

NAVY TACTICS, TECHNIQUES, AND PROCEDURES

**EXPEDITIONARY
MEDICAL FACILITIES
NTTP 4-02.4**

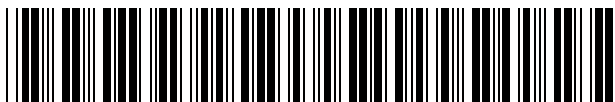
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NTTP 4-02.4

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1. NTTP 4-02.4 (2007), EXPEDITIONARY MEDICAL FACILITIES, is UNCLASSIFIED. Handle in accordance with the administrative procedures contained in NTTP 1-01.
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3. NTTP 4-02.4 (2007) is a reference for operational commanders, planners and health service support (HSS) personnel on capabilities and limitations of Navy expeditionary medical facilities (EMF) and to summarize tactics, techniques, and procedures (TTP). Other users are unified, joint, and supported commanders and planners responsible for theater HSS. It incorporates lessons learned from recent operations.
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1. NTTP 4-02.4 (2007), EXPEDITIONARY MEDICAL FACILITIES, was reviewed for format and approved Joint and Navy Service Terminology. The contents of NTTP 4-02.4 (2007) support Navy Strategic and Operational Level doctrine.

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1. NTTP 4-02.4, EXPEDITIONARY MEDICAL FACILITIES (AUGUST 2007), is available in the Navy Warfare Library. It is effective upon receipt.
2. NTTP 4-02.4 is a reference for operational commanders, planners, and health service support personnel on the capabilities and limitations of Navy expeditionary medical facilities. It incorporates lessons learned from recent operations. Other users are unified, joint, and supported commanders and planners responsible for theater health service support.
3. Summary. This publication addresses Navy expeditionary medical facilities capabilities available to the operational commander, and prescribes tactics, techniques, and procedures for theater operations, and mission planning and training. It is a complete revision of the previous publication and should be read in its entirety.

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PREFACE

NTTP 4-02.4, EXPEDITIONARY MEDICAL FACILITIES (AUGUST 2007), is a reference for expeditionary medical facility (EMF) commanders, planners, and operators regarding tactics, techniques, and procedures (TTP) to operate EMFs. Other users are unified, joint, and supported commanders and planners responsible for EMF employment.

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When items for changes are considered urgent, send this information by message to the Primary Review Authority, info NWDC. Clearly identify and justify both the proposed change and its urgency. Information addressees should comment as appropriate. See accompanying sample for urgent change recommendation format on page 17.

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Submit routine recommended changes to this publication at any time by using the accompanying routine change recommendation letter format on page 18 and mailing it to the address below, or posting the recommendation on the NWDC Doctrine Discussion Group site.

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WARNINGS, CAUTIONS, AND NOTES

The following definitions apply to warnings, cautions, and notes used in this manual:



WARNING

An operating procedure, practice, or condition that may result in injury or death if not carefully observed or followed.



CAUTION

An operating procedure, practice, or condition that may result in damage to equipment if not carefully observed or followed.

Note

An operating procedure, practice, or condition that requires emphasis.

WORDING

Word usage and intended meaning throughout this publication is as follows:

“Shall” indicates the application of a procedure is mandatory.

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1. The following changes are recommended for NTTP X-XX, Rev. X, Change X:

a. CHANGE: (Page 1-1, Paragraph 1.1.1, Line 1)

Replace "...the ~~National Command Authority~~ President and Secretary of Defense establishes procedures for the..."

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b. ADD: (Page 2-1, Paragraph 2.2, Line 4)

Add sentence at end of paragraph "See Figure 2-1."

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Add Figure 2-1 (see enclosure) where appropriate.

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CHAPTER 1

Introduction

1.1 SCOPE

This publication provides tactics, techniques, and procedures to execute all phases of the defined mission of the expeditionary medical facility (EMF) and provides the operational commander with an understanding of the deployable health service support (HSS) capability.

1.2 PURPOSE

The resource sponsorship of the EMF program is executed through the Office of the Chief of Naval Operations (OPNAV) (N41), Materiel Readiness and Logistics, which is responsible for monitoring EMF readiness and validating the activation of an EMF with the requestor and/or combatant commander. Maintaining and reporting readiness, training, and equipment is the responsibility of the Bureau of Medicine and Surgery (BUMED) and/or its subordinate commands. Immediate control of the EMF program is exercised through BUMED by expeditionary medical facility program manager logistics (EMFPML). The assemblies are built and maintained by the Navy Expeditionary Medical Support Command (NEMSCOM).

The primary configurations are the EMF 10-, 81-, 116-, 273-, and 500-bed variations that are surgically intense, inpatient deployable medical systems (DEPMEDS), which include base operating support and civil engineering support equipment, making the EMF self-supporting except for the requirements for external communications, fuel, water, trash disposal, and some specialty services. The DEPMEDS have been prepositioned afloat on maritime prepositioning force (enhanced) (MPF(E)) ships since early 1999. Once activated, positioned, and with an activation site prepared, the EMF can be fully functional within 5–10 days, depending on the size configuration of the EMF. Initial outfitting of the facility provides for 30 days of consumables prior to the need for resupply.

The introduction of capabilities-based DEPMEDS production at NEMSCOM has permitted the concepts of task-organized and custom design and the production of just-in-time DEPMEDS delivery to better support the warfighter. Combatant commanders (CCDRs) can now order DEPMEDS capabilities to be configured into a task-organized DEPMEDS platform. This is a new approach that permits the Navy to support smaller medical missions ashore.

1.3 APPLICATION

The EMF program exists to provide the warfighter with HSS capabilities in support of current operational plans. The capabilities-based design and production operations at NEMSCOM permit additional flexibility and will better meet smaller conflict scenarios and humanitarian missions.

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CHAPTER 2

General

2.1 THE MISSION OF THE EXPEDITIONARY MEDICAL FACILITY

2.1.1 Mission

The mission of the EMF is to provide standardized, modular, flexible combat service support and medical/dental capabilities to an advanced base environment throughout the full range of military operations. It is able to support the theater unified commander, joint task force commanders, Marine air-ground task forces, the naval expeditionary group, and forward elements of the United States Navy (USN), United States Army (USA), and United States Air Force (USAF) units deployed ashore. The EMF mission is also to provide HSS and civil support care for US government agencies involved in foreign humanitarian assistance and peacetime operations with manning, medical materiel, equipment, and provisions tailored according to individual missions. The EMF has three objectives. They are:

1. To provide resuscitative medical care to support combat care management across the full range of military operations
2. To provide a deployable HSS asset to support deployed forces and combat operations globally
3. To provide hospital beds required for medical facility augmentations.

2.1.2 Expeditionary Medical Facility Deployable Medical System

The EMF DEPMEDS is designed and outfitted for assembly by the EMF staff following site preparation and transport of components and personnel. The time phase for EMF construction is 2–10 days after site preparation and transport are complete. Site preparation is a requirement of the CDR and is not performed by personnel organic to the EMF. EMF construction will not start until the site prep has been completed. The time to complete site preparation is dependent upon many factors include availability of construction equipment, materiel, personnel, terrain, and weather conditions. The commanding officer (CO) and operational commander can request additional augmentation personnel, equipment, and supplies mandated by operational requirements and conduct early and continuous coordination with OPNAV (N931), Medical Resources, Plans and Policy Division staff and EMFPML office to facilitate requests for nonstandard deployment configurations.

Note

Planners should factor planning time to configure or task organize and produce humanitarian operation contingency equipment and supply packages not included in the regular inventory in order to meet mission requirements.

2.2 ADVANCED BASE FUNCTIONAL COMPONENT CONCEPT

The EMF is an advanced base functional component (ABFC), which is an element of naval logistics. EMF ABFCs are designated medical facilities planned as a grouping of personnel, facilities, and equipment, and designed to perform a particular function and to accomplish a particular mission at an advanced base. EMF DEPMEDS can be prepositioned to support a unified commander. Its design incorporates the required

operating resources and can also be tailored to provide specialized HSS, thereby preventing redundancy of capabilities already organic to the ABFC.

2.3 OVERVIEW OF EXPEDITIONARY MEDICAL FACILITIES

The EMF comprises the organizational staff and their equipment sets to provide medical/dental care for military, humanitarian, and disaster relief operations in a field environment. It provides follow-on medical care from initial point of injury in sustained operations involving ground force units. An EMF is a theater hospitalization capability. Although external support requirements exist, EMFs are substantially self-supporting.

2.3.1 Deployable Medical Systems

2.3.1.1 Definition

To operate multiple contingency and peacetime health care facilities and assemblages accurately and efficiently, a DEPMEDS, which is a Defense Medical Standardization Board (DMSB) program, standardizes medical materiel and improves the likelihood that newly added equipment will work seamlessly with existing equipment. Standardizing equipment also standardizes training. The EMF staff of a newly configured facility either has the knowledge and skills to operate recently acquired standardized equipment or has access to previously developed standardized training. DEPMEDS materiel is standardized in the following areas:

1. Military services
2. Procurement
3. Medical war reserve materiel availability
4. Peacetime operating stocks.

2.3.1.2 DEPMEDS Configuration

Navy DEPMEDS include EMFs, hospital ships (T-AHs), and forward-deployable preventive medicine units (FDPMU). This publication is concerned with the tactics, techniques, and procedures for employing EMF variations to include 10-, 81-, 116-, 273-, and 500-bed platforms. A DEPMEDS is a configuration of medical, dental, and preventive medicine equipment and/or supporting facility and utility infrastructure items and their associated consumables, materiel, and supplies. Supplies may include vehicle and construction, weight, and materiel handling equipment. A DEPMEDS also includes other materiel used to deploy, set up, and support/sustain various levels of medical/dental care capabilities, such as outfitted shelters, packing systems, and shipping containers.

2.3.2 Deployable Medical System Functional Units

Using the Defense Medical Logistics Standard Support Computer Network System, the Navy expeditionary medical support command staff creates a computer-generated platform configuration plan, or functional unit assemblage, for assembling a DEPMEDS before it is physically assembled. DEPMEDS design configurations range from a task-organized design to a 500-bed platform.

2.3.3 Evolution of Fleet Hospitals and Expeditionary Medical Facility Platforms

2.3.3.1 The 500-Bed Platform

The original 500-bed DEPMEDS platform, prepositioned in containers around the world, has limited use for missions requiring a reduced capability and footprint. Each prepositioned DEPMEDS contains all AMAL/ADAL medical functional components and most of the operational support functional components. It is packed in approximately 400 International Standardization Organization (ISO) containers and outfitted hard-wall shelters.

Civil engineering support equipment rolling stock for the 500-bed platform, which includes pickup trucks, ambulances, buses, and fork lifts, are transported and prepositioned without containers. Upon activation, the 500-bed platforms are set up in preconceived 28-acre layout design.

2.3.3.2 The Expeditionary Medical Facility-10

In order to support missions with reduced requirements and limited operating areas, the 500-bed platform was modified to activate a 116-bed module, at first named the Navy Expeditionary Medical Support System, and later changed to Expeditionary Medical Facility, or EMF. To recreate the expanded hospital, the EMF would have to be disassembled and reassembled with the remaining components, or the core. A smaller expeditionary medical unit, now called the Expeditionary Medical Facility-10 (EMF-10), evolved out of necessity to rapidly deploy using air transport and to be erected in a few hours in order to provide robust surgical capabilities ashore.

2.3.3.3 The 4/2 Expeditionary Medical Facility

From 2001 to 2003, the EMF/core configuration was reengineered to create the 4/2 EMF design, in which four distinct modules allow multiple deployment options for a single or dual-site setup and also incorporate modularity, scalability, and greater flexibility. The existing organic assets are used in the EMF/core with a minimal need for additional equipment. The first 4/2 EMF was produced in February 2004 and prepositioned on a maritime prepositioning force (MPF) squadron. A second 4/2 EMF was produced in late 2004.

2.3.3.4 The 3/2 Expeditionary Medical Facility

The 4/2 EMF design has been replaced by the 3/2 design. Lessons learned using the 4/2 EMF lead to the 3/2 EMF design, in which module 4 was eliminated and module 3 was augmented with an additional operating room shelter. A third 3/2-configured EMF, prepositioned ashore, has been added to the program inventory. Modules 1 and 2 of the 3/2-configured EMFs are currently prepositioned aboard the three MPF squadrons. The fourth set of modules 1 and 2 is scheduled to replace 3/2 EMF modules returning for service life extension.

2.3.4 Tasked-Organized Expeditionary Medical Facilities

To support the requirements of emerging smaller-scale missions, the EMF program has modified its logistical operations to incorporate capabilities-based production with its current platform-based operations. When DEPMEDS platforms in the program inventory are unable to support a particular mission, combatant commanders can order the EMF they need from warehoused prepackaged functional components. These component packages can be configured into 10-, 81-, 116-, 273-, or 500-bed EMF platforms which are loaded onto aircraft pallets or ISO containers for transport.

2.4 UNIVERSAL NAVAL TASK LIST

The EMF Factbook, found in Appendix A, illustrates the relationship of the EMF Naval Mission-Essential Task List (NMETL) to the Universal Naval Task List (UNTL). The EMF NMETL is a compilation of tasks critical to mission accomplishment that allows the commander to focus the unit's training efforts on essential tasks during combat operations. The commander also uses unit NMETLs as the criteria for evaluating unit readiness.

The UNTL is a comprehensive list of tasks consisting of strategic and operational tasks of the Universal Joint Task List (UJTL) and the tactical level tasks provided by the Navy Tactical Task List (NTTL) and the Marine Corps Task List (MCTL). It is the standard for Navy, Marine Corps, and United States Coast Guard (USCG) joint force and naval commanders to use as a master menu of tasks, conditions, and measures to develop NMETLs. The UNTL is architecturally linked to the UJTL by including the UJTL's strategic-national (SN), strategic-theater (ST), and operational (OP) levels of war tasks.

NTTP 4-02.4

The UNTL is a key element of the requirements-based, mission-to-task training system. The UNTL:

1. Contains a hierarchical list of tasks that can be performed by a naval force
2. Describes the variables in the environment that affect task performance
3. Provides measures to be applied by a commander to set a standard of expected performance
4. Identifies what is to be performed in terms common to all Services
5. Does NOT address how a task is to be performed; joint and Service doctrine address how a task is to be performed
6. Does NOT address who is to perform the task; the commander's concept of operations addresses who is to perform the task.

For more definitive information on the UNTL, refer to OPNAVINST 3500.38B/MCO 3500.26/USCG COMDTINST 3500.1B, Universal Naval Task List (UNTL).

2.5 EXPEDITIONARY MEDICAL FACILITIES IN JOINT, COALITION, AND MULTINATIONAL OPERATIONS

2.5.1 General

EMFs are deployed in support of joint, coalition, and multinational operations. Joint operations are military actions conducted by joint forces or Service forces with supporting relationships which, by themselves, do not create joint forces. In these situations EMF administrative control would remain the responsibility of the Navy component commander. In joint operations the operational control could be the responsibility of an Army or Marine Corps component commander who may in turn report to an Air Force task force commander. The joint task force could be in support of a coalition of forces, a formalized UN operation or a coalition operation. The complexities increase with each additional force added higher up the joint chain of command that the EMF is supporting.

In coalition operations, the US forces function in alliance with other individual nations or with established groups of nations, such as the North Atlantic Treaty Organization (NATO). UN operations are formed after the approval of the Security Council to conduct humanitarian missions, etc., and the establishment of a UN force with a specific set of objectives. The force is located in one or several countries at the invitation(s) of the host nations. The UN force headquarters should have its own force surgeon and staff, similar to a US joint task force. While the details of the arrangement may vary, it has been US policy and that of many UN forces that US personnel within a UN operation will not serve directly under a commander of another nation. The exception is personnel who are not part of the joint task force but assigned to the UN force. The objectives of the UN force surgeon and the joint task force surgeon may not always be the same. Under current doctrine, EMFs receive tasking from the joint task force commander, the Service component commander, or subordinate commander that has OPCON of the EMF.

2.5.2 Mission

When selecting the EMF to support joint, coalition and multinational operations, the medical planners must consider the following when assessing the capability of the EMF to provide combat casualty care, community medicine, preventive medicine, and dentistry:

1. A clear understanding of the mission. During UN operations, the mission definition can become more complex because the UN task force may have different objectives than the joint task force.

2. The population that the EMF serves should be carefully defined. As joint operations become a component of coalition and multinational operations, defining the population that the EMF treats has become an important issue and more difficult to define.
3. Refugee care, if undertaken, should focus on developing infrastructure, not treating chronic illness in individuals who will not receive follow-on care. In support of humanitarian assistance operations, clinical care might involve preventive medicine such as a massive rubella immunization program for children to protect a population at risk.
4. Medical/dental exercises.

2.5.3 Clinical Practice

Clinical capabilities required to be provided by the EMF may vary depending on the type of operation. Other nations often lack the ability to provide more advanced levels of medical or dental care for their forces in theater or at home. Health care providers may find it difficult to release patients for whom they were unable to provide the utmost in medical care. The capability of medical and dental care required may well exceed the availability of equipment and supplies that ordinarily equip the facility. The following are other cultural issues of concern to the EMF staff:

1. Language problems may occur when patients are foreign nationals.
2. Patient nutrition may be more difficult in certain cultures. Patients may not be able to eat such foods as pork, beef, or shellfish. Alternative foods are not easily obtained in the field environment.
3. Protocols for addressing military patients of other nations may need to be altered in an EMF. For example, in some cultures, addressing a patient by first name instead of by rank may be preferable to the patient and lead to greater patient compliance.
4. In assisting foreign nationals with establishing family contact, particular problems may be encountered due to language differences and/or lack of adequate communications equipment.
5. Liaison, especially in the emergency room, should be established immediately with all in-theater police forces such as the US military, foreign military, UN, and foreign civilian.

2.5.4 Patient Disposition

While the patient disposition process is well defined for US military members, the process for foreign personnel, military and civilian, can be difficult or lacking. US forces move patients from theater treatment facilities based on the patient's condition and the theater evacuation policy. In coalition operations, some countries may not evacuate their military personnel from treatment facilities as rapidly as the United States for the following reasons:

1. Lack of comparable healthcare availability at home.
2. Knowledge of a patient's location or condition.
3. Lack of tactical or strategic transportation capability; repatriation can take place aboard commercial aircraft, which requires higher levels of patient stability and function.
4. Concern about the patient's welfare on repatriation before total rehabilitation; in some countries, the military member will be discharged without further care.
5. Concern about Service members' loss of special pay received while serving in theater.

NTTP 4-02.4

Attempts at discharging the patient may prove difficult and may require prolonged care for the patient and in trying to effect repatriation. Liaison should be established with component, joint, coalition, and individual national headquarters as soon as possible to have the network in place to solve these labor and time-intensive problems. The EMF should consider working on the following three issues simultaneously to help repatriate foreign personnel as rapidly as possible from the theater of operations:

1. Notify the UN force medical officer.
2. Arrange patient ticketing on a civilian or commercial flight.
3. Work with the patient's parent unit.

2.5.5 Inter-Service Transition

During extended operations, it may be necessary to replace the EMF staff. Custody of the facility, equipment, and classified materials are turned over to the new EMF CO. When other EMF personnel assume responsibility, the policies in delivery of care and methodology in managing a field clinical facility established by the previous EMF staff are relatively easily carried on. In cases where the transition is to or from the Navy, there may be differences in delivery of care policies and field facility management. A command leaving a facility that will be turned over to another Service may not have provided an extensive supply stockpile. Supply lines, base operating support requirements, manning and equipment requirements, and established capabilities are different. As a result, mission fulfillment may be different. The EMF command coming into theater, whether it is taking over an existing facility used by another Service or establishing a new facility, should be cautious in staffing new mission requirements.

2.6 TAXONOMY OF CARE CAPABILITIES

HSS is provided to expeditionary forces using ascending taxonomy of care capabilities, which is a continuum of care starting at the point of illness or injury and continuing through evacuation and en route care. Patients are initially directed to a facility capable of decisive intervention to preserve life, limb, and eyesight. Once stabilized, depending on their condition, patients are either returned to duty or they are transferred to facilities outside the theater of operations for definitive treatment. The taxonomy of care concept weighs four interdependent factors:

1. Urgency of the patient's needs
2. Medical personnel and facilities mobility requirements
3. HSS personnel capabilities, equipment, and supplies
4. Care capability level workload relative to its treatment capacity.

The Department of Defense (DOD) has institutionalized the newly developed taxonomy of care capabilities as the health services standard. (See Figure 2-1 for a summary of the taxonomy of care capabilities found in the Navy Warfare Publication (NWP) 4-02, *Naval Expeditionary Health Service Support Afloat and Ashore*.) According to the Allied Joint Publication 4-10, *Allied Joint Medical Support Doctrine*, NATO retains its levels of care schema, which corresponds to levels 1 to 4 of the US taxonomy of care capabilities.

Note

In coalition and multinational operations, personnel from non-NATO countries may have different interpretations of the levels of care. In such circumstances, evacuation of casualties through the standard progressive levels of care may not occur, and patients may arrive at an EMF without receiving first responder or forward resuscitative care.

CAPABILITY	HEALTH CARE	EXAMPLE*
First Responder	Medical care rendered at the point of initial injury or illness	Self Aid/Buddy Aid Hospital Corpsman Marine Corps Lifesavers
Forward Resuscitative Care	Forward advanced emergency medical treatment performed close to the point of injury/illness	Ship's Medical Department Battalion/Wing Aid Station Shock Trauma Platoon Forward Resuscitative Surgery System Surgical Company Casualty Receiving and Treatment Ship Aircraft Carrier
Theater Hospitalization	Modular theater hospitals with medical and surgical capabilities required to support the theater	Hospital Ship Expeditionary Medical Facility
Definitive Care	Full range of acute, convalescent, restorative, and rehabilitative care	OCONUS Medical Treatment Facility CONUS Medical Treatment Facility Veterans' Administration National Disaster Medical Systems Hospital
En Route Care	Medical treatment during movement between capabilities	Tactical En Route Care Teams** USMC En Route Care System*** USAF Critical Care Air Transport (CCAT)
<p>* This is not an all-inclusive list of medical resources.</p> <p>** The principles of en route care are used throughout all capabilities of care.</p> <p>***. Multiservice en route care assets are utilized with the EMFs.</p>		

Figure 2-1. Taxonomy of Care Capabilities

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CHAPTER 3

Concept of Employment of Expeditionary Medical Facilities

3.1 CONCEPTS AND CAPABILITIES

An operational mission plan for an EMF includes clinical capabilities, clinical limitations, concepts of employment, and design concepts.

3.1.1 Expeditionary Medical Facility Clinical Capabilities

(See Figure 3-1 for a list of areas of EMF medical capabilities and operational support functions.)

3.1.2 Expeditionary Medical Facility Concepts of Employment

3.1.2.1 Employment with Joint Operations

The EMF, a Navy medical asset also used in Marine Corps, joint-combined, and coalition operations, is in compliance with the universal data repository of authorized medical and dental allowance lists established by the DMSB, which allows for joint operations interoperability.

3.1.2.2 Expeditionary Medical Facility Mission Planning

The medical planner compares standard military operations with the actual and expected operational environment. The conflict classification scheme used within OPNAV, which provides recommendations but is not all-inclusive of EMF uses, is used in decisionmaking. It gives EMF operational capability options that support the operating environment and clinical capabilities. (See Figure A-2.)

For further information on EMF operational capability, refer to Field Manual (FM) 8-42, Combat Health Support in Stability Operations and Support Operations.

3.1.2.3 Ground-based Methods of Employment

The EMF can be employed to support the range of military operations. The EMF can ideally support peacetime operations, such as foreign humanitarian assistance and disaster relief. The employment cycle of the EMF includes site preparation, component and personnel transportation, hospital assembly/construction, hospital operations, and retrograde.

3.1.2.4 Employment of Concurrent Air and Maritime Operations

Although the EMF is designed primarily to support ground-based operations, it can also support concurrent air and maritime operations.

EMF CLINICAL AREAS OF CAPABILITY	CAPABILITIES
<p>MEDICAL CAPABILITIES</p>	<p>Casualty Receiving and Treatment Operating Room Laboratory Intensive Care Unit (ICU) Radiology/Imaging Acute Care Wards Pharmacy Operating Room Preparation and Hold Oral Surgery/Dentistry Central Sterile Reprocessing Blood Bank Medical Repair Preventive Medicine Oxygen Generation Patient Administration* Medical Administration*</p>
<p>OPERATIONAL SUPPORT FUNCTIONS</p>	<p>Internal Communications Systems Weapons Storage/Support Electrical Power Generation and Distribution Wastewater Collection Potable Water Storage Fuel Storage and Distribution Supply Food Service Public Works Maintenance and Transportation Laundry Chaplain Services Barber Shop Staff Berthing Administration Information Management Systems Postal Service</p>
<p>AUGMENT MEDICAL BLOCK ITEMS</p>	<p>Type One Consumables** Type Two Consumables** Medical/Surgical Consumables (Class VIII) Medical Hazardous Materials Just-in-Time Medical</p>
<p>AUGMENT OPERATIONAL BLOCK ITEMS</p>	<p>Collective Protection Equipment Infantry Gear Chemical/Biological/Radiological Gear Extreme Cold Weather Gear Fly Away Food-Meals Ready to Eat Long Food (Galley Meals) Forms and Publications Individual Protection Package Information Technology Just-in-Time Tunnel Augment Industrial Hazardous Materials</p>
<p>* Naval Operational Medicine Institute (NOMI) collected observations submitted to the Naval Operational Medical Lessons Learned Center (NOMLLC), and the Marine Corps Center for Lessons Learned (MCCLL) identified several deficiencies in medical regulating including lack of training, communications, and planning. Lessons learned and observations are located on https://www.mccll.usmc.mil/nomi/index.cfm in Binder #266 entitled Medical Regulating.</p> <p>** <i>Shelf-Life Item</i>. An item of supply possessing deteriorative or unstable characteristics to the degree that a storage time period must be assigned to ensure that it will perform satisfactorily in service. All shelf-life items are classified as one of the following two types: <i>Type I</i>. An individual item of supply is designated with a definite nonextendible period of shelf life after an evaluation of technical test data and/or an evaluation following experience using the item. One exception is Type I medical shelf-life items (NSN 6505), which may be extended if they are accepted into and pass testing for extension through the Department of Defense/Food and Drug Administration Shelf-Life Extension Program. <i>Type II</i>. An individual item of supply having an assigned shelf-life time period that may be extended after completion of visual inspection/certified laboratory test, and/or restorative action.</p>	

Figure 3-1. Expeditionary Medical Facility Medical and Support Functional Areas

3.1.2.5 Factors for Determining Expeditionary Medical Facility Employment

Several factors determine which EMF configuration is to be used during an operation, including population at risk, casualty rates and type, real estate availability, theater evacuation policies, nature and duration of the conflict, required employment time frames, and asset relocation assessments. (See Figure A-1 for assets to assist planners in identifying which EMF asset to employ for a given mission and examples of EMF employment.)

3.1.2.6 Environmental Considerations

The EMF can be outfitted to operate in temperatures ranging from -10 °F to 125 °F, making it suitable for most world climates. Extreme cold weather augmentation equipment and personnel clothing, including heaters and heat trace lines, are maintained at the NEMSCOM and transported at the time of EMF activation. Prepositioned with the EMF are either environmental control unit (ECU) heat pumps with heating and cooling capability or air conditioning units with heat strips for heating. Air conditioning units are being phased out and replaced with the ECU heat pumps. Clothing is issued to deploying personnel at the time of EMF activation. Extreme cold weather suits rated for temperatures as low as -50 °F are also available.

3.1.3 Mobility Considerations

A task-organized EMF should be considered when the mission requires mobility. A task-organized EMF can be a mobile facility. All EMF configurations are relocatable; however the larger bed configurations are not mobile facilities. They should only be deployed to locations where mobility is not required. The components that make it theater hospitalization capable also make it immobile, such as sophisticated equipment and a large clinical staff. An EMF is relocatable when the duration of the operation is over 120 days and when the operational scenario requires relocation.

3.1.4 Prepositioning Considerations

The EMF can be activated from various strategic sites: within the continental United States (CONUS), outside the continental United States (OCONUS), shore-based prepositioning locations, and three MPF squadrons. The EMF may not be present at all prepositioning locations at the same time. It could be undertaking ongoing service life extension at NEMSCOM or be activated. A task-organized EMF is usually produced at NEMSCOM and then transported directly to the activation site. A task-organized EMF platform can also be produced and prepositioned. A complete 273-bed EMF is prepositioned on the ships within the Maritime Prepositioning Ships Squadron (MPSRON). A 116-bed EMF can also be configured from the capability sets in the MPSRON. Details on configuring a task-organized EMF from the capability sets in the MPSRON can be obtained from NEMSCOM.

For EMF prepositioning considerations, contact NEMSCOM at Cheatham Annex, 108 Sandra Avenue, Bldg. 564, Williamsburg, VA 23185.

3.1.5 Location Considerations

The combatant commander considers the following location factors for the EMF: proximity to supported units, secure environment, transportation, logistics support, terrain and climate, and communications. (See Figure A-3 for the location factors which are listed by priority.)

3.1.6 Language Barriers/Solutions

EMFs are deployed to foreign countries or used within CONUS for peacetime operations such as disaster relief. In both cases, language barriers can present problems. Task force commanders' staff members and task force surgeons' staff should anticipate language barriers and the need for translators in mission planning. When prolonged interaction between staff and foreign-speaking patients continues throughout treatment, stay, and follow-up ambulatory care, help is sought from a pool of translators put together by the EMF's planner, who is drawn from individuals present in the facility, such as other patients, area food service workers, joint task force personnel, English speakers from the patient's command, and foreign language speakers from the EMF's own

assigned military personnel. With experience, EMF personnel develop communication skills using a combination of body and sign language to communicate to foreign language speakers.

3.2 DESIGN CONCEPTS FOR THE EXPEDITIONARY MEDICAL FACILITY

The EMF is a multiple modular design with theater hospitalization capabilities in mobile operations. The EMF configuration includes medical, dental, and preventive medicine equipment and/or supporting facility and utility infrastructure items and their associated consumables, materials, and supplies. It includes vehicle and construction, weight and handling equipment, and other materials, such as outfitted shelters, packing systems, and shipping containers, used to deploy, set up, support, and sustain various levels of medical and dental care capabilities. The EMF is configured to support 10-, 81-, 116-, 273-, and 500-bed platform configurations. The EMF program also supports task-organized platforms to meet the commander's capability needs. (See Chapter 4 for a list of additional base operating support requirements.)

3.3 EXPEDITIONARY MEDICAL FACILITY CAPABILITIES

The EMF is designed to perform a high volume of inpatient care. Depending on the bed platform configuration activated, the daily admissions and operative procedures range from 19 to 80 and 18 to 54, respectively. The EMF platform information is not all-inclusive and may vary with different platform/mission requirements as shown in Appendix A.

For EMF detail and planning factors, contact NEMSCOM at Cheatham Annex, 108 Sandra Avenue, Bldg. 564, Williamsburg, VA 23185.

