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AEROSPACE MEDICAL CONTINGENCY
GROUND SUPPORT SYSTEM

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PURPOSE: The Air Force Tactics, Techniques, and Procedures (AFTTP) 3-42 series of publications is the primary reference for medical combat support capability. This document, AFTTP 3-42.7, provides an overview of the Aerospace Medical Contingency Ground Support System. In August 1998, the Air Force Chief of Staff directed the Air Force transition to the concept of an Expeditionary Aerospace Force (EAF). The Air Force Surgeon General tasked the Air Combat Command Surgeon to lead the development of an expeditionary medical support capability and the next generation Air Force Theater Hospital (AFTH). This Aerospace Medical Contingency Ground Support System tactics, techniques, and procedures (TTP) document describes the manner in which the Air Force Medical Service (AFMS) supports aerospace expeditionary force (AEF) forces.

APPLICATION: This publication applies to all Air Force military and civilian personnel (including Air Force Reserve Command [AFRC] and Air National Guard [ANG] units and members). The doctrine in this document is authoritative but not directive.

SCOPE: The AFMS must be ready and capable of providing required medical support to the warfighters no matter the scenario. Potential deployments include the full spectrum of deployed contingencies. A robust medical war reserve materiel (WRM) program is essential to meeting the logistics requirements of this capability. This system begins with an initial force package known as the squadron medical element (SME) progressing to the fully developed stage of the mature AFTH where significant specialty care capability and intensive care will be available. It is critical that the AFMS continue to deliver essential care targeted towards optimizing warfighter performance.

FIGURES

Chapter 1

AEROSPACE MEDICAL CONTINGENCY GROUND SUPPORT SYSTEM

1.1. Mission.

1.1.1. The Aerospace Medical Contingency Ground Support System represents the cornerstone of medical support to AEF forces deployed in any worldwide contingency. This system is composed of unit type code (UTC) building blocks that provide personnel and equipment to meet specific operational requirements. The Aerospace Medical Contingency Ground Support System begins with squadron medical elements (SMEs), independent duty medical technicians (IDMTs), and ends with a 100+bed Air Force Theater Hospital (AFTH) facility.

1.1.2. The mission of the AFMS Aerospace Medical Contingency Ground Support System is to rapidly deploy and provide forward stabilization, primary care, dental services, force health protection, and to prepare for aeromedical evacuation of aerospace expeditionary forces or civilian casualties, as appropriate. This system optimizes warfighter performance by delivering essential care targeted to maximize unit effectiveness, readiness, and morale with minimal cost in terms of weight, cube, lift, and forward footprint.

1.1.3. Aerospace Medical Contingency Ground Support System components deploy in various combinations to support a specific theater/regional population size and deployment scenario. Medical support rapidly deploys in a modular, incremental, and interoperable manner, using components as building blocks to support the contingency. There are a variety of specialty modules that may be used to match the scenario's requirements. Additionally, personnel and equipment packages may be tailored, replicated, or combined with previously deployed UTCs to reach the desired capability.

1.1.4. The medical capability required at each bed-down location is determined by expected casualty rates, casualty types, population at risk (PAR), evacuation policy, evacuation delay, and evacuation distances. Geographical positioning of medical capability, which minimizes the time from point of injury to treatment, is essential. Medical planners must specifically consider requirements for the following when determining the proper medical support configuration for each bed-down location: emergency room, inpatient beds, operating room tables, intensive care beds, primary care, mental health, dental care, and patient transportation requirements. Each of these factors varies, sometimes driving different requirements based on projected casualty rates. Additionally, deployed medical facilities normally do not provide reconstructive surgery or rehabilitative services unless supporting a multinational force or humanitarian operation.

1.1.5. Components of the Aerospace Medical Contingency Ground Support System are utilized to provide essential medical/dental care, deferring definitive care as dictated by theater medical concept of operations (CONOPS). Fixed, mature AFTH facilities in supporting theaters receive patients from deployed medical facilities where essential medical/dental care has been rendered. Mature AFTHs are defined as having a complete set

of capabilities represented by specialty UTCs as well as deployable medical teams with their corresponding UTCs. These mature AFTHs provide a robust capability much different than a 50-bed AFTH with no augmentation UTCs.

1.2. Aerospace Medical Contingency Ground Support System.

1.2.1. The Aerospace Medical Contingency Ground Support System is composed of UTC building blocks that provide personnel and equipment to meet specific operational requirements. These UTCs enable the AFTH to expand in modules to meet the full spectrum of theater requirements to include significant specialty care (see Figure 1.1). These capabilities will be utilized to provide essential care, deferring definitive care to the continental United States (CONUS) or supporting theaters.

