE--

   • Provide convoy and serial commanders with strip maps, EMT and emergency maintenance instructions, and other points of contact.
   • Coordinate and finalize billeting and messing arrangements for drivers.
   • Ensure priority for unit recovery capability is given to POE convoy.

(3) Allocate maintenance personnel to each convoy to assist in final preparation of vehicles for loading.

(4) Brief each serial commander on refueling and defueling requirements.
(5) Arrange, as required, for civilian or military escort.

c. Forms.

(1) Have TCMDs (DD Form 1384) completed; one form for each vehicle or other exterior container.

(2) Have load plans completed for each vehicle; load plans will reflect necessary last minute adjustments.

(3) Submit request to AMC for personnel being air transported.

(4) Prepare DD Form 1387-2 for hazardous cargo to be airlifted.

(5) Prepare DD Form 2940-R for vehicles, trailers, military-owned demountable containers, pallet loads, or other exterior shipping containers.

(6) Prepare aircraft load plans as required by Military Airlift Command.

F-40. Miscellaneous Logistics

a. Finalize support arrangements for rear detachment, if required.

b. Have all supply and maintenance accounts closed out and signature cards canceled.

c. Notify the appropriate activity, in writing, of the termination date of any contract that provides supplies or services.

d. Secure personal property.

(1) Inventory and pack personal property.

(2) Provide service members with a copy of the personal property inventory.

(3) Transfer all personal property to the supporting transportation element.

F-41. Engineer


(1) Determine, in coordination with the appropriate office, specific BBPCT requirements for deployment based on actual personnel and equipment for movement; actual method of movement; equipment for movement; and POE.

(2) Request any necessary BBPCT support from the USAF. The request should identify--

- The location of the POE at which the support is required.
- The date and time which hospital personnel will report to the POE, and the date and time they will depart (deploy).

(3) Request any packing and crating support necessary to supplement organic assets for sealing.
previously fabricated supplemental packing items.

(4) Provide space in the unit area for packing and crating operations.

(5) Deliver equipment and supplies to the designated packing and crating base of operations.

(6) Maintain a packing list for each box packed.

(7) Provide sufficient trained teams to execute rail, air, and sea loading operations. Type team is dependent upon specified method of deployment.

b. Billeting.

(1) All personnel in BOQ or BEQ will clear quarters.

(2) Notify finance of the cutoff date for BAQ (quarters allowance) for all single personnel.

(3) Brief dependent families on family quarters policies and procedures.

(4) All personnel residing off-post will either terminate their leases or make other suitable arrangements.

c. Real Property Facilities.

(1) Request termination of assigned RPF.

(2) Request designation of interim RPF manager through command channels.

(3) Transfer accountability for RPF to the interim RPF manager prior to deployment.
APPENDIX G

THE GENEVA CONVENTIONS

G-1. Law of Land Warfare


(1) The Law of Land Warfare is drawn from two sources:

(a) The first is treaty law. Treaties are formally enacted under procedures set out in the US Constitution. They are laws of the highest order and statutes and regulations must comply with them. They govern all US soldiers and civilians.

(b) The second source of Law of Land Warfare is customary international law. Once a practice is internationally accepted, either by widespread treaty enactment or other agreement, it becomes customary international law. Once this occurs, it regulates even countries which do not agree with the concept concerned.

(2) In the area of CHS, the principal treaties are the Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (12 August 1949) and the Hague Resolutions. These are found in DA Pam 27-1. For the commander, FM 27-10 is a handbook reference which will provide the answers to questions concerning the law of war.

b. Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces. The GWS provides for protection of armed forces members and other persons who are wounded and sick on the battlefield. It provides for members of the conflict to take all possible measures to search for and collect the wounded and sick; to protect them against pillage and ill treatment; to ensure their adequate care; and to search for the dead and prevent their being despoiled. It further provides for the protections afforded AMEDD personnel.

G-2. Medical Implications of Geneva Conventions

a. Provisions for Collection of Wounded and Sick. Provisions must be made for the collection and treatment of wounded and sick personnel, whether friend or foe, military or civilian, regardless of legal status. Only urgent medical reasons will determine priority in the order of treatment to be administered. This means that wounded enemy soldiers may be treated before wounded Americans or allies. For enemy personnel wounded as a result of military operations, dual responsibilities must be carried out—custodial and medical. The custodial activity of guarding the wounded EPW should be carried out by assets other than AMEDD personnel. The echelon commander will designate nonmedical units to act as guards when EPW are in medical channels.

b. Accountability and Custody of Enemy Prisoners of War (Geneva Convention Relative to the Treatment of Prisoners of War, 12 August 1949). Enemy prisoners of war evacuated through medical channels must be identified and their accountability established prior to evacuation per appropriate TSOP. Sick, injured, and wounded prisoners may be evacuated through normal medical channels, but they are segregated from US and allied personnel. They may also be evacuated through dedicated or task-organized evacuation assets, particularly in rear areas where they are likely to be moved in a group.

c. Responsibility for and Handling of Prisoners of War. The US Army is responsible for the care and treatment
of EPW from the moment of capture. Below brigade level, these prisoners are handled by combat troops who bring them to the forward or brigade collecting points. Enemy prisoner of war patients will be evacuated from the CZ as soon as possible. Only those sick or wounded prisoners who would run a greater health risk by being immediately evacuated may be temporarily kept in the CZ. When intelligence sources indicate that large numbers of enemy prisoners may result from an operation, medical units may require reinforcement to support the additional EPW patient work load. In this case, the care of the EPW wounded becomes a joint matter between the ground combat commander and the medical commander. Procedures for estimating the medical work load involved in the treatment and care of enemy prisoners are described in FM 8-55. For a more detailed discussion on the administration, handling, treatment, and identification of EPW, see AR 190-8, FM 8-10, and FM 19-40.

d. Identification and Protection of Medical Personnel.