3.3.1 Organization and Staffing of the Expeditionary Medical Facility

The number of staff assigned to EMF modules varies depending on mission objectives and the availability of trained personnel. (See Figures A-11 and A-12.)

3.3.2 Surgical Specialty Capabilities of the Expeditionary Medical Facility

The EMF is configured to provide theater hospitalization capability of care and the ability to execute treatment briefs, as prescribed by the DMSB, for theater hospitalization capability of care. The EMF offers a range of surgical specialties: general, thoracic, urology, gynecology, orthopaedics, neurosurgery, ophthalmology, anesthesiology, oral surgery, and general dentistry.

3.3.3 Medical Specialties and Clinical Support Services of the Expeditionary Medical Facility

1. Medical specialties. The EMF offers a range of medical specialties: internal medicine, general practice, family practice, emergency medicine, dermatology, psychiatry, neurology, radiology, pathology, and preventive medicine.
2. Clinical support services. Clinical support service capabilities provided by the EMF include casualty receiving and triage, operating rooms, postoperative recovery, and patient beds. Patient beds are designated as either intensive care or intermediate (acute) care.
3. Ancillary support. Ancillary support includes laboratory, radiology, central sterile supply, and pharmacy. All EMFs lack spectacle fabrication capability. Most EMFs have two oxygen generation systems of the same type to produce medical grade oxygen, either the portable oxygen generation system (POGS) or the deployable oxygen generation system (DOGS). Both POGS and DOGS use molecular sieve technology to concentrate oxygen to greater than 93 percent, permit direct feed to the patient, and have the ability to fill supplied empty Size D and Size H compressed gas cylinders for administering oxygen. (See Figure A-25 for the consumption rate of oxygen for each oxygen generation type.)

3.3.4 Clinical Limitations

The EMF design does not include community hospital functions. The provision of augmented services can require additional equipment, space, power, supplies, fuel, and water. Medical facility design changes must be made and staff augmentation packages produced accordingly. Before requesting augmented medical services, the EMF CO evaluates the mission and reviews the evacuation policy in order to determine which additional medical specialists are needed and can be accommodated. Pediatrics, gastroenterology, nephrology, and cardiology specialties are examples of medical specialties that are augmented services only. In Operation IRAQI FREEDOM (OIF), the older age and medical condition of reserve and contract personnel have required medical capabilities not generally used in the past. Other clinical service capabilities not routinely available to the EMF include:

1. Spectacle fabrication
2. Magnetic resonance imaging (MRI)
3. Frozen blood supplies
4. Dental care during a prolonged garrison period in theater.

3.3.5 Patient Privacy in the Expeditionary Medical Facility

The EMF's open bay configuration precludes outpatient care without design modifications. The open bay configuration, which offers limited privacy, can be modified with partitions to segregate patients by gender for added privacy.

3.3.6 Radiographic/Fluoroscopic and Other Imaging Procedures

The EMF platforms possess digital x-ray capability. Some platforms can perform radiographic and fluoroscopic procedures, while others may lack the fluoroscopy capability. Two computerized axial tomography units are in the EMF program inventory and may be available to augment EMF platforms depending on the mission. Other imaging capabilities available to the EMF include low and high capability, portable digital X-ray units, C-arm units, endoscope imaging systems, and portable ultrasound devices. MRIs are not available. (See Paragraph 3.3.4 for other clinical service limitations.)

3.3.7 Clinical Laboratory

EMF clinical laboratory capabilities include hematology, blood bank, chemistry, and microbiology.

3.3.8 Blood Bank

The EMF can store and use liquid red blood cells, fresh whole blood and, if tasked, frozen plasma. It has no frozen red blood cells capability. The EMF may serve as a blood supply unit (BSU) when designated within the OPLAN or CONPLAN. (See Figure A-9 for the storage capacity in units of blood for EMFs.)

3.3.9 Dental Operations

The number of dentists assigned to an EMF is based on the estimated number of EMF patients and EMF staff and not on the general military population. Dental staffing of the EMF allows the dental department to work multiple shifts. The EMF is not designed to support dental care required by patients and staff during a prolonged garrison period in theater.

3.3.10 Power Generation and Distribution

Based on lessons learned, the delivery of uninterrupted power supply is of utmost importance, and shall be considered in the planning process. EMF shelters and equipment are powered by 100-kilowatt (kW),

skid-mounted generators, which produce three-phase, 60-hertz (Hz), 110-volt (V) alternating currents and are compatible with all EMF electrical equipment. Use of power sources other than the provided 100-kW, skid-mounted generators may cause equipment malfunctions and damage. Although most platform equipment can run off of both 50- and 60-Hz power, alternate sources provided by the host nation (HN) or other resources should be avoided and used only after consulting with NEMSCOM.

When task-organized EMFs are deployed without organic generator support equipment, the supporting CDR should be notified regarding electrical requirements early in the planning phase to ensure that approved sources of power are available. Additionally, all EMF equipment requires external power and is outfitted with standard American plugs requiring adapters to fit nonstandard American power outlets. Backup generator power is provided to key medical areas of the EMF. Standard American power outlets are provided for EMF equipment. (See Figure A-17 for a list by module of the 100-kW generators utilized in the EMF.)

Note

Design construction drawings determine the length of pipe included in the EMF for building the power distribution system. To ensure that the length of pipe is sufficient, the power distribution system must be built in accordance with the drawings.

Lessons learned and observations concerning power generation for field medical units can be found by logging onto <https://www.mccell.usmc.mil/nomi/index.cfm>, under My Binder in Binder #265, "Electrical Power Requirements for Medical Field Units." The lessons learned and observations in the binder provide a synopsis of how insufficient power resources can affect the HSS mission.

3.3.11 Potable Water and Wastewater Systems

1. Potable water. The EMF can store, distribute, and maintain a three-day supply of potable water. The EMF must coordinate with its operational commander to receive potable water. Navy Medical (NAVMED) P-5010, *Manual of Naval Preventive Medicine*, provides base operating factors for calculating daily water requirements, such as staff and patient population, evaporation rates, and vehicle usage. Water is stored in polypropylene tanks and water bladders in ISO containers, 6,000-gallon water tanker trucks, and 400-gallon water bulls. (See Figure A-18 for an illustration of EMF water requirements and how water storage systems are distributed to each EMF.)
2. Potable water distribution.
 - a. In the EMF personnel and patient facilities, potable water is pumped by way of hose connections from polypropylene tanks or from water bladders and distributes potable water to showers and restroom in facilities such as troop housing, base camp heads, patient showers and restrooms, or mobile utility modules. The distributed water is heated once it passes a water heater located in the shower or head facility shelter.
 - b. Potable water for use in EMF medical treatment areas and related workspaces is provided by five-gallon plastic containers, which are filled from water bulls or tanker trucks. The water is pumped from five-gallon containers to field sinks through instantaneous electric water heaters when hot water is required. A separate five-gallon container is used to collect wastewater. Water supplied to public works and galley areas is heated using the M-80 portable water heater.
3. EMF wastewater collection, storage, and disposal. The EMF wastewater storage system is capable of storing wastewater equal to a three-day potable water supply. Wastewater from base camp heads and mobile utility modules is gravity fed to sewage ejectors that, in turn, pump it to steel wastewater tanks. Large, steel wastewater tanks contained in ISO containers hold the wastewater until it is pumped into 2,000-gallon pump trucks and hauled away to be disposed of properly. Wastewater containers from field sinks must be carried manually to the wastewater collection tanks and emptied.

Note

Wastewater considered as hazardous waste is collected, stored, and disposed of separately from wastewater considered nonhazardous.

(See Figure A-18 for the distribution of wastewater storage containers and Figure A-19 for the distribution of base camp heads, medical utility modules, and sewage ejectors associated with each EMF.)

3.3.12 Heating, Ventilation, and Air Conditioning for the Expeditionary Medical Facility

The EMF module is equipped with skid-mounted, 120K Btu heating, ventilation, and air conditioning (HVAC) units with separate oil-fired heaters that provide HVAC in temperatures ranging from -10 °F to 125 °F.

3.3.13 Fuel Requirements for the Expeditionary Medical Facility

The EMF is outfitted with 10,000-gallon fuel bladders, a 5,500-gallon fuel tanker truck, a 1,500-gallon fuel truck, and 900-gallon fuel tanks to store and deliver diesel fuel to operate its electrical generators, civil engineering support equipment, galley steam generators, water heaters, and space heaters. (See Figure A-21 for a list of fuel requirements and the distribution of fuel storage equipment for each EMF.)

3.3.14 Solid and Hazardous Waste Generation

The EMF generates waste streams similar to CONUS Navy hospitals. EMF COs shall coordinate requirements for disposal of solid and hazardous waste with operational commanders. (See Figure A-22 for a list of the estimated amount of solid and hazardous waste generated by the waste streams.)

3.3.15 Laundry

The EMF has laundry shelters for washing bed linens, miscellaneous hospital items, and staff clothing/personal items.

3.3.16 Shelter Systems

The EMF uses several soft-wall shelters, tents, and hard-wall shelters to provide expeditionary medical services and housing to the medical/dental equipment and staff.

1. Soft-wall shelters. The general-purpose (GP) tent system, historically used to house the EMF staff, is currently being replaced with the Base-X 305 series tent system. The EMF uses the tent expandable, modular, personnel soft-wall shelter in the medical areas and dining facilities. Maintenance tents, which are currently used in shipping and receiving, public works, and fire station component areas of the EMF, are being replaced with lightweight maintenance enclosures.
2. Hard-wall shelters. Hard-wall outfitted shelters are used for EMF medical functional areas and nonmedical support areas. Expandable 3 to 1 shelters are utilized in the operating room, laboratory, medical repair, laundry, and kitchen areas. Expandable 2 to 1 shelters house X-ray, pharmacy, central sterilization, and computerized tomography. Nonexpandable shelters are employed as base camp heads, modular utility modules, communication vans, isolation rooms, morgues, refrigeration units, armories, sanitizers, and for potable water storage and wastewater storage.

3.3.17 Civil Engineering Support Equipment

Civil engineering support equipment (CESE) is organic to the EMF for operating and maintaining the facility after construction. Once the deployment or redeployment site is prepared, the EMF setup is complete, its organic assets are transported, and the facility is operational, CESE is used for post construction operation and maintenance. (See Figure A-24 for the CESE capabilities matrix.)

3.3.18 Expeditionary Medical Facility Type Unit Characteristic Data

The type unit characteristics (TUCHA) file is maintained by the Joint Staff, J-3 Operations Directorate, with assistance from the Defense Information Systems Agency. The file contains passenger and cargo information for generic types of units. Each generic type is designated by a five-character alphanumeric unit type code (UTC). Dozens of individual units identified by their own unit identification code (UIC) can share the same UTC. The UTC that best describes the requirements for the EMF to become fully operational is F038U. This code applies to generic supplies and equipment including dated and deteriorative items and last minute supply system receipts.

The TUCHA information for a UTC includes the unit generic name, the applicable reference document for that unit, unit equipment, the number of different cargo category codes (CCCs) associated with the unit, and the number of authorized unit personnel. The CCC is a three-character alphanumeric code that identifies shipping characteristics for specific cargoes. CCCs are used by the United States Transportation Command to determine the transportation assets needed to move a unit. (See Figure A-13 for TUCHA data.)

CHAPTER 4

Command, Control, and Communications

4.1 OVERVIEW

EMFs are apportioned to the combatant command (command authority) (COCOM) in support of operation plan (OPLAN) and concept plan (CONPLAN) development. The Chairman, Joint Chiefs of Staff allocates them for the execution of a specific OPLAN. EMFs are staffed by active duty and reserve naval personnel. After activation, EMFs are deployed to an operational theater where command and control changes to the CCDR. (See Paragraph 4.3 for the delineation of chain of command relationships.)

4.2 EXPEDITIONARY MEDICAL FACILITY Preactivation RESPONSIBILITIES

4.2.1 Combatant Commander

EMFs are apportioned to each CCDR in support of OPLAN and CONPLAN development.

4.2.2 Service Component Commander

Service component commanders have primary responsibilities for EMFs to include the following:

1. Planning EMF requirements to support the OPLAN
2. Coordinating Navy medical supply requirements, including liaison with the single integrated medical logistics manager (SIMLM) and the unified command
3. Planning and entering EMFs into the theater Navy time-phased force deployment data list (TPFDDL).

4.2.3 Director for Materiel Readiness and Logistics (N41)

OPNAV (N41) is the resource sponsor for the Navy EMF program and provides policy, program, and oversight review. OPNAV (N41) funds the initial outfitting and maintenance costs of supplies and equipment prior to EMF activation.

4.2.4 Director for Medical Resources, Plans, and Policy (N931)

OPNAV (N931) is responsible for monitoring EMF readiness and for validating the activation of the EMF platform.

4.2.5 Navy Bureau of Medicine and Surgery

BUMED monitors the deployment readiness of active duty personnel using various software applications, including the Expeditionary Medicine Platform Augmentation Readiness and Training System (EMPARTS). The Chief, Bureau of Medicine and Surgery (CHBUMED) is responsible for active duty and reserve EMF staffing decisions. BUMED monitors the deployment readiness of active duty personnel using various software applications. Reserve personnel may use an alternative application to track readiness. BUMED maintains ownership of the EMF until activation, at which time fiscal responsibility for transportation and logistical support

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transfers to the responsible service component command (SCC). Maintaining and reporting readiness, training and equipment is the responsibility of BUMED and/or its subordinate commands.

4.2.6 Expeditionary Medical Facility Program Manager Logistics

EMFPML oversees the integrated logistics support management of the EMF program. The position is responsible for developing plans for the design, procurement, integration, prepositioning, modernization, and life-cycle support of EMF DEPMEDS.

4.2.7 Naval Expeditionary Medical Support Command

Naval Expeditionary Medical Support Command reports to EMFPML and is responsible for EMF logistics and platform maintenance prior to activation. Its mission is to carry out policy developed by the program manager for the design, acquisition, receipt, assembly, integration, storage, shipment, maintenance, and life-cycle support of EMFs at prepositioned sites. It also assists the program manager in the activation and deactivation of EMFs.

4.2.8 Naval Expeditionary Medical Training Institute

The Naval Expeditionary Medical Training Institute provides global deployment readiness training to active and reserve naval support staff, including medical personnel and construction battalions, on the assembly, disassembly, and establishment of command structure, and on EMF operations.

4.2.9 Naval Reserve

Prior to activation, Commander, Naval Reserve Force (COMNAVRESFOR) is responsible for administrative control of selected reserve personnel assigned to naval reserve EMFs.

4.2.10 Sourcing Medical Treatment Facility

The sourcing medical treatment facility (MTF) exercises administrative control of active duty personnel assigned to EMF mobilization billets prior to activation.

4.2.11 Naval Facilities Engineering Command

Naval Facilities Engineering Command (NAVFAC) coordinates engineering and construction force resources required for installation of the EMF.

4.3 CHAIN OF COMMAND

4.3.1 Operational, Tactical, and Administrative Control

4.3.1.1 Command Relationship

The deployment order for the EMF defines the command relationship for operational control (OPCON), tactical control (TACON), and administrative control (ADCON).

4.3.1.2 Organization Command and Control

Organization command and control (C2) includes several components. OPCON is transferable command authority that can be exercised by commanders at echelons at or below the level of the CDR through component commanders and organizational unit commanders. TACON is the command authority over assigned forces, attached forces, or commands that are limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish assigned missions or tasks. TACON is inherent in OPCON.

4.3.1.3 Administrative Control

ADCON, vested primarily in the Military Department/Service chain of command, is the exercise of authority over subordinate organizations in respect to administration and support, including Service forces, resources and equipment, personnel management, unit logistics, training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations.

For more information on EMF organizational relationships, refer to NWP 4-02, Naval Expeditionary Health Service Support Afloat and Ashore.

4.3.1.4 Expeditionary Medical Facility Operational Control

EMF OPCON and TACON can be transferred from the CCDR to a SCC. In the support of OIF, Marine Corps and Army component commanders have been assigned OPCON and TACON of EMFs. Using this scenario, the component command assumes responsibility to employ the EMF to accomplish assigned missions, which can include logistics support. Historically, the Navy component commander retains ADCON of the EMF.

4.3.2 Operational, Tactical, and Administrative Control Responsibilities

4.3.2.1 Before Deployment

Prior to deployment, EMF ADCON is the responsibility of the active duty personnel sourcing MTF or the reserve personnel sourcing the reserve component. Predeployment ADCON for logistic matters is the responsibility of BUMED through EMFPML. When activated for a mission other than war, funding of the mission is a key concern to be addressed prior to activation. (See Paragraph 4.2.6 for more information on the role of EMFPML.)

4.3.2.2 During Deployment

When an EMF is deployed in a theater of operation, the Navy component commander is responsible for ADCON. The SCC or designated operational commander exercises OPCON over an EMF and is responsible for funding EMF operating costs. The deployed EMF coordinates through its operational commander to receive day-to-day operations support, including external communications, patient movement item replacement, and base operating support.

4.3.2.3 Expeditionary Medical Facility Program Funding

EMF program funding is for design, acquisition, receipt, assembly, integration, storage, shipment, maintenance, and life-cycle support of Navy deployed medical units at prepositioned sites. The EMF program is not funded for sustainment operations.

Note

The information in this chapter offers general guidance about EMF C2. Deployed EMFs are required to liaison with higher headquarters to understand and work within the combatant command's business process.

4.3.3 Operational Commander's Responsibilities

Operational commanders have the following predeployment and postdeployment responsibilities to the EMF, which include administrative, base operating, financial, and medical support.

4.3.3.1 Predeployment/Postdeployment

The operational commanders have the following predeployment and postdeployment responsibilities:

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1. Selecting the operational site. The operational commander is responsible for supporting the completion of an environmental site survey to avoid inappropriate placement of the EMF decreasing the risk of vector or environmental threats.
2. Preparing the operational site includes gross site preparation prior to arrival of the EMF materiel at the operational site.
 - a. Funding costs of transporting personnel and materiel from the sourcing MTF and repositioned site to the operational site
 - b. Ensuring transport of EMF materiel and personnel from the port of debarkation (POD) to the operational site (Organic rolling stock supports requirements only during the EMF's operational phase.)
 - c. Ensuring transport of EMF materiel and personnel from the operational site to the port of entry after deactivation.

4.3.3.2 Administrative

The operational commanders have the following administrative responsibilities:

1. Disbursing support provided by Navy personnel support activity (PSA) and Navy component commander's logistic organization
2. Supporting personnel support detachment provided by the Navy PSA.

4.3.3.3 Base Operating Support

The operational commanders have the following base operating support (BOS) responsibilities:

1. Aeromedical evacuation transportation services, helicopter pad operational support, and aircraft firefighting assistance
2. Civil engineering support equipment (vehicles)
3. External secure communications
4. External security, including perimeter security and air defense
5. Flammables and compressed gas support
6. Ground medical evacuation (MEDEVAC) transportation services
7. Firefighter augmentation
8. Laundry
9. Mortuary affairs support
10. Morale, welfare, and recreation support, provided by the Navy component commander's organization
11. Nuclear, biological, and chemical (NBC) decontamination support
12. Petroleum, oils, and lubricants
13. Potable water supply

14. Road maintenance, including snow removal
15. Security for detainees
16. Waste disposal, including hazardous materials and biomedical wastes.

Note

Several base operating functions may be fulfilled by contracted organizations managed by the operational commander.

4.3.3.4 Financial

The operational commanders have the following financial responsibilities:

1. Contracting support for contracts above the dollar limits of the EMF CO's authority
2. Coordinating opening target establishment during the activation phase.

4.3.3.5 Medical Support

The operational commanders have the following medical support responsibilities:

1. Combat stress control support
2. Initial and recurring blood requirements
3. Replacement of equipment used in patient evacuation
4. Supply support through the SIMLM.

4.4 COMMUNICATIONS

EMFs do not have external communication assets or technical expertise in setting up radio networks. Prior to deployment, medical planners determine the communication requirements and operational commanders provide equipment and technical support. At a minimum, EMFs must have an Internet connection to order supplies, update clinical databases, and have the ability to interact with the MEDEVAC system database. EMFs should also have voice communication capability with MEDEVAC aircraft and vehicles. When deployed, EMFs need to access the secure telephone equipment and the SECRET Internet Protocol Router Network (SIPRNET) to ensure that they will be able to communicate with supporting and supported units. EMF COs shall coordinate requirements for external communications with operational commanders.

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CHAPTER 5

Organization and Administration

5.1 ORGANIZATION

The internal organization of the EMF is similar to shore-based MTFs, which helps the transition for medical personnel to operate in a field environment.

5.1.1 Responsibility and Authority of the Expeditionary Medical Facility

The EMF CO has the responsibility and authority of command including nonjudicial punishment authority and fitness reports signature authority. Active duty COs are selected by BUMED and appointed by the Bureau of Naval Personnel; reserve COs are selected through the APPLY process outlined annually in COMNAVRESFORNOTE 5400, *National Command and Senior Officer (05/06) Noncommand and Billet Screening and Assignment Procedures*.

5.1.2 Internal Organization of the Expeditionary Medical Facility

The generic internal organization of the EMF consists of the command staff, which is made up of the CO, the executive officer (XO), the command master chief, and special assistants. The EMF organization has been aligned to reflect the operational commander staff, including an EMF operations cell, a director for administrative services, and a chief of professional services. (See Figures A-4 and A-5 for organizational charts of the EMF.)

5.2 STANDARD OPERATING PROCEDURES AND INSTRUCTIONS

Each EMF has standard operating procedures (SOPs). Generic EMF SOPs are developed, provided, and maintained by EMFPML. EMFs are responsible for adapting and incorporating the SOPs into the local training plans. The SOPs used in an activated EMF parallel the operating procedures used in the MTF. Adjustments are made based on the operating environment, assigned mission, and the capabilities of the activated facility. Recommended revisions to the SOPs are made by EMFPML. SOPs are developed for the following functional areas:

Acute care wards Annex A (internal procedures) Anesthesia departments Barbers Casualty receiving Central sterile reprocessing divisions Communication divisions Dental departments Ear, nose, and throat (ENT) – otolaryngology departments Environmental health departments Food service departments Intensive care units (ICU)/recovery wards Laboratories Laundries	Materiel management departments Medical services Medical repair divisions Neuropsychiatry departments Nursing services Ophthalmology departments Operating room preparatory and hold areas Orthopedic departments Personnel administration departments Pharmacies Physical therapy departments Policy, CO (general clinical policies) Operating rooms Pastoral care services	Patient administration departments Public works departments Radiology departments Security Specialty treatment departments Surgical services
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Each SOP follows a standardized table of contents organized as shown below:

1. Mission
2. Functions
3. Physical description
4. Special considerations
5. Workload
6. Organization
 - a. Responsibility
 - b. Organization chart
 - c. Staffing
 - d. Assignments by billet sequence code
 - e. Watch bill
 - f. Special watches
7. Tasks
8. Procedures
9. Clinical policies/guidelines
10. Standard procedures
11. Documentation
 - a. References
 - b. Forms.

5.3 MANUALS

Three types of manuals are used in EMFs:

1. Initial outfitting manuals, including administrative/nontechnical publications and instructions
2. Technical manuals stored with the prepositioned DEPMEDS provided electronically at the time of activation
3. Other technical manuals about air operations; chemical, biological, radiological, nuclear, and high-yield explosives; communications manuals; NWP 4-02, *Naval Expeditionary Health Service Support Afloat and Ashore*, NTTP 4-02.2M/MCRP 4-11.1G, *Patient Movement*; and Marine Corps Warfighting Publication (MCWP) 4-11.1, *Health Services Support Operations*.

Active duty EMFs are not commissioned prior to activation and do not receive administrative/nontechnical manuals and instructions. Administrative/nontechnical manuals and instructions are available to the EMF staff through the NEMSCOM prior to activation.

5.4 UNIT IDENTIFICATION CODES AND PLAIN LANGUAGE ADDRESSES

EMFPML coordinates the assignment of EMF UICs and plain language addresses (PLAs) upon activation.

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CHAPTER 6

Security and Safety

6.1 SECURITY

The EMF has limited organic security capability; therefore, the operational commanders must provide security support. The deployed EMF security plan must address security precautions, threat response, and disaster recovery. The security manager, who reports directly to the CO, coordinates the EMF's overall security program, which covers aspects of external and internal physical security, informational security, and classified materiel security usually included in the area of operations security plan. EMF COs shall coordinate requirements for external security with operational commanders.

6.1.1 External Security

EMF security assets only cover internal security requirements, and therefore rely on the operational commander to provide external security, such as perimeter security and air defense. EMF personnel will require training in perimeter and convoy security. EMF COs shall coordinate requirements for perimeter and convoy security training with operational commanders.

6.1.1.1 Perimeter Security

If the EMF compound is located within a larger logistic organization's compound, perimeter security is covered by the larger organization's compound security element.

6.1.1.2 Air Defense Security

The operational commander assigns EMF air defense responsibilities to an air defense unit. The EMF security manager coordinates with the SCC and operational commander to incorporate the air defense security requirements into their operational planning as in advance of deployment.

6.1.2 Internal Security

The CO should have a trained security staff aboard, and the EMF staff must have knowledge of security procedures.

6.1.2.1 Security Assets

EMFs have a security division under the operating management department. All security division personnel are weapons-qualified prior to their assignment to an EMF. The security division, staffed with enlisted personnel from master-at-arms and gunner's mate ratings and from nonrated seamen, has a guard section and an armory section. Only weapons-qualified personnel are issued weapons. Naval construction force and construction battalion maintenance unit (CBMU) personnel own and train and deploy with their own weapons.

1. Guard section. The guard section performs guard duty and general security functions.
2. Armory section. The armory section stores weapons organic to the EMF. The security officer is accountable for inventory, maintenance, storage, and assigned weapons and ammunition security. To best monitor and control weapons, the armory section is located near casualty receiving and the entrance.

- a. Weapons acquisition. EMF weapons acquisition procedures are as follows:
 - (1) The EMF's table of equipment lists the weapons required to meet the EMF's internal security, including M-16 rifles and 9 mm pistols. Weapons-cleaning and support gear for EMF security division personnel is included in DEPMEDS organic assets.
 - (2) When the EMF is deployed, weapons are shipped from the Naval Surface Warfare Center (NSWC), Crane, Indiana, to the aerial port of embarkation (APOE).

Note

Ammunition is not included with weapons acquired through the NSWC.

- (3) Upon activation of the EMF, EMFPML sends a message to the Naval Sea Systems Command (NAVSEA) (Code 91 WE) with the EMF's name, UIC, mission, number, type of weapons, and the purpose, such as mission participation. The message also includes the names and social security numbers of security personnel receiving the weapons and the shipping address (name, PLA, UIC, and address of the armory used for temporary storage).
 - (4) The NSWC will deliver the weapons within 48 hours.
 - (5) The receiving personnel listed in the message to NAVSEA accepts the weapons shipment at the port of embarkation (POE) and then functions as a cargo courier.
- b. Patients and visitors with weapons. The armory is designed to accommodate only weapons organic to the EMF. When the armory has extra storage capacity, it can accept patient and visitor weapons for temporary storage. If the armory's storage capacity is full, the commanding officer should be prepared to make other arrangements for patient and visitor weapons storage. Security officers follow these guidelines for handling weapons belonging to patients and visitors:
 - (1) Weapons and ordnance belonging to patients admitted to the EMF shall be turned over to the patient's unit.
 - (2) If the EMF accepts the custody of a weapon, a documented custody transfer is made prior to weapon turnover to another organization. For those patient weapons accumulated by the EMF, the EMF must establish communication with line combat support units to cover weapons transfer back to the line.
- c. Ammunition. Ammunition comes from the naval weapons station nearest the POE.
 - (1) There are two types of ammunition required for an activated EMF noncombat expenditure allowance used for training and qualifications and mission/Service allowance used in support of the mission. To request ammunition, EMFPML submits a request to NSWC, Crane, Indiana. A confidential military standard requisitioning and issue procedures (MILSTRIP) message is sent to the Naval Ordnance Center. The request for mission/Service ammunition is made to OPNAV (N411) through NWSC, Crane.
 - (2) Weapons and ammunition requirements for task-organized EMFs are determined based on the mission type, location, and size of the hospital unit. (See Figure A-10 for EMF weapons and ammunition allowances.)

6.1.2.2 Visitor and Patient Security (Friendly Forces)

All visitors are subject to a security check upon entry to the EMF compound and may be escorted during their visit. All patients, even the critically ill, are subject to a security check upon arrival. A security check includes, but is not limited to, an identification check, determination of purpose of visit, and a visual inspection for weapons and ordnance. A security check may also involve frisking, as determined by the CO.

6.1.2.3 Detainee and Refugees

The Secretary of the Army is the executive agent for the DOD in the administration of detainee operations. Treatment and administration of detainees are addressed in the operation plan and Special Text 4-02.46, *Medical Support to Detainee Operations*, which also lists categories for captured, retained, and detained personnel, such as enemy prisoners of war, retained personnel, and civilian internees.

Providing medical care to detainees presents a security problem for EMFs. The goal is to move detainees rapidly through the system to the HN so that the burden on the military health system is minimal. With rapidly shifting battle lines resulting from maneuver warfare, future conflicts are expected to produce significant numbers of detainees who may require treatment at an EMF. Problems confronting EMFs concerning detainees should be addressed to the operational commander's staff.

Commanders are obligated by international law to provide a minimum standard of humane care and treatment for all detainees and refugees. The third and fourth Geneva Conventions of 1949 provide standards of care for detainees and refugees. In joint operations, the theater special operations component provides most of the civil affairs forces to the operational commander for handling refugee problems. Because refugee care is funded separately from friendly forces and detainee care, medical activities in theater cannot provide medical care to refugees without the operational commander's direction. Detainee and refugee security requirements are the responsibility of the operational commanders.

Detainees and refugees may present with medical problems not normally seen by EMF staff, particularly infectious diseases endemic to lesser developed countries. There may also be special religious, messing, berthing, and sanitary considerations. The operational commander's staff is cognizant of and provides advice for unfamiliar medical and cultural differences. Captured enemy materiel, especially weapons and other war trophies, is handled in accordance with the operational commander's directives, including disposal and reporting procedures. The Army civil affairs staff can advise and assist with detainee and refugee issues within the area of operations. EMF COs shall coordinate requirements for civil affairs support with operational commanders for Navy-Marine Corps operations where no Army units are involved.

6.1.2.4 Other Security Issues

Security check-in planning should address all EMF entrance points. Security training and procedures should address issues and problems related to security division personnel, including morale and augmentation during cases of disaster and enemy threat. Security planning should encompass a review of available security functions of other Services.

6.2 SAFETY

The EMF must address the same safety issues that arise in peacetime MTFs and safety concerns inherent in operational units. The EMF follows the same OPNAV safety program other operational units follow. EMF COs also establish safety programs and internal organizations to address safety issues. Assigning a safety officer as a collateral duty officer and developing an EMF plan are of key importance to safety.