1.2.2. The following comprise the Aerospace Medical Contingency Ground Support System:

1.2.2.1. Squadron Medical Elements (SMEs). SMEs provide limited outpatient care, clinical care, emergency medical care (trauma and cardiac stabilization), aerospace medicine support, and in-flight emergency coverage to deployed flying units in a myriad of operations with a PAR of 1-500. SMEs collect, assess, and provide medical intelligence information and recommend strategies to the deployed commander to reduce and/or prevent aerospace, occupational, environmental, and public health risk factors from having a detrimental impact on mission effectiveness.

1.2.2.2. Independent Duty Medical Technicians (IDMTs). The capabilities of IDMTs assigned to line units are very similar to those found in Module 1 of Expeditionary Medical Support (EMEDS) Basic, in that the IDMT provides aerospace medicine support, primary care, initial site survey, and limited environmental monitoring for water and food safety, field sanitation, pest/vector control, sewage, and heat stress to units in a myriad of operations with a PAR of 100-250.

1.2.2.3. EMEDS/AFTH. The role of EMEDS/AFTH is to provide individual bed-down and theater-level medical services for deployed forces or select population groups within the entire spectrum of military operations. EMEDS/AFTHs are modular packages by design and are tailored to meet theater commander in chief (CINC) requirements. As the US Air Force provides timely and effective combat forces to combatant commanders in support of theater objectives, EMEDS/AFTHs support those operations by providing a modular and flexible theater hospitalization capability. The EMEDS/AFTH is divided into three increments: EMEDS Basic, EMEDS+10 Bed AFTH, and EMEDS+25 Bed AFTH.

1.2.2.3.1. EMEDS Basic.

1.2.2.3.1.1. EMEDS Basic provides the operational support required to provide medical care in a myriad of operations with a PAR of 1-2000. EMEDS Basic is currently comprised of two modules.

1.2.2.3.1.1.1. Module 1—Small Portable Expeditionary Aeromedical Rapid Response (SPEARR) team. The leading edge of the EMEDS Basic is the SPEARR team. The SPEARR team fits the definition of Level 2 (Casualty Collection and Forward Resuscitative Surgery) health service support (HSS) capability. (See Attachment 2, *Levels of Care*, for definition.) The SPEARR team provides a rapid response, extremely mobile, forward resuscitative, and preventive medicine and environmental health medical capability. The team is deployable in two modes, completely man-portable or with a sling loadable (one pallet equivalent) trailer. **Supplies and equipment are extremely limited.** Prior to patient evacuation, it is essential that en route patient supplies and equipment are coordinated with aeromedical evacuation (AE) personnel.

1.2.2.3.1.1.2. Module 2. Module 2 consists of additional personnel, supplies, and infrastructure. These additional personnel augment the previously deployed SPEARR team. Deployment of Module 2 is driven by mission requirements.

1.2.2.3.1.2. In total, EMEDS Basic provides Level 2 (Casualty Collection and Forward Resuscitative Surgery) capability. Specifically, it provides forward stabilization, primary care, dental services, force health protection, and prepares patients for aeromedical evacuation. EMEDS Basic has four holding beds. Definitive medical/dental care is deferred to CONUS or supporting theaters. EMEDS Basic deploys with 7 days of supplies. Additional supply pallet UTCs can be deployed simultaneously or as needed to fit CINC operational requirements. Equipment can be prepositioned or incrementally deployed. **Prior to patient evacuation, it is essential that en route patient supplies and equipment are coordinated with AE personnel.**

1.2.2.3.1.3. EMEDS Basic must be supported by Expeditionary Combat Support (ECS) to be fully functional. This support includes: appropriate vehicle of opportunity that can be converted to a patient transport vehicle (the EMEDS allowance standard [AS] includes supplies and equipment to modify the vehicle of opportunity); a 10K forklift; transportation to move [two 463L] pallets from airfield to field site; and an appropriate vehicle capable of towing a 6,000-pound trailer. The sling loadable EMEDS Basic trailer is equipped with both military and commercial style hitches.

1.2.2.3.2. EMEDS+10 Bed AFTH and EMEDS+25 Bed AFTH. EMEDS+10/25 bed AFTH provides a Level 3 (Theater Hospital) HSS capability. These enhanced clinical capabilities are historically found in a medical treatment facility (MTF) located in a lower-level threat environment. These AFTHs are staffed and equipped to provide a high level of resuscitation, initial wound surgery, and post-operative treatment. This level of care is the first step toward restoration of functional health, as compared to procedures that stabilize a condition to prolong life.