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

(2) Medical personnel are to carry a special identity card, DD Form 1934 (Geneva Conventions Identity Card for Medical and Religious Personnel Who Serve in or Accompany the Armed Forces), issued to all persons qualifying as protected medical personnel (see AR 640-3). It will be carried in addition to their regular identification card.

(3) Enemy military medical personnel who are captured are considered retained personnel and not prisoners of war. They will receive the benefits and protection of the Geneva Conventions and may be required to treat prisoners of war. United States medical personnel or medical units that are captured would do likewise, continuing to provide medical support behind enemy lines. In such a situation, this would probably be a primary source of treatment for US prisoners of war, although enemy wounded could be treated also.

(4) Enemy civilian medical personnel who are physicians, surgeons, dentists, nurses, or medical orderlies may also be required to use their medical knowledge in the interest of prisoners of war. These medical personnel are considered protected (under the Conventions) and receive the same treatment as retained military medical personnel.

(5) Personnel protected as medical personnel under the GWS must be exclusively engaged in medical duties or administration of medical units. This includes all members of a medical unit, even cooks, mechanics, drivers, or administration personnel. However, this protection is given only if the soldier is exclusively engaged in medical duties. Performance of any nonmedical duty removes the protection, and the DD Form 1934 must be withdrawn. For example, if an ambulance driver is tasked with driving an unmarked vehicle forward with ammunition prior to evacuating casualties rearward, he would not be exclusively engaged in medical duties and could not be considered or credentialed as "medical personnel."

e. Self-Defense (GWS).

(1) Medical personnel may carry arms for defense of themselves and their patients. This does not mean that they may resist capture or fire on the advancing enemy. It means that, if the enemy is attacking and ignoring the marked medical status of the medic or the medical unit, the medic may provide self-protection. Of course, it is
preferable and proper to attempt to avoid capture by withdrawal.

(2) The arms that medics may use are only defensive arms. By Army regulation these are defined as service rifles (M-16s) and pistols. Other US services restrict arms to pistols alone.

(3) The GWS does not itself prohibit the use of Article 24 personnel in perimeter defense of nonmedical units such as unit trains logistics areas or base clusters under overall security defense plans, but the policy of the US Army is that Article 24 personnel will not be used for this purpose. Adherence to this policy should avoid any issues regarding their status under the GWS due to a temporary change in their role from noncombatant to combatant. Medical personnel may guard their own unit without any concurrent loss of their protected status.

(4) If medical personnel fire on enemy troops or otherwise abuse their protected status, they may lose their special status under the Law of Land Warfare. It is also possible that such a violation could result in a war crimes trial by the capturing force. For instance, if an enemy force was advancing on a marked medical facility but was not firing on it and medical personnel then took advantage of the situation and fired on the enemy, this would be an offense. Under the Law of Land Warfare, this action would constitute an act of perfidy or treason. It would be akin to firing on soldiers exposed under a flag of truce.

This paragraph implements STANAG 2931.

f. Marking of Medical Units/Facilities and Ambulances.

(1) Medical units and facilities.

(a) The distinctive flag (red cross on a white background) of the Conventions shall be hoisted only over such medical units and facilities (except veterinary) as are entitled to be respected under the Conventions and only with the consent of the tactical commander of a brigade-size or larger unit. The marking of facilities and the use of camouflage are incompatible and should not be attempted concurrently. Use of the red cross is authorized. The camouflage of medical units is regulated by Army regulations and also, in the European theater, by NATO STANAG 2931. It is not envisioned that fixed, large medical facilities would be camouflaged. The commander must be aware of who has the authority to order camouflage and for what period it may last. The camouflage of medical facilities is one of the more difficult ones to reconcile with operational necessities. The problem has been present in past wars but is now more critical due to the ability of intelligence assets to see deep into the rear AO. If the failure to camouflage endangers or compromises the tactical operations, the camouflage of medical facilities may be ordered by a NATO commander of at least brigade level or equivalent. Such an order is to be temporary and local in nature and is countermanded as soon as circumstances permit.

(b) The camouflage of a medical unit does not deprive it of protection. However, the enemy is not required to respect a camouflaged facility until he recognizes it as such, so the protection is illusory to a point, especially where indirect fire weapons are involved. The use of defensive arms by medical personnel at a camouflaged site attacked by ground maneuver forces poses a dilemma. The medics should attempt to make the attackers aware of their status rather than fighting back. However, that may be difficult to do on the modern battlefield.