6.2.1 Firefighting Capabilities

EMFs firefighting capabilities include a fire response vehicle and firefighting equipment capable of handling aircraft fires up to a Category 1 airfield, as specified by Naval Air Systems Command (NAVAIR) 00-80R-14,

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Naval Air Training and Operating Procedures Standardization (NATOPS) U.S. Navy Aircraft Firefighting and Rescue Manual. The operational commander is responsible for providing firefighting assistance necessary to meet EMF needs.

The public works officer establishes a fire department for the EMF. Firefighters are trained in a firefighting program set by the standards of Chief of Naval Operations Instruction (OPNAVINST) 11320.23 (series), *Shore Activities Fire Protection and Emergency Service Program*; NAVAIR 00-80R-14, *NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual*; NAVAIR 00-80R-14-1, *NATOPS U.S. Navy Aircraft Emergency Rescue Information*; Department of Defense Instruction (DODI) 6055.5, *Industrial Hygiene and Occupational Health*; DODI 6055.6, *DOD Fire and Emergency Services Program*; and DODI 6055.7, *Accident Investigation, Reporting, and Record Keeping*. EMF COs shall coordinate requirements for firefighting support with operational commanders.

6.2.2 Safety in Country

When deployed, the EMF staff should take appropriate safety precautions during periods of foreign travel. The safety plan should address HN customs, laws, regulations, and geographic areas that are potential or actual threats to staff safety.

6.3 EMERGENCY EVACUATION AND RELOCATION OF A FACILITY

Security and safety plans should address emergency evacuation and relocation of the EMF. Nonemergent relocation is handled according to the procedures established in the deactivation, deployment, and assembly phases. Emergency plans should also address:

1. Disposition of supplies, equipment, and classified materials, weapons/ordnance, patients' personal effects, and individual combat equipment
2. Staff and patient evacuation priorities include:
 - a. Staff required for relocating the facility
 - b. Identification of patients who can be returned to duty
 - c. Stabilized, nonambulatory patients and medical attendants
 - d. Ambulatory patients and medical attendants
 - e. Remaining patients and the remaining staff.
3. Chain of command for nonevacuated personnel
4. Transportation procedures for evacuation
5. Facility reconstitution plans.

CHAPTER 7

Logistics

7.1 GENERAL CONCEPTS

Logistics deals with the design and development, procurement, storage, movement, distribution, maintenance, evacuation, and disposition of materiel. It also consists of construction, maintenance and operation, disposition of facilities, and procurement or furnishing of services. HSS logistics is concerned with medical supplies, equipment, and services. HSS logistics acquires raw material, delivers medical supplies to a field hospital, and returns patient movement items to a theater after patient evacuation. EMF supply operations are conducted in accordance with Naval Supply Systems Command (NAVSUP) P-485, *Afloat Supply Procedures*. The supporting component commander or the subordinate commander with OPCON of the EMF provides operating target funds in accordance with NAVSUP publications and established directives.

7.1.1 Operational Responsibilities

In joint operations, logistic responsibilities are outlined in the OPLAN. A joint operation may include the assignment of a SIMLM.

7.1.2 Expeditionary Medical Facility Concept of Logistics Support

7.1.2.1 Augmentation Blocks

The cost of high-expiration-rate shelf-life medical material, which includes dated and deteriorative controlled substances, precludes prepositioning of this material with the remaining EMF assemblies. Shelf life medical material is maintained in vendor-managed inventory (VMI) accounts, for which the quantity equates to initial outfitting materiel blocks to sustain an EMF to day 60 of the first 60 EMF days deployed in the operation. When prepositioned hospitals are activated, NEMSCOM sends them shelf-life materiel.

7.1.2.2 Sustainment

The EMF requires outside support for all supply items specified in the operational commander's OPLAN. Most medical items found in an EMF are standard stock DEPMEDS-based medical supplies. In a joint operation, the theater lead agent for medical materiel (TLAMM) is the primary source of medical supplies for EMFs. Nonmedical supply items are requisitioned from theater supply activities, combat logistics force ships, and CONUS inventory control points (ICPs), as outlined in the OPLAN and in accordance with procedures outlined in NAVSUP P-485, *Afloat Supply Procedures*. Medical and nonmedical supplies are delivered through various transportation channels. The EMF coordinates with its SCC for receipt and distribution of assets.

7.1.2.3 External Logistic Support Requirements

EMFs require external support throughout the operation. When the EMF is activated, the Navy component commander must provide several categories of materiel not prepositioned with the EMF in theater. Actual requirements should be requested from NEMSCOM prior to deployment. Due to constant changes in DEPMEDS component outfitting, DEPMEDS requirements should be reviewed at the time of activation to ensure that proper items are provided.

7.1.2.4 Priorities

Requisitioned materiel is assigned requisition priorities, or urgency of need designations, in accordance with NAVSUP P-485, *Afloat Supply Procedures*, and theater directives.

7.1.2.5 Design Concepts

The EMF design is based on a modular, rapidly assembled medical and surgical shore-based facilities concept. EMFs are produced and immediately deployed to an activation site or are prepositioned at locations such as CONUS, OCONUS, and on MPF(E) ships. Once the EMF staff prepares the site, the facility is assembled and operational within ten days. Dated and deteriorative supplies, which include pharmaceuticals, provisions, and general use materiel, are maintained in augment blocks, each capable of supporting the EMF up to 30 days. (See Paragraph 7.1.2.1.)

Upon activation, the needed quantity of dated and deteriorative materiel is pushed from a VMI account to the activated EMF to help complete its operational readiness. EMFs are self-sustaining facilities with supplemental support from logistics and the operational commander or task force commander. (See Chapter 3 for more information on EMF facilities and activation.)

7.2 SINGLE INTEGRATED MEDICAL LOGISTICS MANAGER

The SIMLM is mission-assigned as required by a CCDR to a SCC or a joint medical task force to provide medical logistics support to other Services and designated coalition partners. As such, it is a scalable medical logistics element responsible for planning, synchronizing, and performing joint support to deployed US forces and is assigned to promote supply chain efficiency and minimize the theater medical logistics footprint. The SIMLM is usually activated in time of war or contingency. EMF COs shall coordinate requirements for medical logistics support from the SIMLM through operational commanders.

7.2.1 Theater-Lead Agent for Medical Materiel

A TLAMM may be designated by the DOD executive agent in coordination with the CCDR. The TLAMM is a designated organization or unit that serves as a major theater medical distribution node and provides a resource to the customer for medical logistics and supply chain management. It functions in peacetime and wartime and can be an existing organization that provides routine medical materiel support to theater HSS operations. The TLAMM supports all military Service components and designated coalition and nongovernmental customers. It serves as a single point of contact (POC) between supported customers and national industry partners. It stores and manages the distribution of medical materiel through close coordination with theater transportation assets and is responsible for the provision of core medical logistics functions required to support joint force health protection and HSS operations.

7.2.2 Blood and Blood Products

Blood and blood products may be included in the TLAMM mission if properly coordinated in the OPLAN with the Services. EMF COs shall coordinate requirements for blood products from the TLAMM through operational commanders.

7.2.3 Theater Medical Materiel Management Center

The theater medical materiel management center is an Army system that has responsibility for theater-level management of medical logistics and contracting support for all Services when tasked by the CCDR.

7.2.4 Operation Plan Requirements

Component medical planners shall include EMF medical logistics and blood product requirements in OPLANs and CONPLANs and communicate these requirements to the SIMLM and TLAMM.

7.2.5 Peacetime Operations

Joint peacetime operations involve the TLAMM concept. The CCDR's OPLAN shall designate both SIMLM and TLAMM.

7.3 NAVY–MARINE CORPS HEALTH SERVICE SUPPORT LOGISTICS

7.3.1 General

Naval medical units are categorized into four platforms: T-AHs, EMFs, Marine Corps units, and Navy units afloat, each with its own logistics support. Except for standard stock item usage, few operational concepts and processes are common to all four. Planning for EMF logistic support for a Navy–Marine Corps operation should be included in the task force commander's OPLAN, which designates the supply source. The EMF CO shall ensure that all logistical support requirements are identified in the OPLAN and applicable annexes.

7.3.2 Repair Parts Allowance

The EMF stocks repair parts and maintenance-related consumables for medical, CESE, and other mechanical equipment. DEPMEDS determines which repair parts are allowed and includes them as inventory items in each EMF. NEMSCOM determines which CESE repair kits are needed based on recommendations from the Naval Facilities Engineering Logistics Center.

7.3.3 Prepositioned Supplies

The EMF has two dated and deteriorative supply materiel type categories: Type 1 materiel is less than 36 months old, and Type 2 materiel is more than 36 months old. A block is the amount of dated and deteriorative materiel that satisfies a set day requirement up to 30 days for an EMF. Program policy and fundings stipulate that five Type 1 blocks and five Type 2 blocks are part of the flyaway materiel to be sent to an activated EMF. For the remaining EMFs, resupplies for days 1 to 60 are drawn from a consumable reorder initiated by NEMSCOM upon notification of activation. The EMF CO is responsible for resupply orders after initial activation.

7.3.4 Supply Support through Navy Channels

The EMF transmits supply requisitions to the Defense Automatic Addressing System which are then forwarded to an ICP, such as the Defense Supply Center. The ICP fills the requisition and ships the materiel to a collection source located at an airfield and/or port designated by the Naval Operational Logistics Support Center for materiel destined for that EMF while deployed in theater. The materiel is then transported from the collection source to the operational area. The CO's OPLAN should delineate how materiel entering the area will be received, stored, and distributed to operational units, including the EMFs.

7.3.5 Supply Support through Marine Corps Channels

The EMF can obtain supplies from the Marine Logistics Group (MLG), which is the logistics combat element of the MAGTF. The Combat Logistics Regiment (General Support) in the MLG contains a Medical Logistics Company in the Supply Battalion. The Medical Logistics Company provides Class VIII materiels and biomedical engineering support for all elements of the MAGTF. The EMF may obtain Class VIII materiels by submitting a requisition to the Medical Logistics Company. The EMF may also obtain nonmedical materiels by submitting a requisition to the Supply Battalion. The EMF CO shall ensure that medical logistics support requirements are coordinated with the Medical Logistics Company, and that nonmedical logistics support requirements are coordinated with the Supply Battalion. This is especially important for unique Class VIII materiels required by the EMF that are not normally managed by the Medical Logistics Company.

7.4 CONTRACTING

The OPLAN should specify EMF contracting support responsibilities. The EMF is sufficiently staffed for assembly, operation, and disassembly. Contracting tasks and functions relating to staffing and construction should be included in the OPLAN. The EMF COs have limited contracting authority outlined in NAVSUP P-485, *Afloat Supply Procedures*, and NAVSUP P-486, *Afloat Food Service Manual*. Operational commanders provide contracting capabilities above the CO's authorized limits. If the SIMLM concept is implemented, the SIMLM provides contracting support for medical equipment, materiel, and services to the EMFs, although the overall responsibility remains with the Navy component command. The EMF should be prepared to work with differing levels of expectations when contracting in a foreign country. EMF COs shall coordinate requirements for contracting support with operational commanders.

7.5 HOST-NATION SUPPORT

7.5.1 Definition

Host-nation support (HNS) is the civil and/or military assistance rendered by a nation to foreign forces within its territory during peacetime, crises or emergencies, or war, based on agreements mutually concluded between nations.

7.5.2 Cross-Service Support Agreements

HN and cross-Service support agreements exist with numerous countries. These agreements permit acquisitions and transfers of specific categories of logistic support to take advantage of existing stocks in the supply systems of the United States and allied nations. While the usefulness of HN and cross-Service agreements may have limited application with the HN, logistic support items may be acquired from any nation with which the United States has an acquisition cross-Service agreement and transported to use in the operational area. Planners and contracting officers must consider acquisition pursuant to these agreements as possible alternatives to support by contracts and should incorporate and/or reference these agreements into the OPLANs and operation orders (OPORDS).

7.6 LOGISTIC SUPPORT ELEMENT

Another possible source of logistic support for EMFs in a joint operation is the logistic support element (LSE), a CCDD asset. LSEs are part of the Army Materiel Command. During an operation, LSEs provide logistic services using Army-civilian employees and contractors to fill the gap between logistic requirements and capabilities in theater.

7.7 EQUIPMENT MANAGEMENT

7.7.1 Equipment Accounting

The activation expeditionary medical facility assistance team (AEMFAT) officer-in-charge, upon completion of the EMF assembly, provides to the EMF CO a master inventory of equipment and supplies contained in a newly assembled EMF, which is verified before deployment. Each ISO container also has a packing list inventory of the ISO. These container packing lists match the master inventory. Activated EMFs adhere to the same rules and regulations followed by other operational units, including regulations governing equipment accountability and record-keeping requirements contained in NAVSUP P-485, *Afloat Supply Procedures*, and in Comptroller of the Navy manuals. The CO of the EMF is responsible and accountable for the proper care and use of all EMF materiel. Caution is advised when transferring/disposing of property that originally belonged to another Service, which can occur when an EMF staff takes over a facility from another Service during prolonged operations.

7.7.2 Equipment Maintenance

The EMF equipment maintenance involves continuous, progressive, preventive maintenance of equipment, and minimizing organizational level man-hours expended for maintenance. Medical equipment maintenance at the activated EMF is scheduled, performed, and reported in accordance with NAVMED P-5132, *BUMED Equipment Management Manual*. Nonmedical equipment will be maintained and reported in accordance with Commander, FIRST Naval Construction Division Instruction (COMFIRSTNCDINST) 11200.2, *Naval Construction Force (NCF) Equipment Management Instruction*. EMF COs shall coordinate requirements for equipment maintenance with operational commanders.

7.7.3 Levels of Maintenance

7.7.3.1 Organizational or O-Level Maintenance

Organizational or O-level maintenance is the responsibility of the equipment operators and technicians organic to the EMF. It consists of testing, aligning, diagnosing, isolating, removing, and replacing faulty components. It also includes operational checks, safety and serviceability inspections, lubrications, minor adjustments, and preventive maintenance. O-level maintenance is usually performed on the equipment at its normal use location.

7.7.3.2 Intermediate or I-Level Maintenance

Intermediate or I-level maintenance is performed by trained personnel, repairers, and technicians assigned to the EMF. It is performed on both nonmedical and medical equipment up to, but not including, printed circuit board repair. It encompasses removing, replacing, repairing, altering, calibrating, modifying, rebuilding, and overhauling field-level repairable assemblies, subassemblies, and components and is usually performed in a repair shop.

7.7.3.3 Depot-Level Maintenance

Depot-level maintenance on equipment requiring repair beyond O- and I-level capabilities is performed by designated overhaul points in theater medical repair facilities accomplished through an interservice support agreement or by designated equipment manufacturers. LSEs and/or the designated SIMLM may provide some biomedical repair assistance. Depot-level maintenance includes, but is not limited to, major overhaul and rebuilding of spares, assemblies, subassemblies, and end items. It also includes the manufacture of parts, modifications, testing, and reclamation.

7.7.4 Maintenance Responsibilities

Equipment maintenance and records management responsibilities are divided between the supply and public works departments. The supply department is responsible for record management and for maintenance of biomedical equipment through its biomedical repair section. The Public Works Department is responsible for record management and maintenance of nonmedical equipment. Equipment maintenance staffing includes biomedical repair technicians, military occupational specialty (MOS) HM 8478, in the biomedical repair section and a variety of enlisted rates in the public works department.

7.7.5 Patient Movement Items Equipment Exchanges

The patient movement item (PMI) system supports patients in transit, exchange of in-kind PMI without degrading medical capabilities, and PMI recycling. The originating EMF is responsible for notifying the joint patient movement requirements center for special medical equipment needs for patient transport. PMIs are medical equipment and durable supplies that must be available to support the patient, including ventilators, litters, patient monitors, and pulse oximeters. The Air Force component commander is responsible for the establishment of theater PMI centers and cell. The PMI accompanies a patient throughout the chain of movement, from the originating MTF to the destination MTF, whether it is an intratheater or an intertheater transfer.

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PMI centers are established to support worldwide theater requirements. PMI centers will be located at APOE and/or debarkation within CONUS and OCONUS to match aeromedical evacuation (AE) support plans. The PMI centers and cells receive, refurbish, redistribute, and return PMI collected from MTFs. Refurbishing includes technical inspection, calibration, repair, and replenishment of expendable supplies to maintain a three-day level of supplies. At the time an MTF initiates a patient movement request requiring PMI, the PMI center and/or cell initiates action for the exchange of in-kind PMI. Equipment sent with evacuated patients or transferred patients should be documented on the EMF's equipment records for auditing and accountability in accordance with the applicable NAVSUP, NAVMED, or NAVFAC instructions.

7.7.6 Support and Test Equipment

Support and test equipment covers both common and unique items including tools, general and special purpose test equipment, and calibration and maintenance equipment required to support the medical and nonmedical equipment contained in the EMF.

7.8 FACILITIES MANAGEMENT

Within an EMF, facilities management responsibilities are handled by the public works department, headed by a civil engineer corps officer and staffed with enlisted rates. Under wartime mobilization planning, designated personnel from CBMUs are assigned to specific EMFs as public works support. Upon receipt of mobilization orders, designated CBMU personnel travel to the designated EMF.

7.9 TRANSPORTATION CAPABILITIES

The EMF is equipped with organic transportation assets sufficient to satisfy its own internal needs. These CESE items are not intended for site preparation, EMF setup, or for transporting the assets to an activation or redeployment site. The operational commander must satisfy these requirements. EMF COs shall coordinate requirements for transportation with operational commanders.

7.9.1 Patient Transportation

The EMF has no organic air transportation assets. Limited ground transportation assets are available and used for transporting patients within the EMF compound and for short distances within the local geographic area. Ground patient transportation assets are limited to field ambulances and buses configured for both ambulatory and litter patients. The EMF shall provide en route care during ground evacuation in its patient transport vehicles.

7.9.2 Other Transportation Capabilities

An EMF provides its own transportation needs from the initial assembly through disassembly, including picking up supplies from local sources, transporting personnel within the local geographic area, and meeting local administrative transportation needs.

7.9.3 Transportation of Resupply Materiel

The Naval Operational Logistics Support Center (NOLSC) is the Navy command responsible for coordinating the establishment of surface and air resupply channels for activated EMFs.

7.10 MANAGEMENT INFORMATION SYSTEMS

The theater medical information program (TMIP) is a joint system that is designed to provide information to deployed medical forces to support all medical functional areas, including command and control, medical logistics, blood management, patient regulation and evacuation, medical threat/intelligence, health care delivery, manpower and training, and medical capability assessment and sustainment analysis. TMIP integrates medical systems at the theater level to support deployed forces, to enhance the capability to collect, process, and

disseminate an uninterrupted flow of information, and to allow more efficient protection of lives and resources. EMF COs shall coordinate requirements for logistics information systems with operational commanders.

7.11 FOOD SERVICE

An EMF mess is organized and operated as a general Navy mess in accordance with food service program administration and reporting procedures in NAVSUP P-486, *Afloat Food Service Manual*. The mess serves assigned EMF personnel and patients. The SCC funds the EMF's general mess. The EMF CO should consider having a dietitian assess food service needs. EMF COs shall coordinate requirements for funding its general mess with operational commanders.

7.12 MORTUARY AFFAIRS

7.12.1 Policy

Mortuary affairs are a line logistic responsibility covered by specific guidance in the OPLAN. The policy for handling deceased personnel must be addressed in the theater commander's plan in instances where a specific OPLAN is not in place. The EMF is neither equipped nor staffed to perform mortuary affairs and requires mortuary affairs and graves registration support from the operational commander proportional to the casualties received, including augmentation following mass casualties. Until mortuary affairs personnel arrive, the EMF is responsible for preparing the remains for transport to the morgue and safeguarding the deceased's weapons/ordnance, personal effects, and individual combat equipment.

The EMF's capability to store remains is extremely limited. Arrangements for temporary storage should be developed locally. Other concerns involve handling the remains of foreign nationals and relying on organizations without rapid response capability to take over. The EMF should plan and develop action plans based on the force composition supported by the hospital in coordination with component Service logistic planners. EMF COs shall coordinate requirements for graves registration and mortuary affairs with operational commanders.

7.12.2 Biological and Chemical Contamination

To address mortuary issues, the EMF CO should refer to Joint Publication (JP) 4-06, *Joint Tactics, Techniques, and Procedures for Mortuary Affairs in Joint Operations*, and the theater, component, or joint task force commander's mortuary affairs plan.

7.13 OPTICAL SUPPORT

Although the EMF has ocular technicians and optician ratings in their manpower authorizations, they do not fabricate spectacles, combat eye protection, or gas mask inserts. Lost and damaged eyewear is a critical issue of in-theater medical logistics support. In general, troops arrive with spare eyeglasses, combat eye protection, and gas mask inserts and are prepared with total ocular readiness. In a joint operation, spectacle fabrication is performed by the designated TLAMM such as an Army medical supply, optical, and maintenance (MEDSOM) unit. The Naval Ophthalmic Support and Training Activity and its five detachments are the largest fabrication facility of the Optical Fabrication Enterprise (OFE) that fabricates readiness and routine eyewear fabrication for troops prior to deployment. The Operations and Maintenance Defense Health Program, which funded OFE, is also composed of eight Army fabrication labs and ten Navy optical support units. Nondefense health program units outside the OFE include the Army Fabrication Lab in Germany, the MEDSOMs, and Navy fabrication facilities aboard aircraft carriers and hospital ships.

7.14 LOGISTIC SUPPORT TO OTHER SERVICES AND ALLIED NATIONS

EMFs can provide limited logistic support to other Navy and Service units. Procedures for providing logistic support to other Services are contained in NAVSUP P-485, *Afloat Supply Procedures*. Logistic support to allied nations should be handled according to the theater commander's guidance. EMF COs shall coordinate support it provides to other Services and allied nations with operational commanders.

7.15 JOINT BLOOD PROGRAM

In a joint operation, the theater commander will have a joint blood program office (JBPO), which designates the location of a transportable blood transshipment center (TBTC) at an aerial port of debarkation (APOD) established by the Air Force component as an APOE into theater for materiel and personnel and which is responsible for the TBTC and its staffing. Its function is to receive, check, re-ice, and issue blood. TBTCs can issue directly to MTFs in theater or to blood supply units (BSUs) designated by the Area Joint Blood Program Office (AJBPO), which is an element established under JBPO in a large theater. Depending on the size of the operation, MTFs receive blood in one of three ways: directly from the Air Force at the APOD, from a blood transshipment center (BTC), or from a BSU.

The type of organization will depend on the size of the operation. When the operation is carried out by a Navy Marine Corps task force, the OPLAN must delineate the organization and processes for receipt of blood. A POD or an APOD is designated for entry of into theater. A TBTC/BSU organization established to receive blood entering a theater issues the blood to MTFs in theater. The EMF receives blood from the BSU. In a Navy Marine Corps task force, the task force commander designates the location, organization, and staffing of the TBTC/BSU. The EMF is responsible for arranging its own transportation to pick up blood at the appropriate point, such as at an Army medical logistics company, at a BTC, or at some other unit designated as the BSU.

7.16 POSTAL

The EMF deploys with postal clerks who provide standard postal services for the hospital staff. Zip codes are provided to the EMF by the CCDR.

CHAPTER 8

Personnel

8.1 MANNING CONCEPTS

8.1.1 General

EMF personnel are separate from the EMF equipment and supplies, a situation that is unique in the Navy. Each EMF's numbered equipment and supplies are prepositioned in one location. Active duty EMF staffing can be either drawn from a designated CONUS MTF or globally sourced from multiple MTFs. Designated reserve unit staff are from a reserve operational health support unit (OHSU). The prepositioned equipment and supplies have a UIC, and the activated EMF assumes the number and UIC belonging to the EMF's equipment and supplies.

8.1.2 Staffing Levels

The staffing levels and billet breakouts for the EMFs are provided in Figures A-11 and A-12. The staffing levels and mix are subject to change based on mission requirements. Task-organized EMF staffing must be developed and authorized by the OPNAV (N931). Medical core functional areas, including casualty receiving, operating room preparation and hold, and surgical suites are staffed to meet peak surgical workload. Base support components are staffed to meet average workload capabilities. Wartime EMF manpower requirements are based on an 84-hour workweek with modifications for platform-specific requirements such as for watchstanders.

8.1.3 Sources of Staffing

Bureau of Medicine and Surgery Instruction (BUMEDINST) 6440.5 (series), *Health Services Augmentation Program (HSAP)*, and component UICs provide the initial active duty sourcing of the EMF. Active duty EMF staffing levels fall under the program with personnel assigned from various sourcing MTFs. The global sourcing concept is also utilized to deploy personnel from multiple MTFs to a single EMF. Naval construction battalion maintenance units provide naval construction force personnel required for each EMF. The sources of staffing for reserve EMFs are designated OHSUs.

8.2 ORDERS

Temporary additional duty orders are issued by the members' sourcing command. Orders are issued for 179 days, and members have the option to voluntarily extend for an additional 179 days.

8.3 REPLACEMENTS

Projected rotation dates are established for all personnel. BUMED coordinates with Navy Medicine regions to assign replacements as rotation dates occur.

8.4 FITNESS REPORTS EVALUATIONS

The Bureau of Naval Personnel Instruction (BUPERSINST) 1610.10 (series), *Navy Performance Evaluation System*, provides concurrent fitness reports and evaluations for deployed personnel. The fitness reports will be completed according to the normal fitness report schedules. The EMF CO can sign fitness reports for all personnel with orders to that command.

8.5 PERSONNEL READINESS

Activities responsible for monitoring the readiness of personnel assigned to EMF mobilization billets include BUMED for active duty, COMNAVRESFOR for reserve personnel, and FIRST Naval Construction Division for construction battalion personnel. The permanent commands for these personnel are responsible for assuring that personnel maintain their readiness status. They are also responsible for providing timely information on personnel readiness status to proper authorities for inclusion in the Status of Resources and Training System (SORTS). Sourcing commands shall include required personnel readiness information in EMPARTs as directed by BUMEDINST 6440.5 (series), *Health Services Augmentation Program (HSAP)*.

8.6 PERSONNEL SUPPORT FUNCTIONS

The EMF has a small manpower department. A limited personnel support detachment (PSD) is included in the formal organization. The EMF coordinates personnel support functions with the Navy component commander. These services are provided by the area PSA. Depending on the geographic proximity to the PSA, it may be advisable to establish a PSD at the EMF. The Navy component commander provides staffing, equipment, and buildings to support an EMF PSD.

8.7 UNIFORMS

Active duty naval personnel assigned to EMF units receive an issue of organizational clothing from their parent command. Uniforms for reserve personnel are the responsibility of BUMED/COMNAVRESFOR. Personnel protective equipment (PPE) is initially issued by the NEMSCOM. The parent command issues uniforms and PPE issues for sustainment and rotation in place. The operational order or deployment order states the uniform and PPE requirements.

8.8 MORALE, WELFARE, AND RECREATION

Manning levels do not permit EMFs to include a formal morale, welfare, and recreation (MWR) element. The EMF coordinates with the operational commander for MWR support to the EMF. Usually, the Navy component commander provides MWR support. Depending on the geographical proximity to the source of such support, it may be necessary to establish a satellite MWR activity on site at the EMF that includes staffing the activity and equipment, supplies, and buildings to operate the activity. If a business plan includes operating manpower that supports the request, the area Navy Exchange can grant the request. Granting the MWR activity is based on one or more factors:

1. Prolonged stay in a theater
2. Lack of other Service exchange
3. Lack of readily available Class VI (troop support) items
4. Ample population to support a Navy Exchange.

When an EMF is situated where a Navy Exchange is authorized, the Navy component commander deposits the profits in an MWR account established for the EMF. EMF COs shall coordinate requirements for MWR support and management of MWR accounts with operational commanders.

8.9 OTHER SERVICES

Within the operating management department, a personnel Service division includes a barbershop, a personnel services unit, and a post office and is staffed with ship's serviceman rates. A religious services department is headed by a chaplain who reports directly to the XO. Manning for task-organized EMFs are tailored to the functional component areas incorporated into the EMF. EMF COs shall coordinate requirements for MWR support and management of MWR accounts with operational commanders.

8.10 RECORDS

The CCDR and SCC dictate which records personnel will bring with them on deployment.

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CHAPTER 9

Expeditionary Medical Facility Training

9.1 RESPONSIBILITIES

BUMED is responsible for monitoring the training of active duty personnel assigned to EMF mobilization billets. Prior to activation, COMNAVRESFOR is responsible for overseeing the training of reserve personnel assigned to reserve EMFs. While operational, the EMF CO is responsible for all training of assigned personnel. During periods of nonmobilization billets, such as peacetime, individual commands are responsible for ensuring that personnel receive required readiness training, including budgeting and funding training. Sourcing commands shall include required training and certification information in EMPARTs as directed by BUMEDINST 6440.5 (series), *Health Services Augmentation Program (HSAP)*.

9.2 PREMOBILIZATION TRAINING

9.2.1 Commanding Officer/Executive Officer Training

EMF COs and XOs are required to have premobilization training and experience for mobilization billets per the Navy training plan. This training includes areas of command and senior naval leadership; command, control, communications, and computers; strategic medical readiness and contingency training; medical regulating; EMF field training; shore station management; and for XOs, the Senior Officer Course in Military Justice.

9.2.2 Unit Training

EMF personnel are field trained as a unit to build esprit de corps, team morale, and unit effectiveness. Training requirements for EMFs are delineated in the Navy training plan. Attendance is required in the EMF indoctrination and orientation unit training class for all personnel assigned to an EMF billet. The Navy Expeditionary Medical Training Institute (NEMTI) conducts the field training course, which provides familiarization with the EMF program and rating-specific training.

The course structure gives the EMF unit the opportunity to assess its efficiency operating as a unit, the effectiveness of its training programs, and its degree of operational readiness. The course provides updates in the EMF program, training in assembly/disassembly, and expansion of the student command staff responsibilities. Training of public works personnel on the use of nonstandard, public works–related support equipment (such as ejector pumps, UPS equipment, etc.) shall be delineated within the required Navy training plan.

9.2.3 Expeditionary Medical Facility Functional Area Training

The EMF Navy training plan requires that medical and nonmedical personnel accomplish individual or team functional area training to give them the opportunity to use all deployable gear. Medical functional area training is conducted on site at medical/dental treatment facilities and is developed as exportable training from the Defense Medical Readiness Training Institute, field exercises, NEMTI, and Army and Air Force training sites. Prior to deployment, the EMF COs select personnel to complete secure introductory training related to patient AE procedures such as helicopter landing support unit training and task force medical regulating training. The operational commander is responsible for providing air operations support and air evacuation support. The training of EMF personnel is not intended to alleviate the responsibility of air operations and evacuation support but to enhance understanding of the total system. EMF COs shall coordinate requirements for air operations support, tactical air evacuation, and related training with operational commanders.

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CHAPTER 10

Chemical, Biological, Radiological, and Nuclear Defense

10.1 CONCEPT OF OPERATIONS

The EMF is conceptually designed so that it is situated away from the forward line of troops and out of range of chemical, biological, radiological, and nuclear (CBRN) low-risk/low-threat areas. In reality, delivery modes of chemical and biological warfare pose a threat to the safety of the EMF. An assessment of available chemical and biological warfare assets in theater is an essential part of planning EMF operations.

10.2 CBRN CAPABILITIES/LIMITATIONS

10.2.1 Mission-Oriented Protective Posture Gear

At the operational commander's direction, mission-oriented protective posture (MOPP) gear is distributed to the staff prior to deployment to be worn as protection from a chemical attack. MOPP gear is designed to allow personnel to perform clinical tasks and patient management for the unit to accomplish its mission. Chemical and biological collective protection (CP) systems available in the EMF program inventory are used to create a protective environment in which MOPP gear can be safely removed with minimal disruption in the performance of mission tasks. EMF COs shall coordinate requirements for additional collective protection systems for patient care and staff areas with operational commanders.

10.2.2 Collective Protection System

1. CP liners are part of the CP system compatible only with that part of the EMF that utilizes the tent-extendible modular personnel (TEMPER) system and soft shelters (tents). The CP liner system uses special environmental control filters and blowers to create a positive pressure space to keep out gaseous contaminants.
2. CBRN protection planning time should be considered in the planning stage to utilize a CP system. A protected EMF requires more time to set up compared to a nonprotected EMF. Significant rework is required to retrofit a fully erected EMF.

10.2.3 CBRN Training

EMF field training includes CBRN training. Navy medical department enlisted personnel receive limited CBRN training during basic training, and those assigned to Marine Corps forces (MARFOR) units receive CBRN training at Field Medical Service School. Navy medical department officer personnel receive limited CBRN training during the Combat Casualty Care course and MARFOR unit training. There is also online training available on Navy Knowledge Online. A limited number of assigned medical personnel may have received formal training in patient management in a CBRN environment. All EMS personnel, including non-BUMED support personnel (i.e., Seabees), shall receive CBRN training through the EMS. EMF COs shall coordinate requirements for CBRN training with operational commanders.

10.3 CASUALTY AND PATIENT DECONTAMINATION

In a CBRN environment, each individual performs casualty decontamination prior to transport to an EMF as a buddy aid or at a line unit decontamination station prior to the arrival of medical personnel. Contaminated patients

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received by an EMF are problematic in that EMFs are neither equipped nor staffed to handle decontamination. EMF COs shall ensure that the EMF is capable of providing casualty and patient decontamination, and report all resource shortfalls to operational commanders.

10.3.1 Patient Decontamination

Patient decontamination procedures are performed at an MTF under medical supervision. The objectives of patient decontamination are to:

1. Minimize the effects of chemical agent exposure to casualties without exacerbating injuries or illnesses
2. Protect persons handling contaminated casualties or working in contaminated areas
3. Control the spread of contamination
4. Continue the medical mission.

10.3.2 Casualty Decontamination

Casualty decontamination differs from patient decontamination in that medical personnel are not available to monitor the patient's medical status or provide medical treatment to the individual. All casualties exposed to CBRN agents are viewed as contaminated or infectious, even casualties who present no symptoms of exposure. During procedures for handling casualty decontamination the following guidelines are followed:

1. Contaminated patients do not enter the EMF or transfer to another facility prior to thorough casualty decontamination.
2. Ambulatory casualties can be processed through casualty/personnel decontamination stations.
3. Litter patients require a greater degree of medical supervision.
4. Emergency treatment prior to decontamination is limited to administration of antidotes, hemorrhage control, and airway maintenance.

10.3.3 Planning

The EMF's planner should consider the following in mission planning to support casualty and patient decontamination efforts:

1. Selecting necessary personnel and materiel requirements for decontamination
2. Strategic placement of decontamination stations
3. Augmenting decontamination stations with trained medical personnel
4. Conducting frequent decontamination procedure exercises
5. Ensuring that medical personnel are trained to:
 - a. Manage and treat casualties in a contaminated environment
 - b. Prevent the spread of contamination to clean areas.
6. Ensuring that nonmedical personnel are trained in patient transport, handling, and decontamination procedures.

CHAPTER 11

Deployment, Life Cycle, and Redeployment

11.1 INTRODUCTION

The EMF has a life cycle consisting of the following eight phases: prepositioning and preparation (training and equipment), activation, deployment, assembly, operation, relocation, deactivation and rehabilitation, and redeployment. Beginning in a prepositioned state, the EMF proceeds through each phase until it returns full circle to the prepositioned state. It can go through an unlimited number of life cycles until its removal from the EMF inventory. Each phase serves a distinct purpose and comprises a unique set of tasks and processes.

11.2 PREPOSITIONING AND PREPARATION PHASE

11.2.1 General

In the prepositioning phase, the EMF is in an inactive status. Materiel, equipment, and consumables are stored in warehouses, caves, and on ships strategically located throughout the world. Materiel for each EMF is located in one geographic location except for dated and deteriorative materiel and weapons.

11.2.2 Preservation/Packaging

To support both air and sea shipment and to ease offload and further movement, EMF components are packaged in shipping containers except for CESE and oversized components. EMF materiel, supplies, and equipment are preserved and packaged in accordance with MILSTRIP standards. Electronic materiel subject to damage from electrostatic discharge is preserved and packaged in accordance with military standards.

Equipment requiring preventive maintenance while in storage and when prepositioned is returned to Level A preservation and packaging upon completion of maintenance. Vehicles receive corrosion control treatment in accordance with applicable military standards prior to storage.

11.2.3 Marking

Equipment, components, repair parts, and shipping containers destined for storage and/or prepositioning are marked in accordance with military standards. Code of Federal Regulations (CFR), Title 49, *Transportation* is the governing specification and standard for marking radioactive and other hazardous materials. Packages containing petroleum products are marked in accordance with military standards. Electronic components subject to damage from electrostatic discharge are marked as specified in military standards.

11.2.4 Materiel Requiring Special Handling

Sensitive items, items with the potential for drug abuse, controlled substances, and pilferable materiel are handled in accordance with current NAVSUP and BUMED instructions. Hazardous material and hazardous waste must comply with local and state regulations and DOD, Department of Transportation (DOT), and Environmental Protection Agency (EPA) regulations. Physical security measures for safeguarding materiel requiring special handling must meet the requirements of current Navy instructions and United States Code (USC), Title 21, *Food and Drugs*.

11.2.5 Packaging Materiel Reuse

All containers and packaging materiel used in the prepositioning phase and those from nonconsumables are retained for reuse. This practice preserves and enhances EMF relocation capabilities.

11.2.6 Unit Readiness Status Reporting

While deployed, the EMF reports unit readiness following guidance from the commander exercising OPCON and TACON. This may require the EMF to follow other service-reporting systems.

The Status of Resources and Training System Joint Report-Navy (SORTSREPNV), established by NWP 1-03.3, *Status of Resources and Training System (SORTS)*, is the Navy's principal report that provides identification and general status data to the fleet commanders, OPNAV, Joint Chiefs of Staff, and the Secretary of Defense. It is constructed in a computer readable format to enable automated updating of the Navy Status of Forces database with the Navy Command and Control System.

SORTSREPNV's unit status assessments include the following categories: overall personnel, equipment/supplies on hand, training, and primary mission area. Currently, BUMED (for active units) reports personnel and training status. EMFPML reports equipment and supply SORTSREPNV data.

Upon activation, the individual unit is responsible for its SORTSREPNV reporting, which is submitted as a message and is not restricted by MINIMIZE. Units must ensure that the first reports of any status changes, unit degradation, or changes reflected in casualty reports, missed movement, situation reports, and similar reports are first reflected in SORTSREPNV.

11.2.7 Operational Planning

Effective use of EMFs requires thorough operational planning during the prepositioning phase. Navy and joint operational planning results in the CCDR's OPLAN and supporting TPFDDL. These documents will contain information on the EMF's operational scenario, employment and support, and important events and times, such as movement dates. COs should review all planning documents, such as OPLANs and TPFDDLs, and must work with responsible medical planners to ensure plans and documents contain realistic time frames, EMF capabilities, and support requirements.

11.2.8 Type Unit Characteristics Data

TUCHA data files provide standard planning data on movement characteristics for unit personnel, equipment, and accompanying supplies associated with type units of fixed composition. They are used to develop and review unit movement requirements in support of OPLANs. A UTC uniquely identifies each unit in the TUCHA file. For every UTC, the file contains the weight and cube of selected cargo categories, physical characteristics of the cargo, and the number of personnel requiring nonorganic transportation. OPNAV (N31) has overall responsibility for the TUCHA data. Each EMF has its own set of related UTCs and TUCHA data used to build a TPFDDL.

11.3 ACTIVATION PHASE

The activation phase commences when the EMF's command authority issues an activation order. The activation phase continues through the deployment phase. Upon receipt of the activation order, OPNAV (N931) is responsible for the selection and activation of the appropriate platform. Selection of the platform is in consultation with EMFPML. OPNAV (N931) will notify BUMED for the selection of the personnel package to augment the platform. The activation phase entails administrative and training tasks. Personnel substitutions may be made during this phase and some substitutes will not possess the required training. Since other staff assigned to EMF billets may also require this training, unit training will be necessary. Personnel assigned to EMF CO and XO billets should be aware of these requirements and ensure that a plan is developed during the prepositioning phase that addresses activation and deployment administrative and training requirements.

With the implementation of global sourcing, the parent command is responsible for ensuring that personnel are prepared to deploy to the operational theater, including administrative tasks such as acquiring dog tags, updating immunizations, placing legal affairs in order, and outfitting personnel. For deployment of large EMFs (500-bed platform), the OPLAN designates the APOD location where personnel will leave. The EMF CO coordinates the staging site near the APOD.

11.3.1 Responsibilities

During the activation phase, a clear chain of command is essential. The EMF coordinates with the gaining operational commander to establish an operating target for the EMF. This facility covers future administration, predeployment site surveys, training, and transportation costs of moving personnel, including AEMFAT and deactivation expeditionary medical facility assistance team members, to and from the operational area. COMNAVRESFOR oversees the mobilization of reserve personnel and administrative and training requirements during the activation phase. The sourcing MTF oversees administrative and training requirements of active duty personnel. NEMSCOM is responsible for shipment of the EMF. BUMED advises the sourcing MTF, EMFPML, and OPNAV, and assists as requested by COMNAVRESFOR.

The operational commander is responsible for preparation of the operational site for the EMF. Site selection is a tactical decision that should consider proximity to the forward line of own troops, patient evacuation routes, topography, endemic disease, disease vectors, existing infrastructure, soil conditions, climate, logistic support, and perimeter security. A site preparation involves a rough site survey; clearing, rough, and smooth grading; and disposing of any ordnance found. Construction support and public works support is provided via NAVFAC.

11.3.2 General Guidance

Lessons learned from fleet hospital activation during Operation Desert Shield/Storm include keeping functional groups intact through all life-cycle phases, including activation. For example, personnel staffing the food service department should activate and receive predeployment group training together.

The plan developed during the prepositioning phase should follow the logistic support mobilization plan format. It should address the staging and mobilization of reserve personnel, staging location, berthing, food, training, and other support requirements. Public affairs issues during this phase are critical. Other lessons learned from Operation Desert Shield/Storm include the need to enter reservists into the Defense Eligibility Enrollment and Reporting System as soon as possible in order to facilitate military privileges for dependents. The EMF's command staff should visit EMFPML to receive briefings and materiel prior to deployment.

11.4 DEPLOYMENT PHASE

The deployment phase begins when personnel and materiel begin movement from the sourcing MTF (for active duty), predeployment mobilization site (for reservists), or prepositioning site (for materiel). The deployment phase follows and usually overlaps the activation phase. It ends when materiel and personnel arrive in the theater. The EMF commander coordinates with the Service component commander to ensure the following tasks are completed during the deployment phase: sourcing transportation from the mobilization-staging site, transporting personnel and materiel from the POD in theater to the assembly site, and coordinating ship offloading of materiel. The EMF coordinates with the operational commander and ensures the availability of petroleum, oil, lubricants, water, and waste disposal at the site prior to arrival of any EMF personnel.

11.4.1 Time-Phased Force Deployment Data List

The OPLAN, especially the TPFDDL, are the keys to the deployment phase. The TPFDDL details the movement of personnel and materiel from prepositioning sites to the theater and contains required and updated delivery dates for in-theater arrivals and ports of entry and PODs. After the CCDR transmits the activation order, the Navy component commander sends a message to United States Transportation Command (USTRANSCOM) providing POCs for every UTC being air moved.

The Headquarters (HQ) Air Mobility Command (AMC) requirements cell contacts the POCs for final verification of the TPFDDL's UTC with a seven-day window in which the APOE departure date falls. Minor changes may be made at this time. While the size of a change is dependent on the size of a particular scheduled movement, general guidance is that a change of 5 short tons or 15 passengers is acceptable. Significant changes must be coordinated through the appropriate CCDR. If changes are made directly with the HQ AMC requirements or flow planning cells, the requirement will be canceled and the request must be resubmitted. The CCDR exercising operational command establishes theater aerial and water PODs with the Navy Materiel Transportation Office, Norfolk, Virginia, message for the deploying EMF to ensure expeditious flow of resupply materiel and mail.

11.4.2 Personnel Deployment

Deployment of personnel and materiel typically occurs concurrently. Materiel arrives in theater to coincide with the arrival of EMF personnel for immediate setup. The deployment of deployable medical systems materiel is the responsibility of NEMSCOM and proceeds according to the dates established in the TPFDDL. Materiel typically arrives in theater from its prepositioning site or from NEMSCOM as a single unit. Consumables and augment block items may be shipped separately if the EMF is being shipped from an OCONUS prepositioning site.

The AEMFAT is tasked with assisting an EMF in a smooth transition from storage to activation and operation (See Paragraph 11.3.1 for more information on the AEMFAT in the activation phase.) The AEMFAT is responsible for three distinct tasks:

1. Turning over EMF property custody to the designated EMF representative at the point of entry
2. Providing technical expertise during assembly/activation/initial operational phase of the EMF
3. Documenting the turnover of custody of the EMF upon delivery at the point of entry.

Upon activation of the EMF, NEMSCOM and Naval Expeditionary Medical Training Institute recommend the assignment of AEMFAT members to EMFPML. The AEMFAT team members report to the team leader who is responsible for execution of the team's duties. USTRANSCOM, the command responsible for transporting EMF personnel, has time windows for transporting TPFDDL units to the operational theater.

EMF personnel deploy with a complete issue of uniforms and infantry gear. The supporting MTF and construction battalion maintenance unit personnel are responsible for issuing uniforms to their active duty personnel prior to deployment. COMNAVRESFOR is responsible for issuing uniforms to reserve personnel prior to deployment. NEMSCOM provides helmets, flak jackets, infantry gear, and chemical, biological, and radiological gear, as determined by the operational commander at the deployment site when active and reserve personnel are deployed.

11.5 ASSEMBLY PHASE

Once activated, positioned and site prepared, the EMF can be fully functional within 5–10 days depending on the EMF size configuration. The assembly phase encompasses three stages:

1. Unpacking the EMF materiel from the shipping containers and storing containers and packing materiel for repackaging
2. Assembling the components into the structures for housing personnel and equipment
3. Organizing and storing equipment and supplies.

Many tasks will occur concurrently and some are interdependent such as TEMPER connections. Assembly of support and medical areas can occur simultaneously. The completion of laundry installation (remaining units) should be the first support area priority.

As the EMF is completed, there is a transition period from the assembly phase to the operational phase. The assembly phase is complete when the entire EMF is assembled. The EMF does not have to be completely assembled before accepting patients. The CO must balance requirements to begin providing treatment with those to complete EMF assembly. There is no single point that identifies when casualty receiving can begin. The EMF CO makes this determination. The entire assembly phase should take approximately 5 days.

11.5.1 Stage of Assembly

Assembly occurs in three stages covering the infrastructure, medical facility, and secondary support functions: Once activated, positioned and site prepared, the EMF can be fully functional within 5–10 days depending on the EMF size configuration.

1. Primary and designated secondary support areas are assembled first. This infrastructure supports the EMF staff and includes public works, supply, berthing, messing, and laundry.
2. The EMF is assembled beginning with casualty receiving, intensive care unit, medical support, and wards. Ancillary support services are set up after the medical core is assembled.
3. Secondary support areas such as laundry, chaplain, and barber/beauty shops are then assembled. Overall, the entire staff has 10 days to make the EMF operational. Operational is defined as fully capable of performing the mission as a theater hospitalization capability.

11.5.2 Organization

EMF personnel should endeavor to complete the assembly phase as soon as possible. Adequate training in assembling EMF structures and establishing and organizing efficient task accomplishment are critical factors. The organic personnel are the underlying concept of EMF assembly.

The field assembly plan uses an assembly-line tactic wherein each team performs the same assembly task for each structure. Staff members begin equipping and outfitting each TEMPER wing as it is completed.

11.5.3 Layout of Structures

The layout of the EMF consists of a central pair of corridors, running the length of the medical core of the hospital, and various TEMPER wings attached to the corridors. ISO shelters attached to the TEMPER wings house equipment and provide space for various functions, such as operating rooms, X-ray, and laboratories.

Support functions such as laundry, public works, and berthing are housed in a variety of tents within walking distance of the EMF. Specific functional areas such as berthing are generally clustered together. Support function structures include:

1. GP tents for berthing and office space
2. TEMPER wings for patient care areas and food service
3. Shelters for operating rooms, X-ray, and laboratories
4. ISO shipping containers for materiel and equipment storage and shipment
5. Outfitted containers such as shipping containers with equipment.

During the deployment phase, if sufficient time exists and if circumstances warrant, the EMF's CO has the authority to vary the general site plan of the EMF as contained in assembly drawings. Once the EMF is operational, modifications to the layout will be difficult. Additional deviations from the layout established by the

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EMF CO should be made cautiously and with consultation with combat engineers. The following lessons learned offer points for consideration in determining the EMF layout:

1. Incorporate the operational commander's current threat analysis.
2. Casualties are normally transported from the helicopter pad to the casualty receiving area by ambulance or ambulance bus. A safe and secure transportation lane of travel is essential.
3. Firefighting facilities and equipment should be located close to the helicopter pad and to the casualty receiving area.
4. Due to the noise they create, power generators should be located away from patient treatment areas or constructed with sound baffles around them.
5. Receiving areas (patients and visitors) should be located near access gates.
6. Because utilities such as potable water, wastewater, and electrical systems (not including telephones) are zoned and not interconnected, hoses and cables should be layed on the surface to save assembly and repair time.
7. Fuel storage points should be located downhill as far as possible from other structures.
8. Dust control measures should be installed for helicopter operations.
9. If circumstances require above ground anchoring of tents, consider pedestrian traffic flow around exposed anchor cables.

11.6 OPERATION PHASE

The CO must notify the chain of command when the operation phase occurs while the assembly phase is still in process. The primary tasks during the operation phase are receiving, treating, and evacuating patients, tasks that continue until the theater commander issues a deactivation order.

11.7 SUSTAINMENT

Combatant command (CCDR) OPLANs may require a 500-bed EMF; however, in alignment with DOD initiatives to provide requirements-based capabilities, an EMF is task organized and scaled to fit operational requirements identified by the CCDR. Although there is a notional table of organization for the EMF, task organization allows medical planners to build a customized EMF to support the specific mission and environment. In addition to the typical specialist care associated with theater hospitalization capability, the modular nature of EMF equipment sets, and the ability to task organize capabilities, allow the EMF to support sophisticated resuscitative and stabilizing surgical care of FRC capabilities.

The MPF squadron has embarked a 500-bed platform EMF to each of its three squadrons. Each MPF-embarked 500-bed configuration is rapidly discharged as a task-organized EMF. In addition, large BOS packages are common to the EMF-500. Depending on the mission and capability of the CCDR, these Service packages may be reduced or customized to decrease the theater-logistic footprint when they can be provided by other Services or contracted vendors.

11.8 RELOCATION PHASE

Relocation occurs when an EMF must be moved from one operational site to another. The relocation phase combines the deactivation, deployment, and assembly phases and results in a new operation phase. At the inception of the relocation phase, the EMF must curtail new admissions and evacuate patients to the rear. Because of the phased nature of the EMF's assembly, significant support functions such as supply, berthing, messing, and

laundry are the first areas disassembled, transported, and reassembled. Additionally, EMFs have limited capability to transport their patients from one location to another.

11.9 DEACTIVATION AND REHABILITATION PHASE

An EMF deactivation occurs once the CCDR issues the order to cease operations and disassemble to be ready for shipment to its scheduled point of entry. EMFPML is responsible for the coordination of all phases of deactivation and sends a specialized team from EMFPML to the site. Upon arrival, the team provides technical assistance and supervises the process of deactivation, disestablishment, agricultural inspections, washdowns, containerization, and transportation for retrograde to the point of entry. The EMF is shipped back to the NEMSCOM for an integrated logistics overhaul. Once the EMF operations cease, EMFPML becomes responsible for the materiel asset.

It is critical that the EMF CO become involved in the deactivation planning with the theater medical planners in the chain of command. The EMF must curtail new admissions and evacuate patients to the rear echelon. Significant support functions such as supply, berthing, messing, and laundry are the first areas dissembled. Prior planning to the disestablishment of the EMF provides adequate resources such as transportation for staff to the rear echelon.

The CO provides EMF personnel to assist the EMFPML team in the task of disassembling with washdowns, preparing for agricultural inspections, and the containerization of materiel. Once the EMF is retrograded to the assigned site in the rear echelon, EMF personnel are under the theater CCDR's time line for retrograde back to the United States. The EMFPML-specialized team remains on site until the operational commander has been informed and concurs with the completion of the EMF disestablishment and is ready at the point of entry for shipment.

11.10 REDEPLOYMENT PHASE

Redeployed personnel are either used to staff the EMF at its new operational site or sent back to their sourcing active duty MTFs or to their post-mobilization reservist sites. Materiel is used either in the EMF at a new operational site or is retrograded back for rebuild/refurbishment. The repacked EMF is transported to a point of entry for shipment. Transportation for personnel follows theater guidelines. Transportation and security for personnel awaiting redeployment and for materiel are the responsibility of the CCDR. The redeployment phase ends when all personnel and materiel have reached their next destination. At this point, either the repositioning phase or the assembly phase begins again.

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CHAPTER 12

Patient Movement

12.1 GENERAL

The patient movement system consists of three components: medical regulating, patient evacuation, and en route care. The goal of the patient movement system is to move patients from the point of injury or illness as rapidly as possible into and subsequently through the established HSS system. The guiding principle in patient movement is the movement of patients from the most forward unit, using an appropriate level of care such as the first responder capability, through the most rearward medical treatment facility, again using the appropriate level of care, such as the definitive care capability, as the patient's medical condition warrants and the military situation dictates. Prompt movement of patients to the required clinical care capability is essential in avoiding an increase in morbidity and mortality.

For more information on patient regulation and movement, refer to NTTP 4-02.2/MCRP 4-11.1G, Patient Movement; and JP 4-02, Health Service Support in Joint Operations.

12.2 EXPEDITIONARY MEDICAL FACILITY CAPABILITIES/REQUIREMENTS

The EMF has a MEDEVAC division under the patient administration department, which coordinates with the theater medical regulating system. Staffing is composed of hospital corpsmen. The Air Force aeromedical evacuation liaison team (AELT) can be located in this division. EMF COs shall coordinate the requirement for USAF AELT augmentation with operational commanders and shall ensure that AELT personnel receive required support.

12.3 AIR OPERATIONS

A helicopter pad is usually constructed near the EMF for receiving and transferring patients. The EMF must coordinate with the operational commander for the staffing of a full-time air operations crew, the supply of air operations equipment, and for providing firefighting training. Multinational operations can create special AE problems. The CCDR's OPLANs should include air operations procedures involving fixed/rotary wing aircraft from other countries.

12.4 PATIENT MOVEMENT ITEMS

EMFs are equipped with sufficient medical equipment to care for patients while they are within the HSS facility. Medical equipment and supplies such as ventilators, litters, patient monitors, and pulse oximeters are required to support patients during evacuation. To support patient movement requirements, the EMF exchanges PMIs from a patient previously received for the PMIs used with a newly arriving patient when the patient is entered into the AE system. The function of the PMI system is to support patients in transit, to recycle PMIs in kind and to replenish medical capabilities. The handling of equipment requires a reliable supporting logistic infrastructure to ensure that PMIs are available and serviceable. The plan for a PMI exchange system, which involves the return of AE equipment and PMI to the theater of origin, should be addressed in the respective theater OPLAN. EMF COs shall provide required PMI equipment to support en route care during ground evacuation in patient transport vehicles. (See Paragraph 7.7.5 for additional information on PMIs.)

12.5 AIR FORCE LIAISON

An Air Force mobile aeromedical staging facility (MASF) is a medical facility that provides temporary patient holding prior to aeromedical evacuation. When the OPLAN collocates an MASF with the EMF, evacuated EMF patients are moved to the MASF. If the EMF requires additional assets to move patients from the EMF to the MASF, the EMF CO shall request required support from operational commanders.

CHAPTER 13

Clinical Operations

13.1 CONCEPTS UNDERLYING QUALITY OF CARE

The goal of operational medicine is to treat patients and return them to duty as quickly as possible in order to preserve the fighting strength of the force. Treatment is based on performing procedures appropriate to a given capability of care. Patients who are treated and are not ready to return to duty are stabilized for evacuation to the next appropriate capability.

The standards of the Joint Commission for the Accreditation of Health Care Organizations for the fixed MTF is not applicable to the EMF. According to the NAVMED P-117, *Manual of the Medical Department*, “medical care delivered in an operational environment is different from the well controlled environment of a fixed MTF. The mission of a combat environment MTF is to save lives, render emergency medical care, stabilize the patient’s condition, and transfer the patient to more definitive care.”

EMF medical care is based on DEPMEDS standards found in *DEPMEDS Policies/Guidelines: Treatment Briefs*, published by the DMSB, formerly the Joint Readiness Clinical Advisory Board. DEPMEDS standards determine which medical personnel, equipment, and supplies are required to perform normal procedures. Per the concept paper *Naval Force Health Protection for the 21st Century (NFHP-21)*, the EMF’s primary role is to provide essential care in theater for the injured and ill to either return to duty or stabilize them for strategic evacuation to the definitive care out of theater. The DEPMEDS treatment briefs describe the clinical tasks required to be performed at the EMF to provide essential care and stabilize active duty patients for strategic evacuation.

13.1.1 Quality of Care Levels

The level of quality care depends upon the EMF’s patient workload and the health personnel’s ability to administer quality care to the greatest number of patients. In an operational status, the EMF experiences an array of patient workload levels, which can increase and exceed the facility’s capacity for concurrent patient care. The method of triage is used to meet the objective of caring for the greatest number of patients by categorizing patients for treatment according to need for treatment. Triage allows the sickest patients to be seen first rather than patients being seen in the order they arrive for treatment. In the triage process, valuable resources such as manpower, equipment, supplies, and time are preserved. During mass casualty situations, the quality of care administered is highest and most appropriate to the battlefield.

13.1.2 Quality Assurance

Quality assurance in the EMF concentrates on monitoring infection control and adhering to DEPMEDS guidelines and triage plans. Unless a mass casualty situation exists, the EMF staff should not perform any procedure for which they are not privileged. The EMF credentials review process is performed prior to deployment.

13.2 CLINICAL PRACTICE

13.2.1 General Considerations

Clinical practice is based on applying practiced skills within facility limitations related to structure, equipment, supplies, and manpower. The EMF is designed for intensive combat casualty management providing theater hospitalization capability. In some situations, the EMF may provide care usually provided by a CONUS definitive

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care capability. During Operation Provide Promise, a 60-bed facility provided amputee rehabilitation and prosthetics management for foreign military personnel.

The Service component commander, operational commander, force surgeon, and EMF CO should consider mission requirements when determining requests for EMF modifications. The request is sent through the operational commander's chain of command to the CDR for further action. The supporting commands then provide what is needed. The following includes areas for consideration in mission planning:

1. Psychiatric patients may require a separate secure room and frequent monitoring. Quiet rooms are unavailable within EMF.
2. The EMF CO should designate a senior medical department liaison officer to interact with other facilities to coordinate:
 - a. Consultative services not included in the EMF
 - b. Subarea or sector assistance
 - c. Medical evacuation coordination
 - d. Medical intelligence support.
3. Walking blood banks are discouraged except as an absolute last choice in a life-threatening situation. If the facility does not have a readily available supply of fresh blood provided by the JBPO, it may request the provision of frozen blood storage and reconstitution capability, allowing the use of frozen blood for elective cases and reserving fresh blood for emergencies. It should be noted that the use of frozen blood significantly affects the supporting space required and the personnel and equipment demands.
4. Electricity fluctuations can cause equipment problems, including loss of function despite surge protectors.
5. Medical regulating to the EMF may be limited or nonexistent. This may result in patients arriving with minimal or no care, especially patients from non-US forces.
6. Ambulance crews should immediately become qualified in vehicle operations. Designated ambulance drivers will use various field vehicles and should be familiar with local traffic patterns, road systems, and locations of key elements.
7. When using foreign health care assets for support, the EMF staff should be aware of differences in levels, philosophies, and the timeliness of care provided.

13.2.2 Surgical Services

Surgical services, including subspecialties assigned, should be limited to guidance provided in the EMF Standard Operating Procedure manual. Surgeons should also be cognizant of the theater evacuation policy and its implications. Because the EMF may sometimes be employed in situations other than intensive combat, the type of practice within these specialties can change. EMFs will be increasingly employed in protracted operations that require extensive community hospital functions. Commanding officers should determine the extent of practice modification, basing their decision on the facility's equipment, supplies, and personnel, and on the population receiving care.

13.2.3 Medical Services

Internal medicine specialists provide medical services on the wards and in casualty receiving areas. The following are considerations concerning internal medicine services:

1. During reception of combat casualties, some patients awaiting surgery may be taken to the ICU for stabilization, while those requiring less intense stabilization can be managed in the casualty receiving area.
2. Postoperative recovery, performed in the recovery area and based on command requirements, can be performed in the ICU. In both cases, patients receive support from medical services.
3. Individuals trained in the operation and maintenance of ventilators and oxygen delivery systems support ventilator patients.
4. Nonsurgical support is provided for patients expected during combat and low intensity conflict missions. The scope of knowledge supports patient populations being cared for during multinational and refugee operations.
5. Multinational operations may present unique problems where the EMF commanding officer will rely on the family practice physician, whose broad medical background includes general medicine, pediatrics, obstetrics, gynecology, and office practice of surgical specialties. During refugee operations, family practitioners can be ideal health care providers for on-site refugee care. With increased US involvement in peacetime operations, including multinational operations, it is critical that operational commanders consider the capability of the family practice physician. The employment of family practitioners augments, and does not replace, internal or emergency medicine specialists.

13.2.4 Emergency Medical Services Casualty Receiving Area

Many operations require ambulatory, noncombat patients, pediatrics, and refugee care. The casualty receiving area, which is the entry point for all patients, is managed by surgical services. The EMF commanding officer may decide that the best use of EMF personnel includes emergency medicine specialists, who are the best trained and qualified for staffing the casualty receiving area. Other emergency medical service considerations include the following:

1. Casualty evacuation patients arrive unprepared for transport by being medically unstable or still in possession of weapons.
2. The casualty receiving area requires certain provisions continuously:
 - a. Trauma resuscitation/stabilization
 - b. Triage
 - c. Efficient patient flow
 - d. Aeromedical evacuation coordination.
3. Mission scenarios involving care of civilians may require the provision of emergency pediatrics, obstetrics, and gynecology.
4. Toxicological problems in hazardous material accidents require management.
5. Mass casualty and bunker drills must be carried out realistically.