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

(a) Air and ground ambulances will be marked with the distinctive red cross emblem. There is no legal reason why the ambulances could not have the red cross removed and then be used for nonmedical roles. It should be remembered that the aviators and drivers may not do nonmedical tasks without losing their medical status. As such, the policy that benefits the mission to the greatest degree is to use ambulances exclusively for medical tasks.

(b) The US policy is that crew-served weapons may not be mounted on armored ambulances or air ambulances, even if mounting brackets are present.

(c) Vehicles other than ambulances may be used in a dual role, moving wounded to the rear under removable red crosses. However, the red crosses must be removed before nonmedical tasks are attempted. Care must be taken so that the protection provided by the red cross is not abused.

g. Civilians--Wounded and Sick (Geneva Convention Relative to the Protection of Civilian Persons in Time of War, 12 August 1949). Civilians who are wounded or become sick as a result of military operations will be collected and provided initial medical treatment in accordance with theater policies and transferred to appropriate civil authorities as soon as possible. All those wounded and sick as a result of an armed conflict will be collected and cared for. The echelon commander and medical unit commanders jointly exercise responsibilities for custody and treatment of the sick, injured, or wounded and detained civilian personnel.

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

G-3. Compliance with the Geneva Conventions

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

b. Outright violations of the Geneva Conventions result when--

- Medical personnel are used to man any offensive-type weapons or weapons systems.
- Medical personnel are ordered to engage enemy forces other than in self-defense or in the defense of patients and MTFs.
- Crew-served weapons are mounted on a medical vehicle.
- Mines or booby traps are placed in and around medical units and facilities.
- Hand grenades, light antitank weapons, grenade launchers, or any weapons other than rifles and pistols are issued to a medical unit or its personnel.
- The site of a medical unit is used as an observation post, a fuel dump, or an ammunition storage site.
c. Possible consequences of violations described in b above are--

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

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

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

e. Possible consequences of violations described in d above are--

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

COMBAT SUPPORT HOSPITAL LAYOUT

A sample of a hospital layout without a chemical and biological protected shelter system is shown in Figure H-1. The patient decontamination area shown is applicable for the hospital with or without collective protection. The patient decontamination area should be at least 30 to 50 yards downwind of the hospital. The actual layout of the hospital is contingent upon the METT-T factors and guidance provided by the hospital commander.
A sample layout for a hospital (HUB) with a chemical and biological protected shelter system is shown in Figure H-2.
Figure H-2. Sample of a chemical and biological protected HUB layout.
### Figure H-2. Sample of a chemical and biological protected HUB layout (continued).
APPENDIX I

SAMPLE OPERATIONS ORDER WITH ANNEXES

OPLAN 1234

References:


b. ___ CSH TSOP.

c. Medical Brigade/Group (Med Bde/Gp) OPLAN 2987.

d. ___ Corps OPLAN 222

Time Zone Used Throughout the Plan: ZULU

Task Organization: Combat Support Hospital

Medial Service, Medical Teams

Medical Service, Surgical Teams

1. SITUATION

a. Enemy Forces.

(1) The ___ Corps is opposed by two infantry divisions estimated to be approximately 95 percent strength. These ground forces are supported by a helicopter company and an artillery battery, which is capable of mass artillery barrages within a 10-mile radius and attack helicopter strikes within 20 miles. Intelligence indicates that the full range of radio electronic combat elements will be employed to gather intelligence and to degrade the effectiveness of friendly command and control nets through the use of electronic warfare. The threat has the ability to deliver nuclear weapons and/or chemical agents into the corps support area (CSA). Intelligence also indicates that the threat will employ tactical air (TACAIR), airborne and armament regular army units, and local guerrilla units in the CSA to disrupt or destroy CSS operations. (OPLAN 1234—CSH.)

(Classification)
See current intelligence summary.

**Friendly Forces.**

1. Corps attack 120500 June through elements of the 1st and 2nd Threat Infantry Divisions with two divisions abreast. 1st Division on the left (east) conducts main attack; 2nd Division on the right (west) conducts supporting attack. 3rd Division follows in zone of 1st Division Corps, secures FREISING (Q1/0964), and MOOSBURG (Q1773), and prepares to continue attack on to S and SW.

2. Provide hospitalization support to corps units on area basis. Defend the hospital area within the base cluster defense when attacked.

   a. The CSH with assigned and attached elements will be in place and prepared to support Corps.

3. MISSION. Provide hospitalization support to the corps.

4. EXECUTION.

   a. Combat Support Hospital. Provide hospitalization support for corps tactical operations. Render resuscitative care and medical treatment of critically injured or ill patients requiring highly specialized care and surgical and medical services for patients held for definitive treatment.


   c. Coordinating Instructions.

      1. This OPLAN is effective for planning upon receipt; executing on order.

      2. All elements provide closing notification upon arrival at designated operating locations with projected operational capability attainment until fully mission capable.

(Classification)
3. Units located in CSA will comply with defense and area damage control procedures established by the CSH, Operations Section.

4. Chemical MOPP-1 is in effect. Be prepared to increase MOPP on short notice.


6. Movement Annex for CSA units to be prepared separately.

4 SERVICE SUPPORT. See Annex B (Service Support).

5. COMMAND AND SIGNAL.
   a. Command.

   Combat Support Hospital located via MA 779706.

   b. Signal.