13.2.5 Anesthesia Services

The EMF is configured to provide anesthesia in support of combat casualty care. The anesthesia department also provides for elective cases when they can be scheduled without requiring augmentation of equipment, supplies, or manpower.

13.2.6 Dental Services

During periods of intense combat operations, the practice of dentistry is limited to treatment of acute dental problems and/or emergencies. Dental capabilities are not included in smaller EMF configurations, unless requested. If operations permit, elective restorations can be considered. The progression of procedures, as the tempo permits, includes dental maintenance and required periodic examinations. As the length of deployment progresses, elective procedures may become a necessity. The EMF commanding officer should plan for the need for dental services, since implementation requires dental equipment the EMF does not usually contain.

13.2.7 Physical/Occupational Therapy

During intensive periods when patients are treated and rapidly evacuated to higher capability of care for recovery and rehabilitation, the EMF does not provide physical/occupational therapy support. The EMF CO shall provide physical/occupational therapy services for patients when operating in a permissive environment.

13.2.8 Respiratory Therapy

The Service component surgeon and the EMF commanding officer should consider respiratory therapy as a specialty for augmentation to the facility. While other qualified personnel can manage individual respiratory therapy cases, large-scale management severely impacts personnel. Adverse impacts can be avoided by deploying respiratory technicians.

13.3 NURSING PRACTICE

Nursing practice in an EMF is based on current nursing procedures. Several areas in nursing practice are unique to EMFs and require special consideration:

1. Nursing subspecialties should meet mission requirements to the greatest extent possible.
2. Quality patient care may require the use or combination of different systems or processes, creativity, improvisation, and flexibility.
3. Environmental cleanliness may be difficult to achieve. Increased efforts are required to remove and protect against dust. All equipment and supplies require dust cover protection.
4. Specialized (non-DEPMEDS) equipment may not be available.
5. Staff must be aware of and provide for patient privacy needs in the close quarters of EMF wards.
6. The care provider/patient relationship may be an issue, depending on national origin and rank, such as in taking direction and giving orders. EMF personnel can be affected by gender and seniority. This can present problems in staff assignments and delivery of patient care.
7. Liaison should be established with nursing staffs at other military and civilian facilities. This liaison can be crucial in achieving treatment goals.
8. All available resources should be used. Assistance from construction battalion maintenance unit personnel should be used to create devices that enhance patient care.

13.4 CLINICAL LIBRARY

EMF command staff should ensure limited essential medical text availability.

13.5 CONTINUING MEDICAL EDUCATION

Mission planning should include establishing a quality continuing medical education program that meets personnel needs:

1. Liaison with the sourcing MTF is established to expedite the approval of continuing education.
2. Providers receive advanced cardiac life support, basic cardiac life support, and advanced trauma life support courses.
3. Nonmedical EMF personnel attend first responder courses.
4. Continuing medical education credits and continuing education units are approved.
5. Rate training for EMF corpsmen and nonmedical personnel is instituted.
6. A liaison with a personnel support detachment for proper administration of advancement examinations is established.
7. Local education and training programs to provide for other medical organizations, HN liaison support and coalition, and United Nations (UN) liaison and support are developed.
8. Training programs are set up for corpsmen in medication certification, cardiac arrhythmia recognition, suturing, and intravenous certification.
9. Continuing education is provided in support of mass casualty drills.

13.6 MEDICAL RECORDS

Under operational conditions, health records for deployed Navy and Marine Corps personnel are maintained at their assigned ship, the battalion aid station, division, or fixed MTF where care is usually given. The EMF must not retain medical records or X-rays of patients treated. Instead, patient records are forwarded with the patient to become part of the patient's health record upon arrival at the fixed MTF or dental treatment facility.

Documentation of care is key to alerting the receiving MTF of the patient's history and the required continuing treatment. The records of patients returning to duty are forwarded with them back to their unit for inclusion in their health record. When required, the EMF staff documents patient care on the Joint Theater Trauma Record and submits required information to the Navy-Marine Corps Combat Trauma Registry.

13.7 TELEMEDICINE

Telemedicine provides a wide range of digital transmission capabilities, including:

1. X-rays for radiology consultation
2. Physical findings for other specialty consultation
3. Grand rounds-type consultation.

Telemedicine is an additional capability that can be requested for the EMF. Planners must consider the internal support requirements for setting up and using telemedicine capabilities, such as space constraints, electrical requirements, and the operational environment. Consideration should also be given to the CDR's ability to support telemedicine with other communication requirements. EMF COs shall coordinate requirements to establish a telemedicine capability with operational commanders.

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CHAPTER 14

Geneva Conventions

14.1 GENERAL

Geneva Convention III establishes (1) the manner in which persons will be treated, and (2) the conduct for medical and religious personnel assigned to aid detainees. EMFs should address the Geneva Conventions in their standard operating procedure manual, including procedures covering a possible enemy attack. EMF COs shall coordinate requirements for the care of detainees with operational commanders. In addition, EMF COs shall ensure that they are capable of providing required care for detainees, and report all resource shortfalls to operational commanders. The following points are especially pertinent to EMFs:

1. Medical units, facilities, and vehicles marked with a distinctive red cross emblem are afforded special protection under the Geneva Conventions. Unit commanders can elect not to mark medical facilities but run the risk of losing Geneva Conventions protection.
2. Medical personnel are afforded special protection under certain guidelines.
3. Humane treatment of sick or wounded detainees is required.
4. Facilities, materiel, and stores of fixed medical establishments, vehicles, and aircraft displaying the red cross emblem may not be used for nonmedical purposes.

For more information and guidance on the Geneva Conventions, refer to NWP 4-02, Naval Expeditionary Health Service Support Afloat and Ashore, and MCWP 4-11.1, Health Services Support Operations.

14.2 IDENTIFICATION

Doctrine states that its facilities and vehicles will be marked with the distinctive emblem. Direction not to mark comes through the hospital's chain of command.

14.3 DETAINEES

Care will be given to detainees in accordance with the Geneva Conventions, which state that, "Only urgent medical reasons will authorize priority in the order of treatment to be administered." Accordingly, priority of care will not be given to US and allied military force patients over detainee patients, unless dictated by medical reasons.

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CHAPTER 15

After Action Review and Lessons Learned

15.1 GENERAL

The Naval Operational Medical Lessons Learned Center (NOMLLC) collects, analyzes, manages, and disseminates relevant medical observations, insights, and lessons learned in support of EMF operations. Information gathered from the deployment, operation, and exercise of EMFs is used to confirm existing tactics, techniques, and procedures and to identify areas needing improvement. EMF personnel submit lessons learned throughout the course of deployment and conduct an after action review following each major portion of the evolution.

15.2 AFTER ACTION REVIEW

An after action review (AAR) is an assessment that EMF personnel conduct during various phases of EMF deployments, operations, and exercises. Results of the AAR provide operational commanders and Navy Medicine with a mechanism for identifying and evaluating an event and learning from the experience.

Ideas and suggestions are then generated for the improvement of the next evolution based on the outcome of the review. Additionally, capturing and entering observations and lessons early into the NOMLLC lesson management system (LMS) impacts predeployment training and increases the effectiveness of the follow-on units.

15.3 LESSONS LEARNED

Collecting and analyzing lessons and observations is a means of improving the decision-making process and effecting needed changes to the EMF using the doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) format.

EMF personnel prepare lessons learned in accordance with BUMEDINST 3500.3 (series), *Naval Operational Medical Lessons Learned System (NOMLLS)*, for incorporation into the NOMLLC. All approved NOMLLs are to be submitted to the Navy Lessons Learned System (NLLS) or the Marine Corps Lessons Management System (MCLMS). Further Services lessons learned guidance is provided in the OPNAVINST 3500.37 (series), *Navy Lessons Learned System (NLLS)*, and MCO 3504.1, *Marine Corps Lessons Learned (MCLLP) and the Marine Corps Center for Lessons Learned (MCCLL)*.

For additional information, see the NOMLLC websites at: <https://mll.nomi.med.navy.mil> and <https://www.mccll.usmc.mil/nomi/index.cfm>.

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APPENDIX A

Expeditionary Medical Facility Fact Book

The EMF Fact Book provides a consolidated reference to EMF data. This data is presented in the DOTMLPF format.

A.1 REFERENCE PUBLICATIONS

A.1.1 Expeditionary Medical Facility

Fleet Hospital Maintenance Plan.

Fleet Hospital Support Office Operational Support Manual.

Navy Training Plan for Fleet Hospitals.

Operational Logistics Support Summary (OLSS) for the Fleet Hospital Program.

A.1.2 Bureau of Medicine and Surgery

BUMEDINST 3500.3 (series), Naval Operational Medical Lessons Learned System (NOMLLS).

BUMEDINST 6440.5 (series), Medical Augmentation Program.

NAVMED P-117, Manual of the Medical Department (MANMED).

NAVMED P-5010, Manual of Preventive Medicine.

NAVMED P-5041, Treatment of Chemical Agent Casualties and Conventional Military Chemical Injuries.

BUMEDNOTE 6110, Tracking and Reporting Individual Medical Readiness Data.

A.1.3 US Army

FM 8-42, Combat Health Support in Stability Operations and Support Operations.

Special Text 4-02.46, Medical Support to Detainee Operations.

TRADOC Pamphlet 525-11, Near Term Water Resource Management.

A.1.4 US Marine Corps

MCWP 4-11.1, Health Service Support Operations.

A.1.5 US Navy

NAVCOMPT Manual, Vol. III, Financial Management of Resources Fund Administration (Operating Forces).

NTTP 4-02.4

NAVFAC P-404, Naval Construction Force Equipment Management Manual.

NAVSUP P-409, Military Standard Requisitioning and Issue Procedures (MILSTRIP).

NAVSUP P-485, Afloat Supply Procedures.

NAVSUP P-486, Food Service Management General Messes.

NAVSUPINST 4440.146 (series), Safeguarding of Defense Logistics Agency Sensitive Inventory Items, Controlled Substances, and Pilferable Items of Supply.

NTTP 1-01, The Navy Warfare Library.

NTTP 1-03.3, Status of Resources and Training System Joint Report-Navy.

NTTP 3-11.19, Multiservice Tactics, Techniques and Procedures for Nuclear, Biological, and Chemical Reconnaissance.

NTTP 4-02.1, Health Service Support Logistics.

NTTP 4-02.2M/MCRP 4-11.1G, Patient Movement.

NWP 4-02, Naval Expeditionary Health Service Support Afloat and Ashore.

OPNAVINST 3500.37 (series), Navy Lessons Learned System (NLLS).

TACMEMO 3-07.6-06, Foreign Humanitarian Assistance/Disaster Relief Operations Planning.

TACMEMO 3-07.7-06, Domestic Disaster Relief Operations Planning.

U.S. Fleet Forces Command, Fleet Operational Health Concept of Operations.

A.1.6 Joint

Chairman, Joint Chiefs of Staff Manual (CJCSM) 3122.01, Joint Operation Planning and Execution System (JOPES) Volume I (Planning Policies and Procedures).

Defense Medical Standardization Board, Deployable Medical System (DEPMEDS) Policies/Guidelines and Treatment Briefs.

JP 4-02, Doctrine for Health Service Support in Joint Operations.

JP 4-05, Joint Mobilization Planning.

JP 4-06, Mortuary Affairs in Joint Operations.

A.1.7 Other

Department of Transportation Regulations, Title 49.

Title 21, United States Code.

A.2 ORGANIZATION

EMF CONFIGURATION EMPLOYMENT GUIDANCE MATRIX		10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
Ground Forces	MAGTF		X	X	X	X
	MEF(F)	X	X	X	X	
Casualty Rates	High				X	X
	Medium		X	X	X	X
	Low	X	X	X	X	X
Real Estate	> 25 acres					X
	> 15 acres		X	X	X	
	> 5 acres					
	< 5 acres	X				
Medical Evacuation (MEDEVAC) Capability	> 96 hours	X	X	X	X	X
	> 48 hours	X	X	X	X	X
	> 12 hours	X	X	X	X	X
	< 12 hours	X	X	X	X	X
Conflict Duration	Unknown	X	X	X	X	X
	> 365 days	X	X	X	X	X
	> 60 days	X	X	X	X	X
	< 60 days	X	X	X		
Employment Timeframe	Indefinite	X	X	X	X	X
	> 180 days	X	X	X	X	X
	> 30 days	X	X	X	X	X
	< 30 days	X	X	X		
Potential Asset Relocateability	High	X				
	Medium		X	X	X	
	Low		X	X	X	X

Figure A-1. Expeditionary Medical Facility Configuration Employment Guidance Matrix

TYPE OF OPERATION	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
High Intensity Conflict		X	X	X	X
Medium Intensity Conflict		X	X	X	X
Low Intensity Conflict	X	X	X	X	
Support to Domestic Civil Authorities	X	X	X	X	X
Humanitarian Assistance and Disaster Relief	X	X	X	X	X
Security Assistance	X	X	X	X	X
Nation Assistance	X	X	X	X	X
Support to Counter Drug Operations	X	X	X	X	X
Combating Terrorism	X	X	X	X	X
Peacekeeping Operations	X	X	X	X	X
Peace Enforcement	X	X	X	X	X
Show of Force		X	X	X	X
Support for Insurgencies/Counter Insurgencies	X	X	X	X	X
Attacks and Raids	X	X	X		
<p>Note: An X indicates that this type of EMF is appropriate for supporting the type of operation. The absence of an X does not preclude its use if operational considerations warrant.</p>					

Figure A-2. Expeditionary Medical Facility Operational Capabilities Matrix

LOCATION FACTOR	CONSIDERATIONS
Proximity to Supported Units	<ol style="list-style-type: none"> 1. Close enough to the supported units to receive casualties by ground and/or air transportation. 2. In logical patient evacuation routes, including ambulance and aircraft approach/departure. 3. Minimize the evacuation chain, yet reduce the risk of exposure to combat. 4. Rear of area in which troops will operate. 5. As far as possible from proposed civilian refugee evacuation routes when refugee care is not an assigned mission.
Secure Environment	<ol style="list-style-type: none"> 1. Operational site is in a secure environment. 2. Consider perimeter security defensive needs and availability of nearby supporting units to meet those needs. 3. Minimize risk of chemical/biological attack.
Transportation	<ol style="list-style-type: none"> 1. Optimize proximity to airfield for medical evacuation and transportation of supplies. 2. Ease of access to ports, railheads, and beaches. 3. Close to ports of debarkation and embarkation of EMF materiel and personnel.
Logistic Support	<ol style="list-style-type: none"> 1. Near an area that has good infrastructure (labor force, water, petroleum, oil, lubricants, sources, power, waste disposal, sewage treatment facilities, roads, buildings of opportunity). 2. In or near a logistic hub. Near supply and resupply sources. 3. Augmentation units or personnel are available for various support requirements, including site preparation, transportation, and other support needs.
Terrain and Climate	<ol style="list-style-type: none"> 1. Relatively flat terrain. No more than 2 degrees of slope running from the central spine to the outermost end of TEMPER wings, to accommodate assembly of structures. 2. Meets minimum acreage requirements for size of EMF. 3. Good topography, especially drainage for surface water, streams, rivers, and high water marks; relatively flat to avoid pooling of rain, water, and snow. 4. Favorable soil conditions, including firmness, stability, absence of rocks, trees, and frozen ground. 5. Favorable climate, including wind direction, solar loads.
Communications	<p>Consider those units with which EMFs must communicate and interact (medical evacuation units, Marine Corps units, component commander's headquarters, units providing MWR and PSD support, and others).</p>

Figure A-3. Expeditionary Medical Facility Location Factors

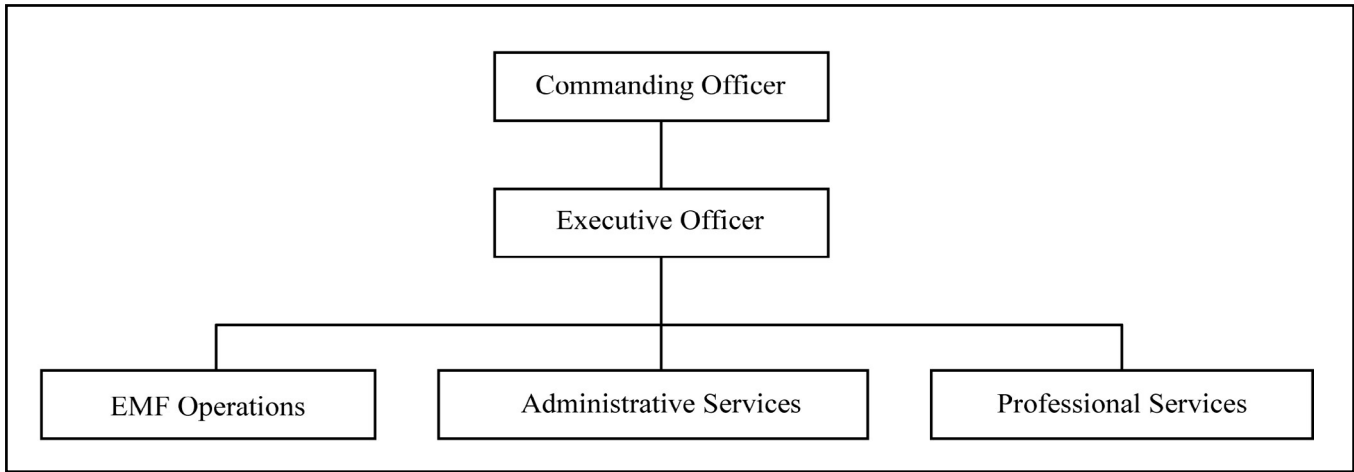


Figure A-4. Expeditionary Medical Facility Command Structure

Note

In recent EMF deployments, the commander with operational control or tactical control has dictated the reorganization of the EMF to reflect the commander’s staff alignment. Current EMF organization is aligned with the structure found in a fixed MTF and does not address key roles required in an operational setting, such as administration, N-1; intelligence, N-2; current operations, N-3; materiel readiness and logistics, N-4; future operations, N-5; and communications, N-6. Aligning the organization of the EMF with the line commands provides operational commanders and their staffs with a familiar structure and knowledge of each section’s responsibility during the planning and execution of operations.

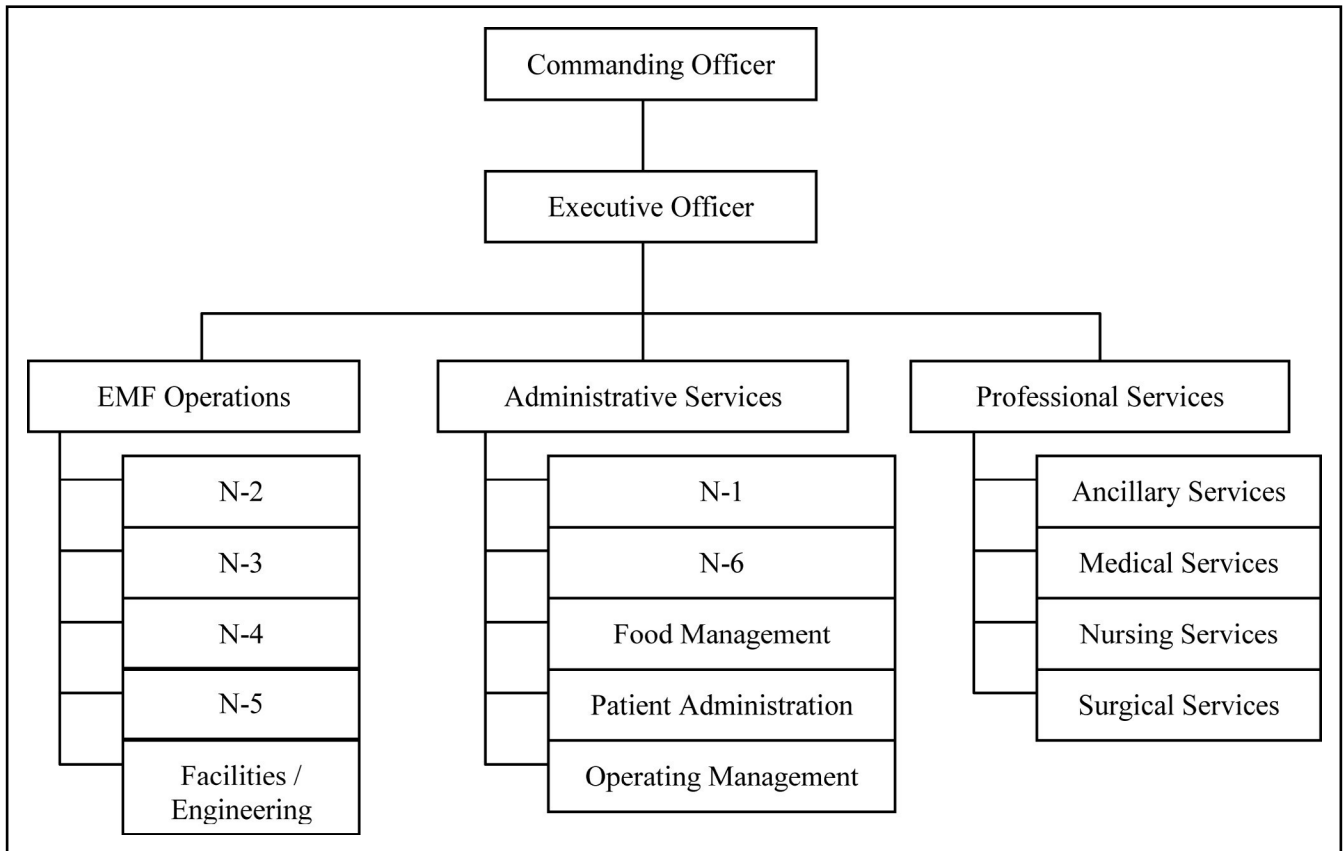


Figure A-5. Expeditionary Medical Facility Internal Structure with Departments

EXPEDITIONARY MEDICAL FACILITY OPERATIONS	ADMINISTRATIVE SERVICES Director Administrative Services
<ol style="list-style-type: none"> 1. N-2 Intelligence 2. N-3 Current Operations 3. N-4 Materiel Readiness and Logistics <ol style="list-style-type: none"> a. Materiels Management Department <ol style="list-style-type: none"> (1) Materiels Management (2) Biomedical Repair (3) Disbursing 4 N-5 Future Operations 5. Facilities/Engineering <ol style="list-style-type: none"> a. Public Works Department <ol style="list-style-type: none"> (1) Public Works (2) Assistant FMO (3) Fire Marshal (4) Safety (5) Maintenance (6) Transportation (7) Engineering (8) Facility (9) Support (10) Utilities (11) Operations (12) Maintenance 	<ol style="list-style-type: none"> 1. Patient Administration Department <ol style="list-style-type: none"> a. Patient Administration Registrar b. Decedent Affairs c. MEDEVAC d. Patient Affairs e. Medical Records f. Admissions g. Patient Effects 2. Food Management Department <ol style="list-style-type: none"> a. Food Management b. Clinical Nutrition c. Admin and Stores d. Production and Service 3. Operating Management Department <ol style="list-style-type: none"> a. Security b. Armory c. Staffing/Assignment d. US Mail e. Message Center f. Internal Communications g. Correspondence Communications h. Central Files i. Billeting j. Personnel Services k. PX/Barber Shop l. Interior Security m. Perimeter Security n. Master-at-Arms o. Discipline p. Laundry q. Linen Control r. Hospital Laundry s. Personal Laundry t. General Administrative Services

Figure A-6. Expeditionary Medical Facility Departmental Organizational Charts (Sheet 1 of 2)

PROFESSIONAL SERVICES	
<ul style="list-style-type: none"> 1. Ancillary Services - Director Ancillary Services <ul style="list-style-type: none"> a. Laboratory b. Pharmacy c. Radiology d. Admin e. Diagnostic f. Anatomic Pathology g. Clinical Pathology h. Blood Bank i. Admin Dispensing j. Admin Packaging 2. Medical Services - Director Medical Services <ul style="list-style-type: none"> a. Psychiatry b. Neurology c. Internal Medicine d. Preventive Occupational Medicine e. Occupational Health f. Preventive Medicine g. Medical h. Clinical i. Diagnostic Exams j. Clinical Services k. Infectious Diseases l. Ambulatory Care 3. Nursing Services - Director Nursing Services <ul style="list-style-type: none"> a. Inpatient Nursing b. Ambulatory Care Nursing c. Operating Room (OR) Nursing 	<ul style="list-style-type: none"> 4. Surgical Services - Director Surgical Services <ul style="list-style-type: none"> a. Supply Anesthesiology Department <ul style="list-style-type: none"> (1) Anesthesiology Clinical (2) Consultative Care (3) Intensive Care b. Dental Department <ul style="list-style-type: none"> (1) Dental (2) Oral Diagnosis (3) Operative Dentistry (4) Oral Surgery c. ENT Department <ul style="list-style-type: none"> (1) ENT (2) Audiology d. General Surgery Department <ul style="list-style-type: none"> (1) General Surgery (2) Peripheral (3) Vascular (4) Surgery (5) Neurosurgery (6) Thoracic (7) Surgery (8) Urology e. Ophthalmology Department <ul style="list-style-type: none"> (1) Ophthalmology (2) Clinical (3) Surgical f. Orthopedic Department <ul style="list-style-type: none"> (1) Clinical (2) Surgical (3) Podiatry Surgery (4) Clinical Services (5) Orthopedics

Figure A-6. Expeditionary Medical Facility Departmental Organizational Charts (Sheet 2 of 2)

A.3 TRAINING

A.3.1 Universal Joint Task List

Operational (OP) Levels of War, Strategic-National (SN), and Strategic-Theater (ST) Tasks

- OP 1.2.3.1 Coordinate DOD Civilian and Contractor Support
- OP 1.5.5 Assist HN in Populace and Resource Control
- OP 1.6 Conduct Patient Evacuation
- OP 2.2.1 Collect Information on Operational Situation
- OP 2.4.1.1 Identify Operational Issues and Threats
- OP 4.4.3 Provide for Health Services in the Joint Operations Area (JOA)
- OP 4.4.3.2 Manage Flow of Casualties in the Joint Operations Area (JOA)
- OP 4.4.3.3 Manage Health Services Resources in the Joint Operations Area (JOA)
- OP 6.2.6 Conduct Evacuation of Noncombatants from the Joint Operations Area (JOA)
- OP 7.3 Coordinate Passive Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) Defense in Joint Operations Area (JOA)
- OP 7.4 Coordinate Consequence Management (CM) in Joint Operations Area (JOA)
- SN 4.3.3 Coordinate Defense-Wide Health Services
- SN 4.3.4 Develop and Maintain a Medical Surveillance Program
- SN 6.6.4 Expand Health Service Support
- SN 8.1.5 Conduct Foreign Humanitarian Assistance and Humanitarian and Civic Assistance
- SN 9.2.1 Coordinate Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) Protection for Strategic Forces and Means
- ST 2.2.1 Collect Information on Theater Strategic Situation
- ST 2.4.1.1 Identify Theater Issues and Threats
- ST 4.2.2. Coordinate Health Services Support
- ST 4.2.2.2 Coordinate Patient Evacuation from Theater
- ST 4.2.2.3 Manage Medical, Dental, and Veterinary Services and Laboratories and Supply
- ST 4.2.2.4 Coordinate Joint Comprehensive Medical Surveillance
- ST 4.3.1 Establish and Coordinate Movement Services within Theater
- ST 7.1.1.1 Provide for Reserve Component Mobilization and Support
- ST 7.1.4 Determine and Validate Forces and Cargo to be Deployed or Redeployed
- ST 8.2.3 Coordinate Foreign Humanitarian Assistance
- ST 8.2.4 Coordinate Humanitarian and Civic Assistance Programs
- ST 8.4 Provide Theater Support to Other DOD and Government Agencies
- ST 8.4.3 Coordinate Evacuation and Repatriation of Noncombatants from Theater
- ST 9.4 Establish Passive Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) Defense in Theater

A.3.2 Navy Tasks

Navy Tactical Tasks (NTAs) and Operational (OP) Levels of War Tasks

- NTA 4 Perform Logistics and Combat Service Support
- NTA 4.12 Provide Health Services
 - NTA 4.12.1 Perform Triage
 - NTA 4.12.2 Provide Ambulatory Health Care
 - NTA 4.12.3 Provide Surgical and Inpatient Care
 - NTA 4.12.4 Provide Dental Care
 - NTA 4.12.5 Coordinate Patient Movement
 - NTA 4.12.6 Provide Industrial and Environmental Health Services
 - NTA 4.12.7 Maintain Records
 - NTA 4.12.8 Obtain and Analyze Medical Information
 - NTA 4.12.9 Train Medical and Non-medical Personnel
 - NTA 4.12.10 Provide Health Services in Support of Humanitarian and Civic Assistance
 - NTA 4.12.12 Perform Level II/III Medical Support
 - NTA 4.12.11 Provide Medical Staff Support
- OP 1.6 Conduct Patient Evacuation
 - OP 2.2.1 Collect Information on Operational Situation
 - OP 2.4.1.1 Identify Operational Issues and Threats
 - OP 4.4.3 Provide for Health Services in the Joint Operations Area (JOA)
 - OP 4.4.3.1 Manage Joint Blood Program in the Joint Operations Area (JOA)
 - OP 4.4.3.2 Manage Flow of Casualties in the Joint Operations Area (JOA)
 - OP 4.4.3.3 Manage Health Services Resources in the Joint Operations Area (JOA)
 - OP 4.5.3 Recommend Evacuation Policy and Procedures for the Joint Operations Area (JOA)
 - OP 4.7.8 Establish Disaster Control Measures
 - OP 5.7.8 Coordinate Consequence Management in the Joint Operations Area (JOA)
 - OP 6.2.6 Conduct Evacuation of Noncombatants from the Joint Operations Area (JOA)
 - OP 6.2.8 Establish NBC Protection in the Joint Operations Area (JOA)

A.4 MATERIEL

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3001 1 C HZ	Casualty Receiving	3164 1 C MC	T064 Emergency Delivery
3001 1 C MC	Casualty Receiving	3167 1 C MC	T067 Nasal Surgery
3001 1 C TO	Casualty Receiving	3172 1 C MC	T072 Gynecological Trauma
3001 1 C TT	Casualty Receiving	3177 1 C MC	T077 Eye Basic Tray
3001 1 C TZ	Casualty Receiving	3178 1 C MC	T078 Eyelid, Orbit and Enucleation
3001 1 C FP	Casualty Receiving	3181 1 C MC	T081 Minor Vascular
3003 1 C HZ	Dental/Oral Surgery	3182 1 C MC	T082 Upper Endoscopy (Colonoscope)
3003 1 C MC	Dental/Oral Surgery	3192 1 C MC	T092 Electric Saw (Small Bone)
3003 1 C TO	Dental/Oral Surgery	3194 1 C MC	T094 Genitourinary/Cystoscopic Kit
3003 1 C TT	Dental/Oral Surgery	3195 1 C MC	T095 Fwd Resuscitative Surgery OR Major Basic Set
3003 1 C TZ	Dental/Oral Surgery	3196 1 C MC	T096 Fwd Resuscitative Surgery Cardiovascular/Thoracic
3005 1 C FP	Lab (General)	3197 1 C MC	T097 Fwd Resuscitative Surgery OR Ortho Set
3005 1 C HZ	Lab (General)	3198 1 C MC	T098 Theater Hospitalization-Cervical Surgery Sup.
3005 1 C JT	Lab (General)	3204 1 C MC	Lab Hematology Analyzer Act-Diff
3005 1 C MC	Lab (General)	3204 1 C TO	Lab Hematology Analyzer Act-Diff
3005 1 C TO	Lab (General)	3205 1 C HZ	Lab Coagulation Analyzer
3005 1 C TT	Lab (General)	3205 1 C MC	Lab Coagulation Analyzer
3005 1 C TZ	Lab (General)	3205 1 C TO	Lab Coagulation Analyzer
3006 1 C FP	Lab-Liquid Blood Bank	3205 1 C TT	Lab Coagulation Analyzer
3006 1 C HZ	Lab-Liquid Blood Bank	3205 1 C TZ	Lab Coagulation Analyzer
3006 1 C JT	Lab-Liquid Blood Bank	3206 1 C MC	Lab Chemistry Desktop (Piccolo)
3006 1 C MC	Lab-Liquid Blood Bank	3206 1 C TO	Lab Chemistry Desktop (Piccolo)

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 1 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3006 1 C TO	Lab-Liquid Blood Bank	3206 1 C TZ	Lab Chemistry Desktop (Piccolo)
3006 1 C TT	Lab-Liquid Blood Bank	3209 1 C MC	Lab Toxicology
3006 1 C TZ	Lab-Liquid Blood Bank	3209 1 C TO	Lab Toxicology
3007 1 C MC	Medical Repair Equipment	3211 1 C TO	Lab Micro-Microbiology Processing
3008 1 C HZ	Med Maint Parts and Provisioning	3212 1 C HZ	Lab Micro-Culture and Sensitivity
3008 1 C MC	Med Maint Parts and Provisioning	3212 1 C MC	Lab Micro-Culture and Sensitivity
3009 1 C HZ	Ward, Acute Care	3212 1 C TO	Lab Micro-Culture and Sensitivity
3009 1 C JT	Ward, Acute Care	3212 1 C TZ	Lab Micro-Culture and Sensitivity
3009 1 C MC	Ward, Acute Care	3213 1 C TO	Lab Micro-Serology
3009 1 C TO	Ward, Acute Care	3213 1 C TZ	Lab Micro-Serology
3009 1 C TT	Ward, Acute Care	3222 1 C TO	Lab MTS Ortho Gel
3009 1 C TZ	Ward, Acute Care	3222 1 C TZ	Lab MTS Ortho Gel
3012 1 C MC	X-Ray Mobile (High-Capability)	3325 1 C ST	Base-X Connector, 100 Series to Shelter, Olive Drab
3013 1 C HZ	Radiology Procedure Room	3326 1 C ST	Base-X Connector, 100 Series to Shelter, Tan
3013 1 C MC	Radiology Procedure Room	3327 1 C ST	Base-X Rigid Door With 300 Series Mount, Olive Drab
3013 1 C TO	Radiology Procedure Room	3328 1 C ST	Base-X Rigid Door With 300 Series Mount, Tan
3013 1 C TT	Radiology Procedure Room	3329 1 C ST	Base-X Connector Set, E/E, S/S, Black Out, Tan
3013 1 C TZ	Radiology Procedure Room	3330 1 C ST	Base-X Connector Set, E/E, S/S, Black Out, Olive Drab Green
3014 1 C HZ	Orthopedic Clinic	3331 1 C MC	Operating Room Typical Facilities
3014 1 C MC	Orthopedic Clinic	3332 1 C MC	Central Sterile Room, G-001

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 2 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3014 1 C TO	Orthopedic Clinic	3333 1 C MC	Lab 3:1 Shelter (Outfitted), G-001
3014 1 C TT	Orthopedic Clinic	3334 1 C MC	Medical Repair 3:1 Shelter, G-001
3014 1 C TZ	Orthopedic Clinic	3335 1 C MC	Philips Fluoroscopy X-Ray 2:1 Shelter
3015 1 C HZ	Eye Clinic	3336 1 C MC	Philips Radiographic X-Ray 2:1 Shelter
3015 1 C MC	Eye Clinic	3337 1 C MC	Pharmacy, 2:1 Shelter, H-001
3015 1 C TO	Eye Clinic	3338 1 C MC	Narcotics Vault and Accessories
3016 1 C MC	Gynecology Clinic	3339 1 C MC	Isolation Room, 2:1 Shelter, G-001
3016 1 C TO	Gynecology Clinic	3340 1 C MC	Darkroom Facility X-Ray, 2:1 Shelter
3016 1 C TT	Gynecology Clinic	3341 1 C FS	Food Service-Kitchen, 3:1 Shelter
3016 1 C TZ	Gynecology Clinic	3342 1 C FS	Food Service-Scullery, Shelter 1:1
3017 1 C FP	Sick Call	3343 1 C FS	Food Ser-Equip, Dining/Stow
3017 1 C HZ	Sick Call	3343 1 C HZ	Food Ser-Equip, Dining/Stow
3017 1 C MC	Sick Call	3343 1 C SS	Food Ser-Equip, Dining/Stow
3017 1 C TO	Sick Call	3344 1 C FS	Food Service-Bakery, 2:1 Shelter
3017 1 C TT	Sick Call	3350 1 C MC	Philips Ct Scanner, 2:1 Shelter
3017 1 C TZ	Sick Call	3351 1 C BS	PSD/Admin-Furniture/Consumables
3018 1 C MC	Medical Clinic	3351 1 C JT	PSD/Admin-Furniture/Consumables
3018 1 C TO	Medical Clinic	3351 1 C MC	PSD/Admin-Furniture/Consumables
3018 1 C TZ	Medical Clinic	3354 1 C BS	Post Office Furniture/Consumables
3018 1 C TT	Medical Clinic	3354 1 C JT	Post Office Furniture/Consumables

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 3 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3020 1 C FP	Central Sterile Supply	3359 1 C BS	Barber Shop-Furniture/ Equipment
3020 1 C HZ	Central Sterile Supply	3359 1 C HZ	Barber Shop-Furniture/ Equipment
3020 1 C JT	Central Sterile Supply	3360 1 C JT	Chapel-Collateral Support
3020 1 C MC	Central Sterile Supply	3360 1 C TH	Chapel-Collateral Support
3020 1 C TO	Central Sterile Supply	3363 1 C BF	Duty Section Quarters-Equipment
3020 1 C TT	Central Sterile Supply	3366 1 C BS	General Supply Admin-Equipment
3020 1 C TZ	Central Sterile Supply	3367 1 C BS	Supply Med Admin-Equipment
3021 1 C HZ	Head/Neck Surgery Augment	3370 1 C BS	Supply Shipping/Receiving-Equipment
3021 1 C MC	Head/Neck Surgery Augment	3372 1 C BS	Supply Storage-Fencing
3021 1 C TO	Head/Neck Surgery Augment	3373 1 C FP	30-Day Stock Supplies
3021 1 C TT	Head/Neck Surgery Augment	3373 1 C HZ	30-Day Stock Supplies
3021 1 C TZ	Head/Neck Surgery Augment	3373 1 C JT	30-Day Stock Supplies
3022 1 C HZ	ICU-Recovery	3373 1 C SS	30-Day Stock Supplies
3022 1 C JT	ICU-Recovery	3374 1 C LF	Rations, Break/Lunch/Dinner (30-Days)
3022 1 C MC	ICU-Recovery	3375 1 C FP	Base Supply-Manual/ Publications
3022 1 C TO	ICU-Recovery	3376 1 C BS	General Supply-Equipment
3022 1 C TT	ICU-Recovery	3377 1 C ST	Temper, Anchor Set/Tie Down Kit
3022 1 C TZ	ICU-Recovery	3378 1 C ST	Temper, Bump Thru Door
3024 1 C MC	Operating Microscope Augment	3379 1 C ST	Lightweight Maint. Encl, 25' X 32'
3025 1 C HZ	X-Ray Mobile (Low-Capability)	3380 1 C ST	Temper, End Section, 16 feet
3025 1 C MC	X-Ray Mobile (Low-Capability)	3381 1 C ST	Temper, A/C Section, 16 feet
3025 1 C TT	X-Ray Mobile (Low-Capability)	3382 1 C ST	Temper, Window Section, 16 feet
3026 1 C MC	C-Arm X-Ray Augment	3383 1 C ST	Temper, Door/Window Section, 16 feet

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 4 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3028 1 C HZ	Operating Room (2-Table)	3384 1 C ST	GP Tent Large, 18' X 52', Troop Housing
3028 1 C JT	Operating Room (2-Table)	3385 1 C ST	GP Tent Large, 18' X 52', Admin/Supply
3028 1 C MC	Operating Room (2-Table)	3386 1 C ST	Base-X Connector Set, E/E, E/S, Black Out, Olive Drab Green
3028 1 C TO	Operating Room (2-Table)	3387 1 C ST	TEMPER, Vestibule Section, Single, 10 feet
3028 1 C TT	Operating Room (2-Table)	3388 1 C ST	TEMPER, Vestibule Section, Double, 20 feet
3028 1 C TZ	Operating Room (2-Table)	3389 1 C ST	TEMPER, Vestibule Section, Triple, 30 feet
3030 1 C FP	Operating Room Prep and Hold	3390 1 C ST	Base-X, 103 Shelter, Tan
3030 1 C HZ	Operating Room Prep and Hold	3391 1 C ST	Base-X, 103 Shelter, Green
3030 1 C TO	Operating Room Prep and Hold	3392 1 C ST	Base-X, 303 Shelter, Tan
3030 1 C TT	Operating Room Prep and Hold	3393 1 C ST	Base-X, 303 Shelter, Green
3030 1 C TZ	Operating Room Prep and Hold	3394 1 C ST	Base-X, 305 Shelter, Tan
3031 1 C MC	Oxygen Generator (Dogs)	3395 1 C ST	Base-X, 305 Shelter, Green
3032 1 C HZ	Pharmacy	3396 1 C ST	Base-X 8d36 Dome Tent, 31' X 37', Tan
3032 1 C JT	Pharmacy	3397 1 C ST	Base-X 8d36 Dome Tent, 31' X 37', Green
3032 1 C MC	Pharmacy	3398 1 C ST	Base-X Connector Set, E/E, E/S, Black Out, OD Tan
3032 1 C TO	Pharmacy	3399 1 C ST	Base-X/Temper Boot Connectors, Tan
3032 1 C TT	Pharmacy	3400 1 C ST	Base-X/Temper Connectors, Green
3032 1 C TZ	Pharmacy	3411 1 C EL	Power Assembly A1
3033 1 C HZ	Computerized Tomography	3412 1 C EL	Power Assembly A2
3033 1 C TO	Computerized Tomography	3413 1 C EL	Power Assembly B1
3033 1 C TT	Computerized Tomography	3414 1 C EL	Power Assembly C1, TEMPER
3033 1 C TZ	Computerized Tomography	3415 1 C EL	Power Assembly C2, Gen Tents
3037 1 C HZ	X-Ray Film Processing, Wet	3416 1 C EL	Power Assembly CM1

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 5 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3037 1 C MC	X-Ray Film Processing, Wet	3417 1 C EL	Power Support, 100 amp
3038 1 C MC	Ultrasound System Diagnostic	3418 1 C EL	Power Support, 60 amp
3038 1 C TT	Ultrasound System Diagnostic	3419 1 C EL	Power Support, 30 amp
3038 1 C TZ	Ultrasound System Diagnostic	3420 1 C EL	Power Support, 20 amp
3039 1 C MC	X-Ray Dry Film Processing	3421 1 C BS	Medical Utility Module-Consumables
3039 1 C SL	X-Ray Dry Film Processing	3422 1 C UT	Potable Water Bladder System
3055 1 C HZ	Lab Blood Gas Analyzer	3423 1 C UT	Potable Water Support System
3055 1 C MC	Lab Blood Gas Analyzer	3424 1 C PW	Utility Support Equipment
3055 1 C TO	Lab Blood Gas Analyzer	3425 1 C UT	Wastewater Support System
3056 1 C HZ	Lab Microbiology Augment	3428 1 C BL	Laundry, Furniture/Collateral
3056 1 C JT	Lab Microbiology Augment	3429 1 C HZ	Laundry Supplies
3056 1 C MC	Lab Microbiology Augment	3429 1 C JT	Laundry Supplies
3056 1 C SL	Lab (Micro Augment)	3440 1 C MC	Filtration System, Operating Room
3056 1 C TO	Lab Microbiology Augment	3450 1 C UT	Environmental Control Unit
3056 1 C TT	Lab Microbiology Augment	3474 1 C EL	Electrical Adapter for Sterilizers
3056 1 C TZ	Lab Microbiology Augment	3475 1 C EL	Interior Electrical Support Package
3061 1 C FP	Patient Admin	3477 1 C CV	Communication Shelter
3061 1 C JT	Patient Admin	3479 1 C II	Network Operations Center
3061 1 C MC	Patient Admin	3480 1 C IT	IT Application Server Assembly
3061 1 C TT	Patient Admin	3481 1 C IT	5 Laptop NIPRNET Workstation
3062 1 C MC	Ambulance Support Equipment	3483 1 C IT	IT System Radio Frequency Infrastructure Assembly
3062 1 C TO	Ambulance Support Equipment	3484 1 C IT	SIPRNET Workstation Assembly
3062 1 C TT	Ambulance Support Equipment	3485 1 C IT	IT System Support Assembly
3062 1 C TZ	Ambulance Support Equipment	3486 1 C IT	Wide Area Network Assembly
3063 1 C FP	Preventive Medicine, Facilities	3487 1 C IT	IT Systems Switch Assembly
3063 1 C HZ	Preventive Medicine, Facilities	3489 1 C IT	IT Telecommunication Assembly
3063 1 C JT	Preventive Medicine, Facilities	3490 1 C IT	IT Systems Server Assembly
3063 1 C MC	Preventive Medicine, Facilities	3501 1 C HZ	Builder/Steelworker Shop-Equipment

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 6 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3063 1 C TO	Preventive Medicine, Facilities	3501 1 C PW	Builder/Steelworker Shop-Equipment
3063 1 C TT	Preventive Medicine, Facilities	3504 1 C PW	Central Tool Room Tools Individual
3063 1 C TZ	Preventive Medicine, Facilities	3504 1 C SS	Central Tool Room Tools Individual
3064 1 C MC	Preventive Medicine, Air Detachment	3506 1 C HZ	Electric/Plumbing Shop Equipment
3064 1 C TO	Preventive Medicine, Air Detachment	3506 1 C PW	Electric/Plumbing Shop Equipment
3064 1 C TZ	Preventive Medicine, Air Detachment	3507 1 C HZ	Generator Maint Shop Equipment
3064 1 C HZ	Preventive Medicine, Air Detachment	3507 1 C PW	Generator Maint Shop Equipment
3065 1 C MC	Neurosurgery Augment	3509 1 C JT	Public Works Maintenance Supplies
3065 1 C SL	Neurosurgery Augment	3509 1 C PW	Public Works Maintenance Supplies
3066 1 C MC	Ophthalmological Surgery Augment	3509 1 C SS	Public Works Maintenance Supplies
3066 1 C SL	Ophthalmological Surgery Augment	3510 1 C PW	Public Works-Power Driver (Tent)
3101 1 C MC	T001 Major Basic	3511 1 C HZ	Public Works Maint-Technical Gases
3102 1 C MC	T002 Minor Basic	3511 1 C PW	Public Works Maint-Technical Gases
3104 1 C MC	T004 Minor Procedure (Triage/Wards)	3512 1 C HZ	Public Works-Water Purification
3107 1 C MC	T007 Intestinal	3512 1 C PW	Public Works-Water Purification
3109 1 C MC	T009 Anal/Rectal	3512 1 C TZ	Public Works-Water Purification
3110 1 C MC	T010 Proctoscopy/Sigmoidoscopy	3513 1 C HZ	Public Works-Maintenance Parts
3111 1 C MC	T011 Major Vascular	3513 1 C JT	Public Works-Maintenance Parts
3112 1 C MC	T012 Thoracotomy	3513 1 C PW	Public Works-Maintenance Parts
3114 1 C MC	T014 Bronchoscopy/ Esophagoscopy	3513 1 C SS	Public Works-Maintenance Parts

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 7 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3115 1 C MC	T015 Tracheostomy	3514 1 C PW	Public Works-Admin Equipment
3121 1 C MC	T021 Electric Drill-Small Bone	3515 1 C JT	Public Works-Office Supplies
3123 1 C MC	T023 Oral Maxillofacial Trauma	3515 1 C PW	Public Works-Office Supplies
3125 1 C MC	T025 Oral Maxillofacial Dental	3517 1 C MC	Air Detachment Berthing Equipment
3126 1 C MC	T026 Basic Plastic/Soft Tissue Repair	3518 1 C MC	Air Detachment-Technical Gases
3129 1 C MC	T029 Urology Instruments	3519 1 C PW	Air Detachment Equipment
3130 1 C MC	T030 Urology Endoscopic Accessory	3520 1 C MC	Air Detachment-Co Locker
3131 1 C MC	T031 Dilation and Curettage	3520 1 C PW	Air Detachment-Co Locker
3132 1 C MC	T032 Basic Orthopedic	3522 1 C HZ	Air Detachment Tool Room Tools
3133 1 C MC	T033 K-Wire/Steinmann Pin	3522 1 C PW	Air Detachment Tool Room Tools
3134 1 C MC	T034 Amputation	3523 1 C FF	Flyaway Food
3135 1 C MC	T035 Hand/Tendon/Foot	3541 1 C MC	Kit; 80051; Air Detachment
3136 1 C MC	T036 Arch Bar Insertion Tray	3543 1 C PW	Kit; 80024; Builders/Steel Shop
3145 1 C MC	T045 Fwd Resuscitative Surgery Burr Hole	3542 1 C PW	Kit; 80082; Transportation Shop
3063 1 C TZ	Preventive Medicine, Facilities	3544 1 C PW	Kit; 80004; Builders/Steel Shop
3148 1 C MC	T048 Craniotomy	3545 1 C PW	Kit; 80005; Builders/Steel Shop
3149 1 C MC	T049 Laminectomy	3546 1 C PW	Kit; 80001; Electrical/Plumbing Shop
3150 1 C MC	T050 Craniotome	3547 1 C PW	Kit; 80019; Builders/Steel Shop
3160 1 C MC	T060 Large Retractor	3548 1 C PW	Kit; 83057; Transportation Shop
3161 1 C MC	T061 Bookwalter Retractor System	3550 1 C MC	Kit, Sink Assembly, Utility
3162 1 C MC	T062 Smedberg Drill	3553 1 C MC	Kit; 80010; Air Detachment
3063-A-1-MC	Preventive Medicine Equipment	3554 1 C PW	Kit; 82001; CTR, B-002
3063-A-1-TZ	Preventive Medicine Supplies	3557 1 C PW	Kit; 80008; Builders/Steel Shop
3063-A-1-TO	Preventive Medicine Supplies	3558 1 C PW	Kit; 80062; Electrical/Plumbing Shop
3063-A-1-HZ	Preventive Medicine Supplies	3559 1 C PW	Kit; 80006; Builders/Steel Shop

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 8 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3063-A-1-TT	Preventive Medicine Supplies	3561 1 C PW	Kit; 85002; Electrical/Plumbing Shop
3064-A-1-MC	Air Det-Preventive Medicine Equipment	3565 1 C UT	Kit, Base Camp Head
3064-A-1-TZ	Air Det-Preventive Medicine Supplies	3566 1 C UT	Kit, Wastewater Universal
3064-A-1-TO	Air Det-Preventive Medicine Supplies	3567 1 C UT	Kit, Potable Water Universal
3064-A-1-HZ	Air Det-Preventive Medicine Supplies	3569 1 C WV	Weapons Van (NAVAIR Shelter)
3064-A-1-TT	Air Det-Preventive Medicine Supplies	3571 1 C BL	Kit, Laundry 3:1 Soft Wall
3065-A-1-MC	Neurosurgery Augment Equipment	3572 1 C MC	Kit, Assembly B, Mum
3065-A-1-TZ	Neurosurgery Augment Supplies	3579 1 C TH	Kit, Personnel Berthing (1 Man)
3065-A-1-TO	Neurosurgery Augment Supplies	3581 1 C MC	Kit, LI0301179, Sink (1899) Installation
3065-A-1-HZ	Neurosurgery Augment Supplies	3581 1 C UT	Kit, Sink Installation
3065-A-1-TT	Neurosurgery Augment Supplies	3583 1 C TH	Troop Housing (1 Tent) Furniture
3066-A-1-MC	Ophthalmological Augment Supplies	3602 1 C BF	Base Fire Station Equipment
3066-A-1-TZ	Ophthalmological Augment Supplies	3602 1 C HZ	Base Fire Station Equipment
3066-A-1-TO	Ophthalmological Augment Supplies	3607 1 C HZ	Public Works (Transportation)
3066-A-1-HZ	Ophthalmological Augment Supplies	3607 1 C JT	Public Works (Transportation)
3066-A-1-TT	Ophthalmological Augment Supplies	3607 1 C PW	Accident Investigation Kit
3067-A-1-MC	Operation Stress Control Equipment	3608 1 C PW	Air Compressor Shop Air
3067-A-1-TZ	Operational Stress Control Supplies	3609 1 C PW	Electrical Termination Kit
3067-A-1-TO	Operational Stress Control Supplies	3610 1 C PW	Transportation Forms
3067-A-1-HZ	Operational Stress Control Supplies	3611 1 C PW	Public Works Lifting Equipment
3067-A-1-TT	Operational Stress Control Supplies	3612 1 C PW	Public Works Shop Equipment

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 9 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
3068-A-1-MC	Patient Food Prep and Transport Equip	3613 1 C PW	Public Works Tent Equipment
3614 1 C HZ	Transportation Shop Tools Kit	3697 1 C TA	Norway Tunnel Mechanical Items
3651 1 C PW	Kit; 80012; CTR, B-002	3707 1 C IG	782 Infantry Gear
3655 1 C PW	Kit; 80013; CTR, B-002	3708 1 C CE	CBR Equipment
3663 1 C PW	Kit; 80045; Transportation Shop, B-002	3708 1 C CP	Blockset, Collective Protection
3666 1 C PW	Kit, Six Con Pump/Tank Combo	3708 1 C HZ	CBR Equipment
3668 1 C PW	Kit; 80015; CTR, B-002	3708 1 C TO	CBR Equipment
3669 1 C PW	Kit; 80031, Mechanic Shop Metric Tools	3710 1 C CW	Extreme Cold Weather Gear/Cloth
3690 1 C TA	B-002, CESE Generator 750 kW	3711 1 C CW	Cold Weather, Utilities
3691 1 C TA	B-002, CESE Trailer, Platform	3712 1 C CW	Public Works Snow Removal Kit
3692 1 C TA	B-002, CESE Trailer, Platform	3713 1 C HZ	Kit, Petrol Storage/Dispensing
3693 1 C TA	B-002, CESE Truck, Lift Platform	3713 1 C PW	Kit, Petrol Storage/Dispensing
3695 1 C TA	Norway Tunnel Architecture	3812 1 C PW	Fire Extinguisher, 2.5-gallon, Water
3696 1 C TA	Norway Tunnel Electrical Items	3813 1 C HZ	Fire Extinguisher, 15-pound, CO ₂
3814 1 C HZ	Fire Extinguisher, 50-Pound Wheeled CO ₂	4019 1 C CS	CESE Lubricating Skid
3815 1 C HZ	Fire Extinguisher, 10-Pound ABC Dry Chem	4020 1 C CS	CESE Maintenance Truck
3816 1 C HZ	TAU Extinguishing Agent, ABC Dry Chem	4021 1 C CS	CESE Mod 97 Tool Kit
3817 1 C HZ	CESE Extinguisher, 2.5 Dry Chem	4022 1 C CS	CESE Mod 98 Tool Kit
3818 1 C HZ	Extinguisher, 50-Pound Wheeled Helo Pad	4023 1 C CS	CESE Pump Unit Reciprocating
4000 1 C CS	CESE 60-kW Generator Set	4024 1 C CS	CESE Reefer Unit
4001 1 C CS	CESE 100-kW Generator Set	4025 1 C CS	Kit, LI0301178, Six Con Pump/Tan
4002 1 C CS	CESE Ambulance	4026 1 C CS	CESE Stake Truck
4003 1 C CS	CESE Bus, Amb. Conversion	4027 1 C CS	CESE Trailer, 3/4-ton Cargo

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 10 of 11)

AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE	AMAL/ADAL ASSEMBLAGE	FUNCTIONAL COMPONENT ASSEMBLAGE
4004 1 C CS	CESE Air Compressor/Trailer	4028 1 C CS	CESE Trailer, 400-gallon Water
4005 1 C CS	CESE 20k RTCH Forklift	4029 1 C CS	CESE Trailer, 5,500-gallon Fuel
4006 1 C CS	CESE 25-Ton Tractor	4030 1 C CS	CESE Trailer, 6,000-gallon Water
4007 1 C CS	CESE 25-Ton Tractor	4031 1 C CS	CESE Truck Sewer Pump
4008 1 C CS	CESE 34-Ton Trailer	4032 1 C CS	CESE Vehicle Skid Load
4009 1 C CS	CESE 6-Passenger Pickup	4033 1 C CS	CESE Welding Machine
4010 1 C CS	CESE Cleaner, Steam Pressure	4034 1 C CS	CESE 4k Forklift
4011 1 C CS	CESE Dump Truck	4035 1 C CS	CESE 10 kW Generator
4012 1 C CS	CESE Floodlight Set	4036 1 C CS	CESE Brush Fire Truck
4013 1 C CS	CESE Fuel Truck	4100 1 C CE	CBR Equipment
4014 1 C CS	CESE Grader	4101 1 C CE	CBR Equipment, Radiac Specific
4016 1 C CS	CESE Loader	4102 1 C CE	CBR Equipment, Desert
4017 1 C CS	CESE Lowboy	4103 1 C CE	CBR Equipment
4018 1 C CS	CESE Lube Truck	4105 1 C PW	Utility Support Equipment

Figure A-7. Expeditionary Medical Facility Assemblage List (Sheet 11 of 11)

TRAY NO.	SURGICAL TRAY	TRAY NO.	SURGICAL TRAY
T001	Major Basic	T036	Arch Bar Insertion
T002	Minor Basic	T044	ASIF Instruments/Implants
T004	Minor Surgery	T045	Burr Hole
T007	Intestinal	T048	Craniotomy
T009	Anal/Rectal	T049	Laminectomy
T010	Proto/Sigmoid scope	T050	Craniotomy Set
T011	Major Vascular	T053	Basin Set
T012	Thoracotomy	T060	Large Retractor
T014	Bronchoscopy	T061	Bookwalter Retractor System
T015	Tracheostomy	T062	Smedberg Drill and Bits
T021	Small Bone Drill	T064	Emergency Delivery
T023	Oral Maxillofacial Trauma	T067	Nasal/Local Surgical
T025	Oral Maxillofacial Dental	T069	Vaginal Speculum
T026	Basic Plastics	T072	Gynecological Trauma
T029	Urology Instrument	T077	Eye Basic
T030	Urology Endoscopic Instrument	T078	Eye Lid (Orbit and Nucleation)
T031	Dilation and Curettage	T081	Minor Vascular
T032	Basic Orthopedic	T082	Upper Endoscopy/Colonoscopy Accessory
T033	K-Wire/Steinmann Pin	T092	Electric Saw (Small Bone)
T034	Amputation	T093	External Fixation
T035	Hand/Foot/Tendon	T094	Genitourinary Cystoscope Kit

Figure A-8. Expeditionary Medical Facility Surgical Trays

	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
Blood Storage Capabilities (in units)	60	540	540	600	660

Figure A-9. Expeditionary Medical Facility Blood Bank Capacity

ITEM DESCRIPTION	PALLETS	WEIGHT (POUNDS)	CUBE
Weapons	4	2,400	200
Ammunition			
M16	1	700	44
9mm ACP (100 rounds each)	1	400	20

Figure A-10. Expeditionary Medical Facility Weapons/Ammunition Shipment

A.5 LEADERSHIP

A.5.1 Combatant Command/Operational Control/Tactical Control/Administrative Control Relationships

The following illustrates an example of a deployed EMF chain of command:

1. CCDR. US Central Command exercises combatant command.
2. SCC. US Marine Forces Central Command
3. Operational commander. I Marine Expeditionary Forces has OPCON/TACON
4. Administrative. US Naval Forces Central Command has ADCON.

A.5.2 Steps for Conducting the After Action Review

The AAR focuses directly on tasks and goals and away from the individual. The objective is to discover why something happens in a nonthreatening, nonjudgmental format. Participants are encouraged to contribute important lessons learned in the discussion.

An AAR may be formal or informal. Both follow the same format and involve the exchange of observations and ideas. However, formal AARs are usually more structured and require planning compared to the informal AAR. Informal AARs can be conducted anywhere, anytime, and can provide quick learning lessons. The following are steps for conducting the AAR:

1. Gather all the players.
2. Conduct introduction and explain rules.
3. Review events leading to the activity. (Ask, “What was supposed to happen?”)
4. Give a brief statement of a specific activity.
5. Summarize the key events. Encourage participation.
6. Have junior leaders restate portions of their part of the activity.
7. Do not turn the discussion into a critique or lecture. The following are questions to ask, ideas for discussion, and management techniques:
 - a. Why were certain actions taken?
 - b. How did you/they react to the situation?

- c. When were actions initiated?
- d. In your own point of view, what happened?

The AAR facilitator should:

1. Remain unbiased throughout the review.
2. Attempt to engage all participants.
3. Not allow personal attacks.
4. Focus on learning and continuous improvement.
5. Strive to allow others to offer solutions rather than you offering your own.
6. Ask leading and thought-provoking questions.
7. Exchange lessons learned.
8. Relate events to subsequent results.
9. Explore alternative courses of action that might have been more effective.
10. Handle complaints positively.
11. Emphasize the positive, and point out the difficulties of making tough decisions when the discussion turns to errors made.
12. Summarize the discussion in a closing statement.
13. Allow junior leaders to discuss the events with their people in private.
14. Follow up on needed actions.