   1. Current SOI in effect.

   2. Minimize, in effect for FM radio traffic until lifted by CSH Commander.

   Acknowledge.

   CDR

   COL

OFFICIAL:

/s/

Annexes:

   A. Operational Overlay
   B. Road Movement
   C. Service Support
   D. Rear Operations
Annex A to OPORD 1234—CSH (Operational Overlay)

References:


b. CSH ISOP.

c. Mad Bde/Gp OPLAN 20/37.

d. Corps OPLAN 222.

Time Zone Used Throughout the Plan: ZULU

1. SITUATION.

a. Enemy Forces. The enemy's capability to conduct road interdiction through mining and demolition generally along the route is acknowledged. However, it is anticipated that the enemy will limit their interdictions to the intent consistent with meeting specific military objectives in ambush attack operations. The enemy's capability to conduct simultaneous and multiple convoy ambush operations at critical areas exists. However, this is unlikely because of the restriction on convoy movement within the CSA.

b. Friendly Forces.

(1) Corps support area units move night of 21-22 June 19XX to assembly area VIC GRAPTON (UV 6302).

(2) 227th Aviation Company provides aerial observation and CAS.

(3) Battery B, 317th Artillery, provides artillery support, as required.
(Classification)

(4) Combat Support Hospital (CSH), Corps, provides en route medical support.

(5) Treatment Company, Supply and Transport (S&T) Battalion, provides transportation support, as required.

2. MISSION. Combat support hospital move commencing 210300 June 19XX to an AO to support Corps tactical mission.

3. EXECUTION.

a. Concept of Operations. The CSH conducts a tactical road march in three echelons over two routes to a new AO. First echelon crossing SP 210300 June and last echelon crossing RP 220646 June.

b. Convoy Organization.

(1) Echelon 1: Advanced/Quartering Party.

(2) Echelon 2: Hospital Headquarters, Supply and Service Division, EMT and Triage, OR Control Team, OR A Module, two ICUs, two ICWs, Laboratory, Blood Bank, X-Ray, Pharmacy, two CMS, Ortho Cast Clinic, Litter Bearer Section, parts of Company Headquarters, Supply and Service Division, PAD, and Nutrition Care Division.

(3) Echelon 3: Neuropsychiatric Service, OR B Module, Inpatient Medicine A Module, two ICUs, two ICWs, two MCWs, two CMS, parts of Company Headquarters, Supply and Service Division, PAD, and Nutrition Care Division.

(4) Echelon 4: All remaining elements of the hospital.

c. Tasks to Subordinate Elements. Supply and Service Division will provide recovery support along the route.

d. Checkpoints.

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<tr>
<th>CHECKPOINTS</th>
<th>COORDINATES</th>
<th>KILOMETERS BETWEEN CHECKPOINTS</th>
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<td>RP</td>
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(Classification)
(Classification)

4. SERVICE SUPPORT.

a. Traffic Control (TC).

(1) Quartering party. Quartering Party will deploy two-man TC teams at Critical Points 1, 2, and 4. Military police will be responsible for traffic control points (TCP) at Blue River and in the town of Manly.

(2) Recovery.

(a) Units will recover organic vehicles that break down along the route.

(b) Heavy Ordnance Maintenance: Company trail echelon will recover all vehicles beyond self-recovery capability.

(3) Medical.

(a) Emergency medical treatment/triage will provide treatment services.

(b) Aeromedical evacuation procedures (Medical Annex, TSOP).

5. COMMAND AND SIGNAL.

a. Command.

(1) Command post and command group with Echelon 2.

(2) Command post opening and closing times and locations to be announced.

(Classification)
b. Signal.

(1) Signal Operation Instructions Index 1-12 in effect.

(2) Listening silence effective 211300 June.

Acknowledge.

OFFICIAL:

/s/

Annexes:

A. Road Movement Table
B. Route Overlay
Appendix A: Road Movement Table: to Annex B, OPORD 1234

Map Reference:

Time Zone Used Throughout the Order:

**General Data:**

1. Average Speed:
2. Traffic Density:
3. Hals:
4. Critical Points:
   a. Starting point:
   b. Release point:
   c. Other critical points:
   d. Route classification:
   e. Route restrictions:
5. Main route to SP:
6. Main route to RP:

<table>
<thead>
<tr>
<th>MARCH UNIT DATE</th>
<th>NO. OF UNIT VEHICLES</th>
<th>CLASS OF HEAVIEST VEHICLES</th>
<th>FROM TO ROUTE CRITICAL POINTS</th>
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(Classification)
Appendix 2 (Route Overlay) to Annex B, OPORD 1234 Annex C (Service Support) to OPLAN 1234, CSII

1. GENERAL. This annex provides the support plan for XXX Corps. Combat service support will provide/coordinate through the CSH Staff and the Med Bde/Gp S1 and S4.