A.6 PERSONNEL GUIDELINES

BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
ADMIN/HCA	2300	1800P	ADMIN		1	1	1
ADP SYS DIR/HCA	2300	6201P	ADMIN		1	1	1
CDR/CO SHR ACT	2000	1806S	ADMIN		1	1	1
CHAPLAIN	4100	3740	ADMIN		1	1	
CMD MASTER CHIEF	POCM		ADMIN			1	1
CORPSMAN	HMC	0000	ADMIN		1		
CORPSMAN	HMCS	0000	ADMIN	1		1	1
CORPSMAN-PT ADMIN	HM2	0000	ADMIN		3	2	2
CORPSMAN-PT ADMIN	HM3	0000	ADMIN			2	2
DIETITIAN	2300	1876S	ADMIN		1	1	1
DISBURSING CLERK	DK2		ADMIN		1	1	1
DISBURSING CLERK	DKSN		ADMIN		1	1	1
GEN SUPPLY/HCA	2300	1918	ADMIN	1	1	1	1
OPSMGT MEDFAC/DPHD	2300	1800P	ADMIN				1
PERSONNELMAN	PN2		ADMIN		1		1
POMI/HCA	2300	1805S	ADMIN		1	1	1
PT ADMIN	2300	1801S	ADMIN	1	1	1	1
RELIGIOUS PGM SPLST	RP1		ADMIN			1	
RELIGIOUS PGM SPLST	RP3		ADMIN		1		
SENIOR ENLISTED ADVISOR-ADMIN	HMCS	0000	ADMIN		1	1	
SUPPLY TECHNICIAN	SK1	0000	ADMIN		1	1	

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 1 of 11)

BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
SUPPLY TECHNICIAN	SK2	0000	ADMIN	2	2	2	3
XO SHR ACT	2000	1806S	ADMIN			1	1
YEOMAN	YN3	2514	ADMIN	1	1	1	3
YEOMAN (ADMIN)	YN2	2514	ADMIN		2	2	1
ADV BUILDER	BU1	5907	BOS		1	1	1
ADV CONST ELECTRICIAN	CE2	5635	BOS		1	1	1
ADV CONST ELECTRICIAN	CE1	5635	BOS		1	1	1
ADV CONST MECHANIC	CM1	5805	BOS		1	1	1
ADV CONST MECHANIC	CM2	5805	BOS		1	1	2
ADV ENGINEERING AID	EA2	5503	BOS		1	1	1
ADV EQUIP OPERATOR	EO1	5710	BOS		1	1	1
ADV EQUIP OPERATOR	EO2	5710	BOS		1	1	2
ADV UTILITIESMAN	UT1	6105	BOS		1	1	1
ADV UTILITIESMAN	UT2	6105	BOS		1	1	1
AFLOAT SALES/ SRV MGR	SH2	3131	BOS		1	1	1
BARBER	SH2	3122	BOS		1	2	2
BARBER	SHSN	3122	BOS		1		1
BROADCAST ENG TECH	IC1	4747	BOS				1
BUILDER	BU		BOS	1			
BUILDER	BU2		BOS				1
BUILDER	BU3		BOS		3	2	3
BUILDER	BUCN		BOS			1	5

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 2 of 11)

NTTP 4-02.4

BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
BUILDER	BUCS		BOS		1	1	1
CONST ELECTRICIAN	CE1		BOS	1	1		
CONST ELECTRICIAN	CE2		BOS		1	1	2
CONST ELECTRICIAN	CE3		BOS				1
CONST ELECTRICIAN	CEC		BOS		1	1	1
CONST ELECTRICIAN	CECN		BOS			1	5
CONST MECHANIC	CM2		BOS	1	1	1	2
CONST MECHANIC	CM3		BOS		1		2
CONST MECHANIC	CMC		BOS		1	1	1
CONST MECHANIC	CMCN		BOS			1	5
CULINARY SPEC	CS1	3527	BOS		2	1	1
CULINARY SPEC	CS1		BOS			1	1
CULINARY SPEC	CS2		BOS		1	2	3
CULINARY SPEC	CS2	3527	BOS	1	2	1	1
CULINARY SPEC	CS3	3527	BOS	2	3		
CULINARY SPEC	CS3		BOS			9	7
CULINARY SPEC	CSC		BOS		1	1	1
CULINARY SPEC	CSSN	3527	BOS		10		
CULINARY SPEC	CSSN		BOS			4	16
ELECTRONICS TECH	ET1	1460	BOS				1
ELECTRONICS TECH	ET3		BOS				1

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 3 of 11)

BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
ENGINEERING AID	EA3		BOS		1	1	1
EQUIPMENT OPERATOR	EO2		BOS		1	1	2
EQUIPMENT OPERATOR	EO3		BOS		2	1	2
EQUIPMENT OPERATOR	EOCN		BOS			1	3
EQUIPMENT OPERATOR	EOCS		BOS			1	1
FOOD SVC	3100	1130	BOS		1	1	1
INFO SYS	6420	9582	BOS				1
INFO SYS ADMIN	IT1	2735	BOS		1		
INFO SYS TECH	IT2	2735	BOS	2	1		1
INFO SYS TECH	IT3		BOS				1
MASTER-AT-ARMS	MA1	0000	BOS	1	1	1	
MASTER-AT-ARMS	MA2	0000	BOS		3	2	7
MASTER-AT-ARMS	MA3	0000	BOS		2	3	10
MASTER-AT-ARMS	MAC	0000	BOS	1	1	1	1
MASTER-AT-ARMS	MACS	0000	BOS				1
POSTAL CLERK	PC1		BOS		1	1	1
POSTAL CLERK	PC2		BOS		1	1	1
POSTAL CLERK	PC3		BOS				1
PUBLIC WORKS CHIEF	UCCM		BOS		1	1	1
PW OPS	5100	4255	BOS				1
SHIP SERVICEMAN	SH2		BOS		3	1	1

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 4 of 11)

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BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
SHIP SERVICEMAN	SH3	0000	BOS		4	4	7
SHIP SERVICEMAN	SHCS		BOS		1	1	1
SHIP SERVICEMAN	SHSN	0000	BOS		3		7
SHR REFR and A/C TECH	UT1	6104	BOS		1	1	1
SM ARM MARKS INST	GM1	812	BOS				1
STEELWORKER	SW2		BOS		1	1	1
STEELWORKER	SW3		BOS		1	1	1
STEELWORKER	SWCN		BOS			1	2
STF CIV ENG/PWO	5100	4210	BOS			1	1
STOREKEEPER	SK3		BOS		1	1	1
TRANS SYS TECH	ITC	2379	BOS				1
UTILITIESMAN	UT2		BOS	1			
UTILITIESMAN	UT3		BOS				1
UTILITIESMAN	UTC		BOS				1
UTILITIESMAN	UTCN		BOS		3	2	3
MEDICAL LAB TECH ADVANCED	HM2	8506	FNABB		2	1	3
BIOMED REPAIR ADVANCED TECH	HM2	8478	FNABM		1	1	1
BIOMED REPAIR BASIC TECH	HM3	8479	FNABM		1	1	1
PHARMACIST	2300	0887	FNABP		2	2	4
PHARMACY TECHNICIAN	HM2	8482	FNABP		6	6	12
ADV LAB TECHNICIAN	HM1	8506	FNALA		2	1	3
ADV LAB TECHNICIAN	HM2	8506	FNALA		4	3	3

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 5 of 11)

BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
ADV LAB TECHNICIAN	HM1	8506	FNALB			2	
ADV LAB TECHNICIAN	HM2	8506	FNALB				2
PATHOLOGIST	2100	0150	FNALB		1	1	1
ADV X-RAY TECHNICIAN	HM3	8452	FNAXB		4	2	6
ADV X-RAY TECHNICIAN	HN	8452	FNAXB		2	2	3
ADV X-RAY TECHNICIAN - CT	HM3	8452	FNAXB			2	
RADIOLOGIST	2100	0131	FNAXB		2	2	3
CARDIOLOGIST	2100	0104	FNCGT		1		1
CLINICAL SPEC NURSE	2900	0952	FNCGT		1		1
HOSPITAL CORPSMAN CV	HM2	8408	FNCGT		1		1
COLORECTAL SURGEON	2100	0259	FNCRS		1		1
CARDIO THORACIC SURGEON	2100	0264	FNCVT		1		1
SURGICAL TECHNICIAN	HM2	8483	FNCVT		1		1
CHAIRSIDE ASST	HM2	8701	FNDAT		2	1	3
COMPREHENSIVE DENTIST	2200	0525	FNDAT		2	1	2
FIELD MEDICAL TECH	HM2	8404	FNDAT		2	1	2
DENTAL HYGIENIST	HM2	8708	FNDET				1
PROS LAB TECH	HM2	8753	FNDET				1
DERMATOLOGIST	2100	0111	FNDRT		1	1	1
HOSPITAL CORPSMAN	HM3	8495	FNDRT		1	1	1
STAFF NURSE	2900	0944	FNECW				23
HOSPITAL CORPSMAN	HM2	0000	FNECW				4

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 6 of 11)

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BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
HOSPITAL CORPSMAN	HM2	0000	FNECW				4
HOSPITAL CORPSMAN	HM3	0000	FNECW				8
HOSPITAL CORPSMAN	HN	0000	FNECW				24
ENVIRONMENTAL HEALTH OFFICER	2300	0861	FNEHU		1	1	1
PREV MED TECHNICIAN	HM1	8432	FNEHU		1	1	1
OTORHINOLARYNGOLOGIST	2100	0249	FNENT		1	1	1
OTORHINOLARYNGOLOGY TECH	HM3	8446	FNENT		1	1	1
ER/TRAUMA NURSE	2900	0935	FNERT		2	2	2
ER/TRAUMA PHYSICIAN	2100	0109	FNERT		2	2	2
HOSPITAL CORPSMAN	HM2	0000	FNERT		2	2	2
HOSPITAL CORPSMAN	HM3	0000	FNERT		2	2	2
HOSPITAL CORPSMAN	HN	0000	FNERT		2	2	2
PHYSICIAN ASSISTANT	2300	1893	FNERT		2	2	2
ANESTH/NURSE ANEST	2100-2900	0118/0952	FNGST		4	2	4
GENERAL SURGEON	2100	0214	FNGST		4	2	4
PERIOPERATIVE NURSE	2900	0932	FNGST		4	2	4
SURGICAL /ANEST TECH	HM3	8483	FNGST		4	2	4
SURGICAL TECHNICIAN	HM2	8483	FNGST		8	4	8
CLINICAL SPEC NURSE	2900	0925	FNGYN		2	2	2
HOSPITAL CORPSMAN	HM2	0000	FNGYN		3	3	3
OB GYN PHYSICIAN	2100	0229	FNGYN		1	1	1

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 7 of 11)

BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
ADV LAB TECHNICIAN	HM1	8506	FNH10	1	2	1	2
ANESTH/NURSE ANEST	2100/2900	0118/0952	FNH10	2	4	2	4
BIOMED REPAIR ADVANCED TECH	HM1	8478	FNH10	1	2	1	2
CRITICAL CARE NURSE	2900	0904	FNH10	4	8	4	8
ER/TRAUMA NURSE	2900	0906	FNH10	1	2	1	2
ER/TRAUMA PHYSICIAN	2100	0109	FNH10	1	2	1	2
FAMILY PRACTICE PHYSICIAN	2100	0108	FNH10	1	3	1	
GENERAL SURGEON	2100	0214	FNH10	1		1	
HOSPITAL CORPSMAN	HM2	0000	FNH10	3	6	3	6
HOSPITAL CORPSMAN	HM3	0000	FNH10	7	14	7	14
HOSPITAL CORPSMAN	HN	0000	FNH10	2	4	2	4
INTERNAL MEDICINE	2100	0104	FNH10	1	2	1	2
MED SURG NURSE	2900	0925	FNH10	3	3	3	6
ORTHO CAST ROOM TECH	HM2	8489	FNH10	1	2	1	2
ORTHO SURGEON	2100	0244	FNH10	1	2	1	2
PERIOPERATIVE NURSE	2900	0932	FNH10	2	4	2	4
PHARMACY TECHNICIAN	HM2	8482	FNH10	1	2	1	2
PREV MED TECHNICIAN	HM1	8432	FNH10	1	2	1	2
RESPIRATORY THERAPY TECHNICIAN	HM1	8541	FNH10	1	2	5	2
RESPIRATORY THERAPY TECHNICIAN	HM2	8541	FNH10	1	2	1	2

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 8 of 11)

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BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
SURGICAL TECHNICIAN	HM2	8483	FNH10	5	10		10
ADV X-RAY TECHNICIAN	HM2	8452	FNH10	1	2	1	2
CRITICAL CARE NURSE	2900	0904	FNICU		12	12	36
HOSPITAL CORPSMAN	HM2	0000	FNICU		4	2	12
HOSPITAL CORPSMAN	HM3	0000	FNICU		10	5	30
INTERNAL MED CC SPEC	2100	0101	FNICU		2	2	6
RESPIRATORY THERAPY TECH	HM1	8541	FNICU		2	2	6
RESPIRATORY THERAPY TECH	HM2	8541	FNICU		2	2	6
RESPIRATORY THERAPY TECH	HM3	8541	FNICU		2	2	6
FAMILY PRACTICE PHYSICIAN	2100	0108	FNICW		3	5	7
HOSPITAL CORPSMAN	HM2	0000	FNICW		3	5	7
HOSPITAL CORPSMAN	HM3	0000	FNICW		9	15	21
HOSPITAL CORPSMAN	HN	0000	FNICW		18	30	42
MED SURG NURSE	2900	0925	FNICW		12	20	28
HOSPITAL CORPSMAN	HM3	8506	FNIDZ		1		1
INFECTIOUS DISEASE	2100	0104	FNIDZ		1		1
CLINICAL PSYCH	2300	0851	FNMHA		1	2	2
PSYCHIATRIC NURSE	2900	0925	FNMHA		1	2	2
PSYCHIATRY TECHNICIAN	HM2	8485	FNMHA		4	8	6
PSYCHIATRY, GENERAL	2100	0115	FNMHA		2	4	2
PREV MEDICINE OFFICER	2100	0160	FNMPM				1
PREV MED TECHNICIAN	HM2	8432	FNMPM				1

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 9 of 11)

BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
CLINICAL SPEC NURSE	2900	0925	FNNAT		1	1	1
NEUROSGN	2100	0224	FNNAT		1	1	1
SURGICAL TECHNICIAN	HM2	8483	FNNAT		1	1	1
HOSPITAL CORPSMAN-EEG	HM3	8454	FNNLT		1	1	1
NEUROLOGIST	2100	0121	FNNLT		1	1	1
CLINICAL SPEC NURSE	2900	0952	FNNPT		1		1
HOSPITAL CORPSMAN HEMODIALYSIS	HM2	8434	FNNPT		1		1
NEPHROLOGIST	2100	0104	FNNPT		1		1
OCULAR TECH	HM3	8445	FNOPT		1	1	1
OPHTHALMOLOGIST	2100	0234	FNOPT		1	1	1
ORAL SURGEON	2200	0550	FNOST		2	1	2
SURGICAL TECHNICIAN	HM2	8783	FNOST		2	1	2
OPTICIAN	HM3	8463	FNOTT				1
OPTOMETRIST	2300	880	FNOTT				1
SURGICAL TECHNICIAN	HM3	8783	FNBPT				2
FAMILY NURSE PRACTITIONER	2900	0925	FNPCT		2	2	3
HOSPITAL CORPSMAN	HN	0000	FNPCT		1	2	3
PHYSICIAN ASSISTANT	2300	1893	FNPCT		2	2	3
PODIATRIST	2300	0892	FNPDT				1
CLINICAL SPEC NURSE	2900	0944	FNPED				1
HOSPITAL CORPSMAN	HM2	0000	FNPED				2
PEDIATRICIAN	2100	0105	FNPED				1

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 10 of 11)

BILLET TITLE	SKILL	PNOBC/ PNEC	SECTION	10 BEDS	81 BEDS	116 BEDS	273 BEDS
PEDS NURSE PRACTITIONER	2900	0944	FNPED				1
PHYSICAL THERAPIST	2300	0873	FNPTT		1	1	1
PT TECH	HM1	8466	FNPTT		1	1	1
PT TECH	HM2	8466	FNPTT		1	1	1
PERIVASCULAR SURGEON	2100	0214	FNPVS				1
UROLOGIST	2100	0269	FNURT		1	1	1
UROLOGY TECHNICIAN	HM3	8486	FNURT		1	1	1
TOTAL STAFF					380	341	676

Figure A-11. Expeditionary Medical Facility Staffing Matrix A (Sheet 11 of 11)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
COMMANDER/CO SHORE ACTIVITY	HQ	2000	9421	1806S	1
XO SHR ACT	HQ	2000	9436	1806S	1
COMMAND MASTER CHIEF	HQ	POCM			1
ADMIN/ HCA	DFA	2300	2615	1800P	1
INST ACAD	DFA	2900	3251	3150P	1
ADP SYS DIR/HCA	DFA	2300	9705	6201P	1
PAO	DFA	1650	2412		1
POMI/HCA	DFA	2300	0031	1805S	1
CORPSMAN	DFA	HMCS			1
INFO SYS ADMIN	DFA	ITC	2735		1
SNAP I/COMP SYS MANT	DFA	ET1	1678		1
INFO SYS ADMIN	DFA	IT1	2735		1
JOURNALIST	DFA	JO1			1
LEGALMAN	DFA	LN1			1
DISB	DISB	3100	1045		1
AFLT/AUTO SYS SPEC	DISB	DKC	2905		1
AFLT/AUTO SYS SPEC	DISB	DK1	2905		1
DISBURSING CLERK	DISB	DK2			1
DISBURSING CLERK	DISB	DK3			1
DISBURSING CLERK	DISB	DKSN			1
PERS	PERS	2300	3965	3130P	1

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 1 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
PERSONNELMAN/LCPO	PERS	PNC			1
PERSONNELMAN	PERS	PN1			1
PERSONNELMAN	PERS	PN2			1
PERSONNELMAN	PERS	PN3			1
PERSONNELMAN	PERS	PNSN			2
YEOMAN	PERS	YNC			1
YEOMAN	PERS	YN1			1
YEOMAN	PERS	YN2			1
YEOMAN	PERS	YN3			1
STAFF CIV ENG/PWO	PW	5100	4210		1
PW OPS	PW	5100	4255		1
BUILDER	PW	BUCS			1
SAFETY INSPECTOR	PW	BUC	6021		1
ADV BUILDER	PW	BU1	5907		1
BUILDER	PW	BU2			1
BUILDER	PW	BU3			6
BUILDER	PW	BUCN			6
CONST ELECTRICIAN	PW	CEC			1
ADV CONST ELECTRICIAN	PW	CE1	5635		2
CONST ELECTRICIAN	PW	CE2			3
ADV CONST ELECTRICIAN	PW	CE2	5635		1
CONST ELECTRICIAN	PW	CE3			2

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 2 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
CONST ELECTRICIAN	PW	CECN			7
CONST MECHANIC	PW	CMC			1
ADV CONST MECHANIC	PW	CM1	5805		2
CONST MECHANIC	PW	CM2			3
ADV CONST MECHANIC	PW	CM2	5805		3
CONST MECHANIC	PW	CM3			4
CONST MECHANIC	PW	CMCN			7
ADV ENGINEERING AID	PW	EA2	5503		2
ENGINEERING AID	PW	EA3			2
EQUIPMENT OPERATOR	PW	EOCS			1
EQUIPMENT OPERATOR	PW	EOC			1
EQUIPMENT OPERATOR	PW	EO1			1
ADV EQUIP OPERATOR	PW	EO1	5710		1
EQUIPMENT OPERATOR	PW	EO2			3
ADV EQUIP OPERATOR	PW	EO2	5710		3
EQUIPMENT OPERATOR	PW	EO3			3
EQUIPMENT OPERATOR	PW	EOCN			6
STEELWORKER	PW	SW2			2
STEELWORKER	PW	SW3			2
STEELWORKER	PW	SWCN			2
STOREKEEPER	PW	SK3			2
PUBLIC WORKS CHIEF	PW	UCCM			1

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 3 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
UTILITIESMAN	PW	UTC			1
SHR REFR and A/C TECH	PW	UT1	6104		1
ADV UTILITIESMAN	PW	UT1	6105		1
SHR REFR and A/C TECH	PW	UT2	6104		1
ADV UTILITIESMAN	PW	UT2	6105		2
UTILITIESMAN	PW	UT3			1
UTILITIESMAN	PW	UTCN			5
YEOMAN	PW	YN3			2
PT ADMIN/DPHD	PAD	2300	0808	1801R	1
PT ADMIN	PAD	2300	0808	1801S	1
CORPSMAN	PAD	HMC	0000		2
CORPSMAN	PAD	HM1	0000		5
CORPSMAN	PAD	HM2	0000		4
CORPSMAN	PAD	HM3	0000		10
OPSMGT MEDFAC/DPHD	OPMAN	2300	0820	1800P	1
INFO SYS	OPMAN	6420	9582		1
SURF COMM SYS TECH	OPMAN	ET2	1420		1
ELECTRONICS TECH	OPMAN	ET3			1
COMSEC DEVICE TECH	OPMAN	ET1	1460		1
INFO SYS TECH	OPMAN	IT2			1
INFO SYS TECH	OPMAN	IT3			2
TRANS SYS TECH	OPMAN	ITC	2379		1

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 4 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
TRANS SYS TECH	OPMAN	IT1	2379		1
SM ARM MARKS INST	OPMAN	GM1	0812		1
SM ARM MARKS INST	OPMAN	GM2	0812		1
BROADCAST ENG TECH	OPMAN	IC1	4747		1
MASTER-AT-ARMS	OPMAN	MACS			1
MASTER-AT-ARMS	OPMAN	MAC			1
MASTER-AT-ARMS	OPMAN	MA1			2
MASTER-AT-ARMS	OPMAN	MA2			4
HOSPITALMAN/SECURITY	OPMAN	HN	0000		31
GEN SUP/DPHD	MMD	3100	1918	1302S	1
GEN SUP/HCA	MMD	2300	1918	1802S	1
CORPSMAN	MMD	HMC	0000		1
CORPSMAN	MMD	HM1	0000		1
CORPSMAN	MMD	HM2	0000		2
CORPSMAN	MMD	HM3	0000		2
ADV BMET	MMD	HMC	8478		1
ADV BMET	MMD	HM1	8478		3
ADV BMET	MMD	HM2	8478		3
SK/SNAP II/SFM SUPV	MMD	SKCS	2820		1
STOREKEEPER	MMD	SKC			1
STOREKEEPER	MMD	SK1			1
SK/SNAP II/SFM	MMD	SK1	2814		2

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 5 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
STOREKEEPER	MMD	SK2			4
STOREKEEPER	MMD	SK3			2
STOREKEEPER	MMD	SKSN			6
POSTAL CLERK	MMD	PC1			1
POSTAL CLERK	MMD	PC2			2
POSTAL CLERK	MMD	PC3			3
HOSPITALMAN/OPS MGT	MMD	HN	0000		12
GEN SUP/HCA/DPHD	SUP	2300	1918	3121P	1
STOREKEEPER	SUP	SKC			1
FOOD SVC	MESS	3100	1130		1
DIETITIAN	MESS	2300	0876	1876S	1
CULINARY SPEC	MESS	CSC			1
CULINARY SPEC	MESS	CS1	3527		2
CULINARY SPEC	MESS	CS1			2
CULINARY SPEC	MESS	CS2	3527		2
CULINARY SPEC	MESS	CS2			6
CULINARY SPEC	MESS	CS3			10
CULINARY SPEC	MESS	CSSN			29
CULINARY SPEC	MESS	CSCS	3529		2
SHIP SERVICEMAN	SUP	SHCS			1
AFLOAT SALES SRV MGR	SUP	SH1	3131		1
SHIP SERVICEMAN	SUP	SH2			2

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 6 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
AFLOAT SALES/SRV MGR	SUP	SH2	3131		1
BARBER	SUP	SH2	3122		4
SHIP SERVICEMAN	SUP	SH3			2
SHIP SERVICEMAN	SUP	SHSN			5
BARBER	SUP	SHSN	3122		2
DIR HS/PGM/DNS	DNS	2900	0005	1901P	1
CORPSMAN	DNS	HMCS	0000		1
STAFF NRS/DPHD	MEDSURG N	2900	0944	1910P	1
STAFF NRS/DIVO	MEDSURG N	2900	0944	1910P	7
CLIN SPEC NRS/PSYCH	MEDSURG N	2900	0925	1930P	1
CLIN SPEC NRS	MEDSURG N	2900	0925	1910P	1
STAF NRS	MEDSURG N	2900	0944	1910S	10
STAF NRS/PSYCH	MEDSURG N	2900	0944	1930S	1
STAF NRS/PSYCH	MEDSURG N	2900	0944	1930S	2
STAF NRS	MEDSURG N	2900	0944	1900E	14
CORPSMAN	MEDSURG N	HMC	0000		1
PSYCH TECH	MEDSURG N	HM2	8485		3
PSYCH TECH	MEDSURG N	HN	8485		5
CORPSMAN	MEDSURG N	HM1	0000		1
CORPSMAN	MEDSURG N	HM2	0000		5
CORPSMAN	MEDSURG N	HM3	0000		12
HOSPITALMAN	MEDSURG N	HN	0000		30

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 7 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
STAF NRS/DPHD	SURG N	2900	0944	1910P	1
STAF NRS/DIVO	SURG N	2900	0944	1910P	7
CLIN SPEC NRS	SURG N	2900	0925	1910P	1
STAF NRS	SURG N	2900	0944	1910R	7
STAF NRS	SURG N	2900	0944	1900E	14
CORPSMAN	SURG N	HMC	0000		1
CORPSMAN	SURG N	HM1	0000		1
CORPSMAN	SURG N	HM2	0000		6
CORPSMAN	SURG N	HM3	0000		14
HOSPITALMAN	SURG N	HN	0000		35
CC NRS/DPHD	CC N	2900	0904	1960P	1
CC NRS/DIVO	CC N	2900	0904	1960P	3
CC NRS/CLIN SPEC	CC N	2900	0904	1960P	1
CC NRS	CC N	2900	0904	1960R	46
CORPSMAN	CC N	HMC	0000		1
CORPSMAN	CC N	HM1	0000		1
CORPSMAN	CC N	HM2	0000		4
CORPSMAN	CC N	HM3	0000		15
HOSPITALMAN	CC N	HN	0000		56
PERIOP NRS/DPHD	OR N	2900	0932	1950P	1
PERIOP NRS	OR N	2900	0932	1950P	2
PERIOP NRS	OR N	2900	0932	1950R	11

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 8 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
CORPSMAN	OR N	HMC	0000		1
SURG TECH	OR N	HM1	8483		1
SURG TECH	OR N	HM2	8483		6
SURG TECH	OR N	HM3	8483		16
CC NRS/DIVO	PRE POST N	2900	0904	1960P	1
CC NRS	PRE POST N	2900	0904	1960S	6
CORPSMAN	PRE POST N	HM1	0000		1
CORPSMAN	PRE POST N	HM3	0000		5
HOSPITALMAN	PRE POST N	HN	0000		7
PERIOP NRS/DIVO	CSR	2900	0932	1950P	1
CORPSMAN	CSR	HM3	0000		6
SURG TECH	CSR	HM1	8483		2
SURG TECH	CSR	HM2	8483		2
SURG TECH	CSR	HM3	8483		2
DIR HS/PGM/INTERNIST	DMS	2100	0005	16R0K	1
CORPSMAN	DMS	HMCS	0000		1
INTERNIST/DPHD	INT MED	2100	0101	16R0K	1
INTERNIST	INT MED	2100	0101	16R0J	3
INTERNIST/CC	INT MED	2100	0101	16R1J	4
INTERNIST/CARDIO	INT MED	2100	0101	16R1K	2
INTERNIST/INF DIS	INT MED	2100	0101	16R1K	1
INTERNIST/NEPH	INT MED	2100	0101	16R1K	1

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 9 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
MED DPT STF/PHYSICAL MEDICINE (PM&R)	INT MED	2100	0002	15L0J	1
PEDIATRICIAN	INT MED	2100	0105	16V0J	1
ANESTHESIOLOGIST	INT MED	2100	0118	15B0J	2
FAM PHYS	INT MED	2100	0108	16Q0K	1
FAM PHYS/SP MED	INT MED	2100	0108	16Q1J	1
FAM PHYS	INT MED	2100	0108	16Q0J	1
DERMATOLOGIST	INT MED	2100	0111	16N0K	1
NEUROLOGIST	INT MED	2100	0121	16T0K	1
PHYSICIAN ASST	INT MED	2300	0113	1893E	2
PC NRS PRAC/FNP	INT MED	2900	0963	1976Q	2
CORPSMAN	INT MED	HMC	0000		1
CORPSMAN	INT MED	HM1	0000		1
CORPSMAN	INT MED	HM2	0000		1
CORPSMAN	INT MED	HM3	0000		2
HOSPITALMAN	INT MED	HN	0000		2
DERM TECH	INT MED	HM3	8495		1
CV TECH	INT MED	HM2	8408		2
RES THER TECH	INT MED	HM1	8541		1
RES THER TECH	INT MED	HM2	8541		3
RES THER TECH	INT MED	HM3	8541		4
PSYCHIATRIST/DPHD	MENTAL	2100	0115	16X0K	1
PSYCHIATRIST	MENTAL	2100	0115	16X0J	1

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 10 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
CLIN PSYCH	MENTAL	2300	0851	1840D	1
PYSCH TECH	MENTAL	HM2	8485		1
PSYCH TECH	MENTAL	HM3	8485		1
EMERG MED SPEC/DPHD	ER	2100	0109	16P0K	1
EMERG MED SPEC	ER	2100	0109	16P0J	3
FAM PHYS	ER	2100	0108	16Q0K	1
FAM PHYS	ER	2100	0108	16Q0J	3
PHYSICIAN ASST	ER	2300	0113	1893E	2
EMERG-TRAUMA NRS/DO	ER	2900	0906	1945P	2
EMERG-TRAUMA NRS	ER	2900	0906	1945R	4
CORPSMAN	ER	HMC	0000		1
CORPSMAN	ER	HM1	0000		2
CORPSMAN	ER	HM2	0000		10
CORPSMAN	ER	HM3	0000		20
HOSPITALMAN	ER	HN	0000		17
PREV MED/DPHD	PREV MED	2100	0160	15K0J	1
ENVR HLT OFF	PREV MED	2300	0861	1860P	1
PREV MED TECH	PREV MED	HMC	8432		1
PREV MED TECH	PREV MED	HM1	8432		1
PREV MED TECH	PREV MED	HM2	8432		1
DIR HS/PGM/DSS	DSS	2100	0005	15C0K	1
CORPSMAN	DSS	HMCS	0000		1