2. MATERIAL AND SERVICES.
   a. Supply.
      (1) Class I. The COSCOM will operate ration supply points in the CSA for Med Bde/Gp and its supporting units.
      (2) Water. The DS Supply Company will operate the water points. Water requirements will be coordinated through the Med Bde/Gp S2/S3 and may be located in the CSA.
      (3) Classes II and III.
         (a) Classes II and III.
            1. Supply point distribution from DS Supply Company, COSCOM.
            2. Request will be submitted to CSH Operations Section.
         (b) Class III (bulk).
            1. Supply point distribution from any Class III supply point.
            2. Allocations will be provided by the Med Bde/Gp S4, when required.
         (4) Class IV.
            (a) Supply point distribution. Selected Class IV materials issued by the S&T Battalion, COSCOM.
            (b) Class IV priorities assigned by the COSCOM.
            (c) The following controlled items will be requisitioned through command channels.
               1. Culvert nestable, 60 feet.
3 MEDICAL EVACUATION AND HOSPITALIZATION.

a. Evacuation.
   (1) Corps holding policy is 72 hours.
   (2) Primary means of evacuation is ground ambulance.
   (3) Preferred means of evacuation is air ambulance.

b. Hospitalization.
   (1) Medical facilities forward of division boundaries will camouflage.
   (2) Hospitalization will be provided by the ____ CSH.

4 PERSONNEL.

a. Maintenance of Unit Strength. Replacements will be assigned to units based upon priority of the commander.

b. Personnel Management.
   (1) Enemy prisoners of war and civilian internees. Medical brigade/group evacuates EPW to corps collection points. Enemy prisoners of war from NBC unit will be reported immediately to the Med Bde/Gp command channel.
   (2) Military prisoners. Corps headquarters will retain military prisoners until sentences are approved.

c. Development and Maintenance of Morale.
   (1) Morale and personnel services
      (a) Postal, personnel/administrative, and finance services provided to Med Bde/Gp by corps contact teams.
      (b) Legal services will be requested from Med Bde/Gp through the SI.
   (2) Mortuary affairs.
2. Lumber, softwood, 2 X 4 RL.

(5) Class V.

(a) Ammunition transfer points will be operated by the S&T Battalion, COSCOM.

(b) Units will maintain basic loads.

(6) Class VII.

(a) Selected Class VII will be stocked by the Headquarters and Light Ordnance (Maintenance) Company.

(b) Requests to fill TOE shortages will be submitted to Med Bde/Gp S4 citing TOE authority. Battle loss replacement will be requested by submitting Daily Battle Loss Reports in accordance with field standing operating procedures. The Med Bde-Gp S4 will forward request to Corps Assistant Chief of Staff (Logistics): G4.

(7) Class VIII. Medical battalion, logistics, provides Class VIII support on a supply point distribution basis.

(8) Class IX.

(a) Direct Support Maintenance Company provides repair parts support.

(b) Stockage objectives. DS. 15 days of authorized stockage list items.

(c) Major critical shortages exist for the following item:

- Truck, utility, N-ton, M1009-transmissions.

(d) Cannibalization. Unserviceable end items and major assemblies will be evacuated to the Headquarters and Light Ordnance (Maintenance) Company, CSA, collection points. Controlled cannibalization may be performed at the discretion of the hospital commander.

(9) Class X. Civil relief supply requirements will be approved by Med Bde/Gp and coordinated through the security, plans, and operations (SPO) office.

(10) Maps are provided by the Med Bde/Gp S4.
(Classification)

(11) Captured enemy materials.

(a) Will be reported to Med Bde/Gp S2 for disposition instructions.

(b) Enemy rations and medical supplies will not be utilized or consumed by Med Bde/Gp personnel.

(12) Excess supplies. All elements will report excess supplies through supply channels to Med Bde/Gp S4 for disposition instructions.

h. Transportation.

(1) All main supply routes (MSR) are two-way.

(2) Ten or more vehicles dispatched to the same destination from one point of origin constitutes a convoy.

(3) Elements coordinate convoy movements with the Med Bde/Gp SPO.

(4) Emergency resupply requirements will be submitted through command channels.

c. Services.

(1) Construction efforts will be limited to minimum essential required.

(2) Corps units will evacuate remains to the nearest MA collection point. Collection points will be operated by the CSA.

(3) Clothing exchange and bath services will be coordinated by Med Bde/Gp S4.

d. Maintenance.

(1) Maintenance collection points will be established in the CSA by the DS Maintenance Company.

(2) Priority of maintenance is to the 1st Division.

(3) Repair time limit: 48 hours. If an item will be deadlined in excess of 24 hours and otherwise qualifies for float, it may be exchanged for a serviceable like item at the discretion of the CSIR commander in coordination with Med Bde/Gp commander.

(Classification)
(Classification)

(a) Army cemeteries will not be established.

(b) Concurrent return program is in effect.

(c) Isolated or mass burials are not authorized unless approved by the corps commander. In emergencies, commanders may request such burials through TOC channels. When authorized, report number of remains, identity (by nationality, sex, age grouping and name, if possible), and cause of deaths to the Med Bde/Gp, Headquarters, ATTN: SI, within 48 hours of burial.

(d) Maintenance of discipline, law, and order.

(e) Commanders will give special attention to the problems of illegal sale and bartering of military supplies and equipment. Incidents will be reported to appropriate criminal investigation or military police unit.

(f) Claims by indigenous personnel will be reported to the Med Bde/Gp SPO.

3. CIVIL-MILITARY OPERATIONS.

a. Corps Assistant Chief of Staff (Civil Affairs; G5) provides civil affairs support.

b. ALL civil affairs related activities will be coordinated through Med Bde/Gp Civil-Military Operations.

6. MISCELLANEOUS.

a. Subordinate elements submit Daily Battle Loss Report twice each day to the Med Bde/Gp and CSH. Reporting periods are 0001 to 1200, due not later than 1400 hours; 1201 to 2400 hours, due not later than 0400 the following day.

b. See Reports Standing Operating Procedures.
Annex D (Rear Battle Operations) to OPORD 1234 CSH

1. SITUATION. OPORD 1234 CSH.

2. MISSION. Combat support hospital provides hospitalization support within the CSA.

3. EXECUTION.

   a. Concept of Operations. Units in the CSA will establish individual bases for rear security. The base cluster will have an appointed commander who will form and operate the base defense operations center on a 24-hour basis. Base commanders are responsible for their own base defense and base damage control. Base cluster commanders will coordinate and supervise base defense and base damage control. Under direction of Med Bde/Gp SPOs, supporting military police will respond to bases under attack by Level II forces. The Med Bde/Gp SPO will request commitment of Corps radio frequency should a Level II threat attack occur in the CSA. Base commanders will request Level II support from the CSA base clusters operations center. Any rear operations liaison or technical support provided by the corps will be collocated with Med Bde/Gp headquarters.

   b. Base Cluster Operations Center/Tactical Operations Center.

   (1) Provide Level I protection.

   (2) Request Level II support.

   (3) Request fire support/TACAIR.

   (4) Request area damage control support.


   (1) Disseminate tactical information to CSH Operations Section.

   (2) Forward request for assistance from CSH.

   (3) Forward priority communications from CSH.

   (4) Monitor base defense preparedness.

   d. Coordinating Instructions.

   (Classification)
(Classification)

1. Reporting enemy activities. Individual units within a base defense cluster will report all observed enemy acts and any locally gathered intelligence data to the base defense operations center and next higher headquarters.

2. Barrier and denial. No barrier and denial operations will be conducted without approval of the CSH headquarters.

4. SERVICE SUPPORT. Annex C.

5. COMMAND AND SIGNAL.
   a. Command. Command of rear operations in the CSA as directed by CSA base defense operations center (MA 676886).

(Classification)
GLOSSARY

ABBREVIATIONS, ACRONYMYS, AND DEFINITIONS

AC Active Component; alternating current.

ACLS advanced cardiac life support

ACR armored cavalry regiment

ACUS area common-user system

ADA air defense artillery

admin administration

alert
Any form of communication used by Headquarters, Department of the Army, or other competent authority, to notify the United States Army National Guard or the United States Army Reserve unit commanders that orders to active duty are pending for the units. Simultaneously with the alert, or as soon as possible during the alert period, the unit is given the effective date of entry on active duty, its mobilization station, MTOE, and other basic data as determined by the orders issuing authority.

ALT alanine aminotransferase

AM amplitude modulation

AMC air mobility command

AMEDD Army Medical Department

AN Army Nurse Corps

AO See area of operations

APTT partial thromboplastin time

AR Army regulation

area of operations
That portion of an area of conflict necessary for military operations. Areas of operation are geographical areas assigned to commanders for which they have responsibility and in which they have authority to conduct military operations.

arty artillery

ASI additional skill identifier

ASMB area support medical battalion
Authorized level of organization

Authorized level of organization establishes the authorized strength and equipment level for units. The authorized level of organization (ALO) may be expressed in numerically or letter designated levels representing percentages of full manpower spaces (for example, ALO 1 is 100 percent, ALO 2 approximately 80 percent, ALO 4 approximately 70 percent). The Joint Chiefs of Staff term "readiness rating limitations" is synonymous with ALO for Army unit status reporting.

Aviation

Basic allowance for quarters

Blocking, bracing, packing, crating, and tie-down

Brigade

Bachlor enlisted quarters

Battalion

Basis of issue plan(s)

Bachelor officers' quarters

Brigade support area

Command and control

CAPSTONE

A management program designed to improve the readiness of the total force through the alignment of Active Component and Reserve Component units into force packages which enable units to train and plan in peacetime for their wartime missions. A road map that orients a unit's readiness, mobilization, and deployment programs toward the primary objective of accomplishment of a wartime mission, it provides a guide for force readiness and aids in prioritizing resources.

Combat

Commander

Communications-electronics

ACLU-RDI 320 p.179
CH chief; chaplain
CHS combat health support
CI counterintelligence
CK creatine kinase
CL chlorine
clr clearing
cm centimeter
cmd command
CMO civil-military operations
CMS central material service
CNR combat net radio
c0 company
CO2 carbon dioxide
COL colonel
COMMZ communications zone
COMSEC communications security
cont/cntrl control
CONUS continental United States
CP command post
CPT captain
CS combat support
CSA corps support area
CSB corps support battalion
CSC combat stress control
CSF cerebrospinal fluid