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 11 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
GEN SGN/DPHD	SURG	2100	0214	15C0K	1
GEN SGN	SURG	2100	0214	15C0J	1
GEN SGN/VASCULAR	SURG	2100	0214	15C1K	1
GEN SGN/TRAUMA	SURG	2100	0214	15C1K	1
NEUROSGN	SURG	2100	0224	15D0J	2
PLASTIC SGN	SURG	2100	0254	15C1K	1
C/RECTAL SGN	SURG	2100	0259	15C1K	1
THOR and CDV SGN	SURG	2100	0264	15C1J	1
CORPSMAN	SURG	HM1	0000		1
CORPSMAN	SURG	HM2	0000		2
CORPSMAN	SURG	HM3	0000		4
ORTHOPEDIC SGN/DPHD	ORTHO	2100	0244	15H0K	1
ORTHOPEDIC SGN	ORTHO	2100	0244	15H0J	2
ORTHOPEDIC SGN/HAND	ORTHO	2100	0244	15H1K	1
ORTHOPEDIC SGN/SPINE	ORTHO	2100	0244	15H1K	1
ORTHOPEDIC SGN/TRAU	ORTHO	2100	0244	15H1K	1
PODIATRIST	ORTHO	2300	0892	1892P	1
CAST RM TECH	ORTHO	HM2	8489		2
CAST RM TECH	ORTHO	HM3	8489		4
OBSTR-GYN/DPHD	OB GYN	2100	0229	15E0K	1
CORPSMAN	OB GYN	HM2	0000		1
CORPSMAN	OB GYN	HM3	0000		1

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 12 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
OPHTHALMOLOGIST/DPHD	OPHT	2100	0234	15G0K	1
OPHTHALMOLOGIST	OPHT	2100	0234	15G0J	1
OPTOMETRIST	OPHT	2300	0880	1880P	1
OCULAR TECH	OPHT	HM1	8445		1
OCULAR TECH	OPHT	HM2	8445		1
OPTICIAN	OPHT	HM3	8463		1
UROLOGIST/DPHD	UROL	2100	0269	15J0K	1
UROLOGY TECH	UROL	HM2	8486		1
OTOLARYNGOLOGIST/DPHD	ENT	2100	0249	15I0K	1
ENT TECH	ENT	HM2	8446		1
ANESTHESIOLOGIST/DPHD	ANEST	2100	0118	15B0K	1
ANESTHESIOLOGIST	ANEST	2100	0118	15B0K	2
ANESTHESIOLOGIST	ANEST	2100	0118	15B0J	1
NRS ANESTH	ANEST	2900	0952	1972Q	6
ORAL MAX SGN/DPHD	DENTAL	2200	0550	1750J	1
COMPRE DENT	DENTAL	2200	0525	1725J	2
ORAL MAX SGN	DENTAL	2200	0550	1750J	1
CORPSMAN	DENTAL	HMC	0000		1
CHAIRSIDE ASST	DENTAL	HM3	8701		2
PROS TECH	DENTAL	HM2	8753		1
SURG TECH	DENTAL	HM1	8783		1
SURG TECH	DENTAL	HM2	8783		3

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 13 of 15)

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TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
FIELD MEDICAL TECH	DENTAL	HM3	8404		2
SUPV CHAPLAIN	DPC	4100	3740		1
CHAPLAIN	DPC	4100	3701		1
RELIGIOUS PGM SPLST	DPC	RP1			1
RELIGIOUS PGM SPLST	DPC	RP3			1
DIR HS/PGM/RAD DIAG	DAS	2100	0005	16Y1K	1
CORPSMAN	DAS	HMCS	0000		1
PATHLGIST/DPHD	LAB	2100	0150	15M0K	1
MED TECH	LAB	2300	0866	1865P	2
MED TECH	LAB	2300	0866	1865E	1
MED LAB TECH	LAB	HMC	8506		1
MED LAB TECH	LAB	HM1	8506		4
MED LAB TECH	LAB	HM2	8506		12
MED LAB TECH	LAB	HM3	8506		13
BIOMED PHOTO	LAB	HM2	8472		1
PHARMACIST/DPHD	PHARM	2300	0887	1887P	1
PHARMACIST/CLINICAL	PHARM	2300	0887	1888P	3
PHARM TECH	PHARM	HMC	8482		1
PHARM TECH	PHARM	HM1	8482		2
PHARM TECH	PHARM	HM2	8482		3
PHARM TECH	PHARM	HM3	8482		5
PHYS THERAPIST/DPHD	PT	2300	0873	1873P	1

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 14 of 15)

TITLE	OFFICE	RATE DESIG	PNEBC PNOBC	PSUB	STAFF
PHYS THERAPIST	PT	2300	0873	1873P	1
PT TECH	PT	HM1	8466		2
PT TECH	PT	HM2	8466		2
PT TECH	PT	HM3	8466		2
RADIOL DIAG/DPHD	RAD	2100	0131	16Y0K	1
ADV X-RAY	RAD	HMC	8452		1
ADV X-RAY	RAD	HM1	8452		2
ADV X-RAY	RAD	HM2	8452		9
ADV X-RAY	RAD	HM3	8452		2
TOTAL STAFF					982

Figure A-12. Expeditionary Medical Facility Staffing Matrix B (Sheet 15 of 15)

A.7 FACILITIES

	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
EMF CONTAINERS					
Number of Containers per EMF	8	120	159	228	385
Approximate Total Cube (in cubic feet)	10,880	162,480	224,560	318,240	530,880
Approximate Total Weight, Excluding CESE (pounds)	90,000	1,332,640	1,755,480	2,501,340	4,292,026
CESE					
Number of CESE	1	49	55	55	107
Approximate Total Cube (in cubic feet)	670	80,786	85,878	85,878	166,664
Approximate Total Weight (pounds)	2,800	732,914	802,919	802,919	1,535,135

Figure A-13. Expeditionary Medical Facility TUCHA Data Matrix

EMF SITE REQUIREMENTS	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
GENERAL SITE ACREAGE REQUIREMENTS:		(acres)	(acres)	(acres)	(acres)
Medical Core (Note: Max Slope 2% Grade)	0.5	1.65	2.88	4.11	6.02
Food Service		0.52	0.52	0.52	0.89
Troop Housing		1.83	2.60	3.57	6.32
Laundry/Base Support		0.17	0.17	0.17	0.36
Public Works		0.21	0.21	0.21	0.37
Container Staging Area		0.65	0.65	0.65	0.65
Supply Storage Area		0.40	0.86	0.86	0.86
Hazardous Storage Area		0.15	0.15	0.15	0.72
Bladder Fuel System Storage		0.56	0.56	0.56	0.56
Total of Component Areas		0.63	0.63	0.63	0.63
Site Area Required (Total Acreage)		19.41	23.9	30.72	32.06
MEDICAL CARE CAPABILITIES:	Each	Each	Each	Each	Each
Intensive Care Beds	4	21	21	63	84
Acute Care Beds	6	60	90	210	420
Total Bed Capacity	10	81	111	273	504
Operating Room Tables	1	2	2	4	6
STAFF:	Each	Each	Each	Each	Each
Medical/Support Staff	40	282	299	488	882
Naval Construction Force (CBMU)	4	41	59	59	100
Total	44	323	358	547	982

Figure A-14. Expeditionary Medical Facility Site Requirements and Bed/Operating Room/Staff Capacity

TENT SHELTERS	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
General Purpose Tent		32	36	48	83
Maintenance Tent		3	3	3	6
Lightweight Maintenance Enclosures		7	7	7	
Circus Tent					1
BASE-X MODEL 305 TENT	10				
BASE-X MODEL 103 TENT	2				
Number of TEMPER Tent Sections					
Acute Care Wards		13	48	126	182
Intensive Care Units		13	16	16	64
Surgical Suite		13	18	18	18
Prep and Dental			13	13	13
Medical Support		13	13	13	13
Casualty Receiving		13	14	14	14
Specialty Treatment		13	13	13	13
Patient Admin			15	15	15
PSD Admin		13			13
Food Service Dining		11	11	11	22
Food Service Storage		4	4	4	8
Oxygen Generation		2	4	4	6
Environmental Storage					6
Total TEMPER Sections		108	169	247	387

Figure A-15. Expeditionary Medical Facility Tent Shelters Matrix

	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
OUTFITTED ISO AND SHELTERS					
NOC Van 1:1					1
Central Sterilization Room Shelter 2:1		1	1	2	3
Isolation Room			1	1	1
Darkroom Shelter 2:1			1	1	1
Kitchen Shelter 3:1		1	1	1	2
Laboratory Shelter (3:1 typical)			1	1	2
Medical Repair Shelter 3:1			1	1	1
Morgue Refrigeration Unit ISO		1	2	1	2
Operating Room Shelter 3:1		1	1	2	3
Pharmacy Shelter 2:1			1	1	1
Refrigeration Unit ISO		1	1	2	3
Sanitizer ISO		1	1	1	2
Weapons and Forms Shelter 1:1			1	1	1
X-Ray Shelter 2:1		1	1	1	2
CONTAINER					
Average Number of Containers per Hospital	8	120	159	228	385
Approximate Total Cube (in cubic feet)	10,880	162,480	224,560	318,240	530,880
Approximate Total Weight (in pounds)	90,000	1,332,640	1,755,480	2,501,340	4,292,026

Figure A-16. Expeditionary Medical Facility Outfitted Shelter Matrix

POWER GENERATION - 100 kW GENERATOR	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
Medcore		4	6	8	12
Troop Housing		1	1	2	4
Food Service		1	1	1	2
Laundry		1	1	1	2
Base Operation Support Area (Power/Supply)		1	1	1	2
O ₂ Generation		1	1	1	2
Spare					3
60-kW GENERATOR	2				

Figure A-17. Expeditionary Medical Facility Electrical Generator Requirements Matrix

	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
POTABLE WATER STORAGE REQUIREMENTS (3 DAY SUPPLY)	4,300	34,300	42,100	84,600	153,800
2,500-Gallon Polly Tank, Potable Water ISO Container		37,500	47,500	70,000	117,500
6,000-Gallon Tanker		12,000	12,000	12,000	36,000
400-Gallon Water Bull	400	800	1,200	1,200	2,000
Total Potable Water Storage Capacity	400	50,300	60,700	83,200	155,500
POTABLE WATER ISO (2500 GALLONS PER UNIT)					
Medcore	1	5	7	11	17
Food Service		3	3	3	6
Troop Housing		5	6	11	18
Laundry		2	2	2	5
Public Works		1	1	1	1
Total Units	1	16	19	28	47
WASTEWATER STORAGE REQUIREMENTS (3 DAYS, 72 HOURS)	4,300	34,300	42,100	84,600	153,800
Wastewater ISO Container		42,000	54,000	78,000	129,000
2,000-Gallon Sewage Truck		4,000	4,000	4,000	4,000
Total Wastewater Storage Capacity (2 days, 48 hours)		46,000	58,000	82,000	133,000
WASTEWATER ISO (3,000 GALLONS PER UNIT)					
Medcore	1	5	7	11	17
Food Service		3	3	3	6
Troop Housing		4	5	9	14
Laundry		2	3	3	5
Public Works					1
Total Units	1	14	18	26	43

Figure A-18. Expeditionary Medical Facility Potable and Wastewater Requirements Matrix

	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
BASE CAMP HEAD ISO					
Medcore		1	1	2	4
Food Service		1	1	1	2
Troop Housing		4	5	9	15
Total BCH		6	7	12	21
MEDICAL UTILITY MODULE (MUM) SHELTER/ ISO "A"		4	4	9	14
Sewage Ejectors to Support BCH and MUM Equipment		19	23	32	55

Figure A-19. Expeditionary Medical Facility Staff and Patient Shower/Head Facility Requirements

UTILITIES SUPPORT EQUIPMENT	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 EDS
Air Conditioner/Heater Unit 120 kBtu	4	27	32	43	79
Laundry Shelter 3:1		1	1	1	2
Oil Fired Heater 416 kBtu		3	3	3	8
Water Heater (M-80) Portable		2	2	3	4

Figure A-20. Expeditionary Medical Facility Heating and Air Conditioning Requirements

DIESEL FUEL (ALL PURPOSE)	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
Diesel Fuel Requirements Breakdown (gallons per day)	108	3,640	6,776	6,776	12,149
CESE	108	4,883	5,914	5,914	10,264
Kitchen Equipment		50	50	50	101
Laundry					302
416K Btu Duct Heaters		171	171	171	342
120K Btu Water Heater		49	49	49	66
45K Btu Space Heater		481	592	592	1,074
Diesel Fuel Storage Requirements (3 days)	324	10,920	15,531	21,687	36,447
Diesel Fuel Storage Capacity Breakdown					
Fuel Tank Quantities (900 gal/unit)		9,000	9,000	9,000	18,000
Medcore		2	4	5	7
Troop Housing		1	1	1	3
Food Service		2	1	1	3
Laundry		1	1	1	2
Base Operation Support Area (Power/Supply)		1	1	1	4
O ₂ Generation		1	1	1	1
Fuel Bladder, 10,000 gal/unit		10,000	10,000	10,000	20,000
Fuel Tanker, 5,500 gal/unit			5,500	5,500	5,500
Fuel Truck, 1,500 gal/unit		1,500			1,500
Total Fuel Storage Capacity	86	20,500	24,500	24,500	45,000

Figure A-21. Expeditionary Medical Facility Fuel Requirements Matrix

WASTE GENERATION RATES	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
Daily Potable Water Consumption Rate (gallons per day)	1,400	11,400	14,100	28,200	51,300
Daily Sewage Generation Rate (gallons per day)	1,400	11,400	14,100	28,200	51,300
Daily Fuel Consumption Rate (gallons per day)	108	4,700	5,400	7,400	12,100
Dry Trash, (tons per day) (TPD)	0.2	1.8	2	3.2	6.1
Wet Garbage (TPD)	0.1	0.8	1.1	1.8	3.1
Medical Waste, pounds per day (PPD)	30	282	372	858	1,500
Hazardous Waste (PPD)	5	47	62	143	250

Figure A-22. Expeditionary Medical Facility Waste Generation Rates Matrix

LAUNDRY REQUIREMENTS	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
Laundry Requirement (PPD)		816	948	1,661	3,000
Laundry Requirements Breakdown (PPD)					
Acute Care Ward Bed *(2 pounds per bed x number of beds)		120	180	420	840
Recovery Room ICU *(3 pounds per bed x number of beds)		63	63	189	240
Casualty Receiving *(2 pounds per unit x average daily admissions)		56	76	188	160
Specialty Treatment *(1 pound per unit x 78 average daily procedures)		12	18	42	78
Dental *(1 pound per unit x number of units)		10	10	10	10
OR Prep and Hold *(2 pounds per unit x daily operative procedures)		36	36	72	108
Surgical Suite *(2 pounds per unit x daily operative procedures)		36	36	72	108
OR/CSR Staff Sterile Gear *(1 pound per unit)		12	12	24	36
Berthing *(1 pound per unit)		161	178	273	500
Staff Personal Laundry *(1 pound per unit)		161	178	273	500
Incidentals/Miscellaneous		149	161	98	420

Figure A-23. Expeditionary Medical Facility Laundry Requirements Matrix

CIVIL ENGINEER SUPPORT EQUIPMENT (CESE)	10 BEDS	UNIT WEIGHT (POUNDS)	UNIT VOLUME (CUBIC FEET)	81 BEDS	116 BEDS	273 BEDS	500 BEDS
15-ton Stake Truck		1,894	1,989	3	3	3	7
20-ton Rough Terrain Cargo Handler		43,000	4,029	2	2	2	4
25-ton Tractor		19,080	1,909	5	5	5	10
3/4-ton Trailer		1,280	504	1	1	1	2
34-ton Trailer		19,760	2,897	2	2	2	4
400-gallon Water Trailer	1	2,800	670	2	2	2	4
4,000-pound Forklift		10,180	750	3	3	3	6
10-kW Generator		1,220	42	2	3	3	5
5,500-gallon Fuel Tanker		15,500	2,494		1	1	1
6-Passenger Pickup Truck		9,200	834	5	5	5	10
6,000-gallon Water Tanker		17,500	3,238	2	2	2	4
Air Compressor Trailer		6,000	867	1	1	1	1
Ambulance		6,400	1,157	6	6	6	12
Ambulance Bus		17,241	2,716	2	2	2	4
Dump Truck		21,075	1,592	1	1	1	2
Flood Light Trailer		2,360	463	2	2	2	4
Front End Loader		21,175	2,241	1	1	1	2
Grader		21,175	2,285		1	1	1
Lowboy Trailer		12,640	1,854		1		2
Lubrication Utility Truck		18,660	1,711	1	1	1	2
Maintenance Truck		11,220	1,373	1	1	1	2
Mud Pump (Mounted on 3/4-ton Trailer)				1	1	1	2
Refrigeration Units (Reefer Containers)		6,740	1,280	2	3	3	5
Septic Truck		17,236	2,453	2	2	2	4
Steam Cleaner (Skid Mounted on Truck)					1	1	2
Fuel Truck		13,880	1,409		1	1	
5th Wheel, Towing (Mounted on 25-ton Tractor)				1	1	1	2
Welder Trailer		3,200	498	1	1	1	2

Figure A-24. Expeditionary Medical Facility CESE Capabilities Matrix

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OXYGEN GENERATION CAPABILITIES	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
Generator, Gas, O ₂ /N ₂				1	1
Generator, O ₂ /Air, M-1B		1	1	1	2
POGS 33	1	2	2	2	
POGS 66	1	2	2	2	
DOGS	1	2	2	2	
“H” Tank Quantities		26	26	43	67
“H” Tank Approximate Daily Consumption	7	11	11	18	16
“D” Tank Quantities		43	45	89	140
“D” Tank Approximate Daily Consumption	13	13	13	26	41
Generator, Gas, O ₂ /N ₂ Capability					
“H” Tank Generation Rate (Tanks Filled in 24-Hour Period)				36	36
“D” Tank Generation Rate (Tanks Filled in 24-Hour Period)				108	108
Generator, O ₂ /Air, M-1B Capability:					
“H” Tank Generation Rate (Tanks Filled in 24-Hour Period)		72	72	72	144
“D” Tank Generation Rate (Tanks Filled in 24-Hour Period)		216	216	216	432

Figure A-25. Expeditionary Medical Facility Oxygen Generation Capabilities Matrix

EMF CLINICAL CAPABILITIES	10 BEDS	81 BEDS	116 BEDS	273 BEDS	500 BEDS
Average Daily Admissions	10	14–28	19–38	27–55	40–80
Average Daily Operative Procedures	6	18	18	36	54
Average Daily Specialty Clinical Care		12	18	42	78

Figure A-26. Expeditionary Medical Facility Admissions/Surgery/Clinical Treatment Rates Matrix

A.8 APPLICABLE NAVY ENLISTED RATINGS

BU1	Builder Petty Officer 1 st Class
BU2	Builder Petty Officer 2 nd Class
BU3	Builder Petty Officer 3 rd Class
BUC	Builder Chief Petty Officer
BUCN	Builder Constructionman
BUCS	Builder Senior Chief Petty Officer
CE1	Construction Electrician Petty Officer 1 st Class
CE2	Construction Electrician Petty Officer 2 nd Class
CE3	Construction Electrician Petty Officer 3 rd Class
CEC	Construction Electrician Chief Petty Officer
CECN	Construction Electrician Constructionman
CM1	Construction Mechanic Petty Officer 1 st Class
CM2	Construction Mechanic Petty Officer 2 nd Class
CM3	Construction Mechanic Petty Officer 3 rd Class
CMCN	Construction Mechanic Constructionman
CSC	Culinary Specialist Chief Petty Officer
CSCS	Culinary Specialist Senior Chief Petty Officer
CS1	Culinary Specialist 1 st Class
CS2	Culinary Specialist 2 nd Class
CS3	Culinary Specialist 3 rd Class
CSSN	Culinary Specialist Seaman
EA2	Engineering Aide Petty Officer 2 nd Class
EA3	Engineering Aide Petty Officer 3 rd Class
EO1	Equipment Operator Petty Officer 1 st Class
EO2	Equipment Operator Petty Officer 2 nd Class
EO3	Equipment Operator Petty Officer 3 rd Class

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EOC	Equipment Operator Chief Petty Officer
EQCM	Equipmentman Master Chief Petty Officer
EOCN	Equipment Operator Constructionman
ET1	Electronics Technician Petty Officer 1 st Class
ET2	Electronics Technician Petty Officer 2 nd Class
ET3	Electronics Technician Petty Officer 3 rd Class
GM1	Gunner's mate Petty Officer 1 st Class
GM2	Gunner's mate Petty Officer 2 nd Class
GM3	Gunner's mate Petty Officer 3 rd Class
HM1	Hospitalman Petty Officer 1 st Class
HM2	Hospitalman Petty Officer 2 nd Class
HM3	Hospitalman Petty Officer 3 rd Class
HMC	Hospitalman Chief Petty Officer
HMCM	Hospitalman Master Chief Petty Officer
HMCS	Hospitalman Senior Chief Petty Officer
HN	Hospitalman
IC1	Internal Communications Petty Officer 1 st Class
IT1	Information Systems Technician Petty Officer 1 st Class
IT2	Information Systems Technician Petty Officer 2 nd Class
IT3	Information Systems Technician Petty Officer 3 rd Class
MC1	Mass Communication Specialist Petty Officer 1 st Class
LN	Legalman Petty Officer 1 st Class
MA1	Master-at-Arms Petty Officer 1 st Class
MA2	Master-at-Arms Petty Officer 2 nd Class
MAA	Master-at-Arms
MAC	Master-at-Arms Chief Petty Officer
MACS	Master-at-Arms Senior Chief Petty Officer

PC1	Postal Clerk Petty Officer 1 st Class
PC2	Postal Clerk Petty Officer 2 nd Class
PC3	Postal Clerk Petty Officer 3 rd Class
PSC	Personnel Specialist Chief Petty Officer
PS1	Personnel Specialist 1 st Class
PS2	Personnel Specialist 2 nd Class
PS3	Personnel Specialist 3 rd Class
PSSN	Personnel Specialist Seaman
RP1	Religious Program Specialist Petty Officer 1 st Class
RP2	Religious Program Specialist Petty Officer 2 nd Class
SH1	Ship's Serviceman Petty Officer 1 st Class
SH2	Ship's Serviceman Petty Officer 2 nd Class
SH3	Ship's Serviceman Petty Officer 3 rd Class
SHSN	Ship's Serviceman Seaman
SK1	Storekeeper Petty Officer 1 st Class
SK2	Storekeeper Petty Officer 2 nd Class
SK3	Storekeeper Petty Officer 3 rd Class
SKC	Storekeeper Chief Petty Officer
SKCS	Storekeeper Senior Chief
SKSN	Storekeeper Seaman
SW2	Steelworker Petty Officer 2 nd Class
SW3	Steelworker Petty Officer 3 rd Class
SWCN	Steelworker Constructionman
UCCM	Utilities/Constructionman Master Chief Petty Officer
UT1	Utilitiesman Petty Officer 1 st Class
UT2	Utilitiesman Petty Officer 2 nd Class
UTC	Utilitiesman Chief Petty Officer

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UTCN	Utilitiesman Constructionman
YN1	Yeoman Petty Officer 1 st Class
YN2	Yeoman Petty Officer 2 nd Class
YN3	Yeoman Petty Officer 3 rd Class
YNC	Yeoman Chief Petty Officer

REFERENCES

The development of NTTP 4-02.4 (AUG 2007) is based upon the effective edition of the following sources.

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BUMEDINST 3500.3 (series), Naval Operational Medical Lessons Learned System (NOMLLS).

BUMEDINST 6440.5 (series), Health Services Augmentation Program.

BUPERSINST 1610.10 (series), Navy Performance Evaluation System.

CJCSM 3500.04 (series), Universal Joint Task List (UJTL)

Code of Federal Regulations (CFR), Title 49, Transportation.

COMNAVRESFORNOTE 5400, National Command and Senior Officer (05/06) Noncommand Billet Screening and Assignment Procedures.

COMFIRSTNCDINST 11200.2, Naval Construction Force (NCF) Equipment Management Instruction.

DMSB, DEPMEDS Policies/Guidelines: Treatment Briefs.

DODI 6055.5, Industrial Hygiene and Occupational Health.

DODI 6055.6, DOD Fire and Emergency Services Program.

DODI 6055.7, Accident Investigation, Reporting and Record Keeping.

FM 8-42, Combat Health Support in Stability Operations and Support Operations.

JP 1-02, Department of Defense Dictionary of Military and Associated Terms.

JP 4-02, Health Service Support in Joint Operations.

MCO 3504.1, Marine Corps Lessons Learned (MCLLP) and the Marine Corps Center for Lessons Learned (MCCLL).

MCWP 4-11.1, Health Services Support Operations.

NAVAIR 00-80R-14, NATOPS US Navy Aircraft Firefighting and Rescue Manual.

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NAVFAC P-404, Naval Construction Force Equipment Management Manual.

NAVMED P-117, Manual of the Medical Department.

NAVMED P-5010, Manual of Naval Preventive Medicine.

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NWP 1-03.3, Status of Resources and Training System.

NWP 4-02, Naval Expeditionary Health Service Support Afloat and Ashore.

OPNAVINST 11320.23 (series), Shore Activities Fire Protection and Emergency Service Program.

OPNAVINST 3500.37 (series), Navy Lessons Learned System.

OPNAVINST 3500.38B/MCO 3500.26/USCG COMDTINST 3500.1B, Universal Naval Task List (UNTL).

ST 4-02.46, Medical Support to Detainee Operations.

United States Code (USC), Title 21, Food and Drugs.

LIST OF ACRONYMS AND ABBREVIATIONS

AAR	after action review
ABFC	advanced base functional component
ADAL	authorized dental allowance list
ADCON	administrative control
AE	aeromedical evacuation
AELT	aeromedical evacuation liaison team
AEMFAT	activation expeditionary medical facility assistance team
AJBPO	area joint blood program office
AMAL	authorized medical allowance list
AMC	Air Mobility Command
APOD	aerial port of debarkation
APOE	aerial port of embarkation
BOS	base operating support
BSU	blood supply unit
BTC	blood transshipment center
Btu	British thermal unit
BUMED	Bureau of Medicine and Surgery
BUMEDINST	Bureau of Medicine and Surgery instruction
BUPERSINST	Bureau of Naval Personnel instruction
C2	command and control
CBMU	construction battalion maintenance unit
CBRN	chemical, biological, radiological, and nuclear
CCC	cargo category code
CCDR	combatant commander

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CESE	civil engineering support equipment
CHBUMED	Chief, Bureau of Medicine and Surgery
CO	commanding officer
COCOM	combatant command (command authority)
COMNAVRESFOR	Commander, Naval Reserve Force
CONPLAN	concept plan
CONUS	continental United States
CP	collective protection
DEPMEDS	deployable medical systems
DMSB	Defense Medical Standardization Board
DOD	Department of Defense
DODI	Department of Defense instruction
DOGS	deployable oxygen generation system
DOT	Department of Transportation
DOTMLPF	doctrine, organization, training, materiel, leadership and education, personnel and facilities
ECU	environmental control unit
EMF	expeditionary medical facility
EMFPML	Expeditionary Medical Facility Program Manager Logistics
EMPARTS	Expeditionary Medicine Platform Augmentation Readiness and Training System
ENT	ear, nose, and throat
EPA	Environmental Protection Agency
FDPMU	forward-deployable preventive medicine unit
FM	field manual (Army)
GP	general purpose
HN	host nation
HNS	host-nation support

HQ	headquarters
HSAP	Health Services Augmentation Program
HSS	health service support
HVAC	heating, ventilation, and air conditioning
Hz	hertz
ICP	inventory control point
ICU	intensive care unit
ISO	International Organization for Standardization
JBPO	Joint Blood Program Office
JOA	joint operations area
JOPEs	Joint Operation Planning and Execution System
kBtu	British thermal unit and kilo British thermal unit
kW	kilowatt
LMS	lesson management system
LSE	logistic support element
MAGTF	Marine air-ground task force
MARFOR	Marine Corps forces
MASF	mobile aeromedical staging facility
MCCLL	Marine Corps Center for Lessons Learned
MCLMS	Marine Corps Lessons Management System
MCTL	Marine Corps Task List (2-3)
MCWP	Marine Corps warfighting publication
MEDEVAC	medical evacuation
MEDSOM	medical, supply, optical, and maintenance unit (USA)
MEF(F)	Marine expeditionary force (forward)
MILSTRIP	military standard requisitioning and issue procedures
MLG	Marine logistics group

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MOPP	mission-oriented protective posture
MOS	military occupational specialty
MPF	maritime prepositioning force
MPF(E)	maritime prepositioning force (enhanced)
MPSRON	maritime prepositioning ships squadron
MRI	magnetic resonance imaging
MTF	medical treatment facility
MUM	(A-56) Medical Utility Module
MWR	morale, welfare, and recreation
NATO	North Atlantic Treaty Organization
NATOPS	Naval Air Training and Operating Procedures Standardization
NAVAIR	Naval Air Systems Command
NAVFAC	Naval Facilities Engineering Command
NAVMED	Navy medical
NAVSEA	Naval Sea Systems Command
NAVSUP	Naval Supply Systems Command
NBC	nuclear, biological, and chemical
NCF	(7-5, ref 1) Naval Construction Force
NEMSCOM	Navy Expeditionary Medical Support Command
NEMTI	Navy Expeditionary Medical Training Institute
NIPRNET	Non-Secure Internet Protocol Router Network
NLLS	Navy Lessons Learned System
NMETL	Naval Mission-Essential Task List
NOMI	Naval Operational Medicine Institute
NOLSC	Naval Operational Logistics Support Center
NOMI	Naval Operational Medicine Institute
NOMLLC	Naval Operational Medical Lessons Learned Center

NSWC	Naval Surface Warfare Center
NTA	Navy Tactical Task
NTTL	Navy Tactical Task List
NTTP	Navy tactics, techniques, and procedures
NWP	Navy warfare publication
OCONUS	outside the continental United States
OFE	Optical Fabrication Enterprise
OHSU	operational health support unit
OIF	Operation IRAQI FREEDOM
OLSS	operational logistics support summary
OP	operational
OPCON	operational control
OPLAN	operation plan
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	Chief of Naval Operations instruction
OPORD	operation order
OR	operating room
PLA	plain language address
PMI	patient movement item
POC	point of contact
POD	port of debarkation
POE	port of embarkation
POGS	portable oxygen generation system
PPE	personnel protective equipment
PPD	pounds per day
PSA	personnel support activity
PSD	personnel support detachment

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SCC	Service Component Command
SIMLM	single integrated medical logistics manager
SIPRNET	SECRET Internet Protocol Router Network
SN	strategic national
SOP	standard operating procedure
SORTS	Status of Resources and Training System
SORTSREPNV	Status of Resources and Training System Joint Report-Navy
ST	strategic theater
TACON	tactical control
T-AH	hospital ship (tanker, auxiliary hospital)
TBTC	transportable blood transshipment center
TEMPER	tent-extendible modular personnel (USAF)
TLAMM	theater lead agent for medical materiel
TMIP	theater medical information program
TPD	tons per day
TPFDDL	time-phased force deployment data list
TTP	tactics, techniques, and procedures
TUCHA	type unit characteristics file
UIC	unit identification code
UJTL	Universal Joint Task List
UN	United Nations
UNTL	Universal Naval Task List
USA	United States Army
USAF	United States Air Force
USC	United States Code
USCG	United States Coast Guard
USMC	United States Marine Corps

USN	United States Navy
USTRANSCOM	United States Transportation Command
UTC	unit type code
V	volt
VMI	vendor-managed inventory
XO	executive officer

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