ACLU-RDI 320 p.180
CSH combat support hospital
CSM command sergeant major
CSS combat service support
CTA common table(s) of allowances
cu cubic
CZ combat zone
DA Department of the Army
DC Dental Corps
decon decontamination
DEERS defense eligibility enrollment system
DEFCON See defense readiness condition.
defense readiness condition
A uniformed system of progressive alert postures for use by the Joint Chiefs of Staff, unified and specified commands, and the Services. Conditions are graduated to match situations of varying military severity or status of alert.
DEPMEDS Deployable Medical Systems
div division
DLA Defense Logistics Agency
DNVT digital nonsecure voice terminal
DOD Department of Defense
DS direct support
DSA division support area
DSN Defense Switched Network
DVA Department of Veterans Affairs
EAC echelons above corps
ECCM electronic counter-counter measure

ACLU-RDI 320 p.181
EEFI essential elements of friendly information
EEI essential elements of information
EMT emergency medical treatment
engr engineer
ENT ear, nose, and throat
EOC emergency operations center
EPW enemy prisoners(s) of war
evac evacuation/evacuate
EW electronic warfare
FA field artillery
FAO finance and accounting office(r)
FAX facsimile
FH field hospital
FHC female health and combat items
1SG first sergeant
FLOT forward line of own troops
FM frequency modulated; field manual (when used with a number)
FORSCOM United States Army Forces Command

fragmentary order
An abbreviated form of an operation order used to make changes in mission to units and to inform them of changes in the tactical situation.

FRAGO See fragmentary order
FSC Federal supply classification
FSMC forward support medical company
FSN Federal stock number
FST forward surgical team
ft feet/foot
fwd forward
G4 Assistant Chief of Staff (Logistics)
G5 Assistant Chief of Staff (Civil Affairs)
gal gallon
GEN general
GH general hospital
GP group/general purpose
GPS global positioning system
GS general support
GWS Geneva-Wounded and Sick
GYN gynecology
Hct hematocrit
Hgb hemoglobin
HHC headquarters and headquarters company
HHD headquarters and headquarters detachment
hlth health
HN host nation
hosp hospital
HN host nation
hosp hospital
HQ headquarters
HUB hospital unit, base
HUH hospital unit, holding
HUM hospital unit, medical

ACLU-RDI 320 p.183
HUS hospital unit, surgical
ICU intensive care unit
ICW intermediate care ward
IHFR improved high-frequency radio
in inch
INSCOM Intelligence and Security Command
ISO international organization for standardization
K potassium
kHz kilohertz
km kilometer
LAB laboratory
lb pound(s)
LDF lightweight digital facsimile
LEN large extension node
log logistics
LOGMARS logistics applications of automated marking and reading symbols
LRP long-range patrol
LRPP long-range patrol pack
Lt lieutenant
LTC lieutenant colonel
M4 enlisted, blood grouping, collecting and processing specialty
MA mortuary affairs
maint maintenance
MAJ major
MASH mobile army surgical hospital

ACLU-RDI 320 p.184
mobilization

The act of assembling and organizing national resources to support national objectives in the time of war or other emergencies. The process by which the Armed Forces or part of them are brought to a state of readiness for war or other national emergency. This includes activating all or part of the Reserve Components as well as assembling and organizing personnel, supplies, and materiel. Mobilization of the Armed Forces includes the following categories:

a. Selective mobilization. Expansion of the active Armed Forces resulting from action by Congress and/or the President to mobilize Reserve component units, Individual Ready Reservists, and the resources
needed for their support to meet the requirements of a domestic emergency that is not the result of an enemy attack.

b. Presidential Call-Up of 200,000 Selected Reservists (not considered a mobilization). The President may augment the active forces by call-up of units or individuals of the Selected Reserve, up to 200,000 personnel, for 90 days with an additional 90 days, if necessary, to meet the requirements of an operational mission.

c. Partial Mobilization. Expansion of the active Armed Forces resulting from action by Congress (up to full mobilization) or by the President (not more than 1,000,000) to mobilize Ready Reserve Component units, individual reservists, and the resources needed for their support to meet the requirements of a war or other national emergency involving an external threat to the national security.

d. Full Mobilization. Expansion of the active Armed Forces resulting from action by Congress and the President to mobilize all Reserve Component units in the existing approved force structure, all individual reservists, retired military personnel, and the resources needed for their support to meet the requirements of a war or other national emergency involving an external threat to the national security.

e. Total mobilization. Expansion of the active Armed Forces resulting from action by Congress and the President to organize and/or generate additional units or personnel, beyond the existing force structure, and the resources needed for their support, to meet the total requirement of a war or other national emergency involving an external threat to the national security.

**mobilization day (M-DAY)**
The term used to designate the day on which mobilization is to begin. The day the Secretary of Defense, based on a decision by the President and/or Congress, directs mobilization. All mobilization planning will be based on that date.

**mobilization station**
The designated military installation (active, semiactive, or State-owned/controlled) to which a Reserve Component unit is moved for further processing, organizing, equipping, training, and employment, and from which the unit may move to a port of embarkation.

MOPP mission-oriented protective posture

MOS military occupational specialty

MP military police

MRE meal(s), ready to eat

MS Medical Service Corps

MSE mobile subscriber equipment

MSG master sergeant

MSMC main support medical company

MSR main supply route

ACLU-RDI 320 p.186
MSRT mobile subscriber radiotelephone terminal

MTF medical treatment facility

MTOE modification table(s) of organization and equipment

N3 occupational therapy specialty

N9 physical therapy specialty

Na sodium

NATO North Atlantic Treaty Organization

NBC nuclear, biological, and chemical

NBI nonbattle injury

NC node center(s); noncommissioned

NCO noncommissioned officer

NCOIC noncommissioned officer in charge

NCS net control station

NP neuropsychiatric

NRTD nonreturn to duty

NS node switch

NSN national stock number

NUR/NURS nursing

OB obstetrics

OCONUS outside continental United States

OP/OPNS/OPS operational control

operation order
A directive issued by a commander to subordinate commanders for affecting the coordinated execution of an operation; includes tactical movement orders.

operation plan
A plan for a military operation. It covers a single operation or series of connected operations to be carried out simultaneously or in succession. It implements operations derived from the campaign plan. When the
time and/or conditions under which the plan is to be placed in effect occur, the plan becomes an operation order.

**OPFAC** operational facility

**OPLAN** See operation plan.

**OPSEC** operations security

**OR** operating room

**ORTHO** orthopedics

**OSHA** Occupational Safety and Health Act

**oz** ounce

**P1** orthopedic specialty

**PA** physician assistant

**PAC** Personnel and Administration Center

**PAD** patient administration Center

**PAT** patient

**patient**

A sick, injured, or wounded person who receives medical care or treatment from medically trained (military occupational specialty- or area of concentration-specific) personnel. A casualty becomes a patient when first treated by a medically trained individual.

**PDC** personnel data card

**PDS** personnel daily summary

**PFC** private first class

**PLGR** precision lightweight global positioning system receiver

**PLL** prescribed load list

**PMCS** preventive maintenance checks and services

**PMD** pounds per man per day

**POE** See point of embarkation.

**point of embarkation**

ACLU-RDI 320 p.188
An air or sea terminal at which troops, units, military sponsored personnel, unit equipment, and materiel board and/or are loaded.

POL petroleum, oil, and lubricant(s)
POM preparation for oversea movement
POMCUS pre-positioning of materiel configured to unit sets
POR preparation of replacements for oversea movement
POS/NAV position/navigation
POV privately owned vehicle
PRE-OP preoperative
PROFIS professional officer filler system
PSNCO personnel staff noncommissioned officer
PT physical therapy
PVNTMED preventive medicine
RAU radio access unit(s)
RBC red blood cell
RC Reserve Component
regt regiment
RMC remote multiplexer combiner
RP release point(s)
RPF real property facilities
RPR rapid plasma reagin
RSSP ration supplement sundries pack
RTD return to duty
S1 Adjutant (US Army)
S2 Intelligence Officer (US Army)
S3 Operations and Training Officer (US Army)
S4 Supply Officer (US Army)
S&T supply and transport
SAEDA Subversion and Espionage Directed Against US Army and Deliberate Security Violations
SCC system control center(s)
sec section
SEN small extension node
sep separate
SFC sergeant first class
SGT sergeant
SIDPERS Standard Installation/Division Personnel System
SIGSEC signals security
SINCGARS single channel ground and airborne radio system
SOI signal operation instructions
SP start point(s): specialist corps
SPBS-R standard property book supply-revised
SPC specialist
SPO security, plans, and operations
spt support
sq square
sqdn squadron
SSG staff sergeant
SSSC self-service supply center
sta station
STANAG standardization agreement

ACLU-RDI 320 p.190
**surg** surgery

**svc** service

**TACAIR** tactical air

**TACCS** Tactical Army Combat Service Support Computer System

**TAMMIS** Theater Army Medical Management Information System

**TAT** to accompany troops

**TB MED** technical bulletin medical

**TC** traffic control; training circular (when used with a number)

**TCMD** transportation control and movement document

**TCP** traffic control point(s)

**tech** technician

**TEMPER** tent, extendable, modular, personnel

**Time-Phased Force Deployment Data**
The computer-supported data base portion of an operation plan that contains time-phased force data, nonunit-related cargo personnel data, and movement data for the operation plan. Information includes in-place units, prioritized arrival of units deployed to support the OPLAN, routing of forces to be deployed, movement data associated with deploying forces, estimates of nonunit-related cargo and personnel movements to be conducted concurrently with deployment of forces, and estimates of transportation requirements.

**TM** technical manual; team

**TO** theater of operations

**TOC** tactical operations center

**TOE** table(s) of organization and equipment

**TP** digital nonsecure voice telephone

**TPFDDL** Time-Phased Force Deployment Data List. (See also Time-Phased Force Deployment Data.)

**trmt** treatment

**TSOP** tactical standing operating procedure

**UCMJ** Uniform Code of Military Justice
US United States
USA United States Army
USAEHA US Army Environmental Hygiene Agency
USAF United States Air Force
util utility
vs versus
W2 warrant officer, second grade

**warning order**
A preliminary notice of an action or order that is to follow. Usually issued as a brief oral or written message designed to give subordinates time to make necessary plans and preparations.

WBC white blood cells
WIA wounded in action
WO warrant officer
XO executive officer
Y7 enlisted sterile pharmacy specialty
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These documents must be available to the intended users of this publication.

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