1.2.2.3.2.1. EMEDS+10 provides medical/dental care in a myriad of operations with a PAR of 2000-3000. Included in this capability are 10 inpatient beds. EMEDS+10 deploys with 7 days of supplies. Equipment is either prepositioned or incrementally deployed. Additional supply pallet UTCs can be deployed simultaneously or as needed to fit CINC operational requirements.

1.2.2.3.2.2. EMEDS+25 provides medical/dental care in a myriad of operations with a PAR of 3000-5000. Included in this capability are 25 inpatient beds (cumulative). EMEDS+25 deploys with 7 days of supplies. Additional supply pallet UTCs can be deployed simultaneously or as needed to fit CINC operational requirements. Equipment is either prepositioned or incrementally deployed.

Figure 1.1. Depicts the Aerospace Medical Contingency Ground Support System Components and the Notional Building Block Response (Based on Contingency Requirements) Covering the High Vulnerability Periods (The Red Wedge)

1.3. Chemical and Biological Threat. Until collective protection for the EMEDS portion of the AFTH system is fielded, the EMEDS CONOPS assumes it will operate in a low chemical and biological warfare (CBW) threat environment. Personnel required to staff decontamination (DECON) teams, patient retrieval teams, and biological assessment teams are not embedded in the EMEDS personnel matrix. Higher threat scenarios will require additional specialized medical equipment as well as specially trained and equipped personnel (provided by medical nuclear, biological, and chemical [NBC] UTCs).

Chapter 2

ORGANIZATIONS, ROLES, AND RESPONSIBILITIES

2.1. Air Force Surgeon General.

2.1.1. The Air Force Surgeon General (HQ USAF/SG) provides leadership and guidance to ensure a vital readiness posture is maintained through prevention oriented activities focused on population health and Air Force medicine. The Surgeon General is responsible for coordinating and aligning health care programs and services to integrate with other Services and the Office of the Assistant Secretary of Defense for Health Affairs (OASD-HA). This supports a Department of Defense (DOD) enterprise-wide health care system.

2.1.2. The office of the Air Force SG establishes policies to foster, advocate, and support research and development and equipment acquisition. Additionally, the office of the Air Force SG establishes medical training guidelines; develops, coordinates, and publishes all program policy and readiness; and ensures the proper infrastructure and the appropriate mix of medical personnel are available.

2.2. Aerospace Expeditionary Force Center (AEFC).

2.2.1. The AEFC is a cross-functional, centralized management team designed to facilitate EAF operations that include AEF force package preparation for contingency steady state rotations and on-call aerospace expeditionary wing (AEW) operational requirements. The AEFC works closely with the Air Staff, major commands (MAJCOMs), and Air Force components to integrate trained aerospace forces to meet theater CINC's requirements across the full spectrum of operations.

2.2.2. The AEFC is a Chief of Staff, United States Air Force (CSAF)-designated authority and has direct liaison authorized (DIRLAUTH) across all MAJCOMs, Air Force components, and AEF/AEW scheduled units to provide readiness oversight and to integrate required planning and sourcing processes. The AEFC does not have direct tasking authority. Tasking authority remains with MAJCOMs and Air Force components.

2.2.3. The AEFC provides continuity during crisis action planning, escalation to surge, or full-scale major theater war (MTW) operations. The AEFC guides all aspects of AEF/AEW planning to include sourcing and scheduling forces (UTCs/individuals), refining the time-phased force and deployment data (TPFDD), preparing the Deployment Requirements Manning Document (DRMD), assessing available forces, and monitoring unit readiness status.

2.3. Major Commands.

2.3.1. The Air Force organizes, trains, and equips air forces through MAJCOMs. The MAJCOMs implement DOD, OASD-HA, CSAF and HQ USAF/SG policies. They provide

guidance and oversight for all readiness programs throughout their command. The MAJCOMs provide forces to combatant commands for employment.

2.3.2. Each MAJCOM Surgeon General is responsible for planning and executing health services operations and training to support wartime or contingency operations. Command Surgeons maintain Manpower and Equipment Force Packaging (MEFPAK) System responsibility for Aerospace Medical Contingency Ground Support System UTCs assigned to their MAJCOM. HQ Air Combat Command (ACC)/SG serves as the medical consultant for technical guidance and deliberate planning for AFMS contingency support operations. Component commands have responsibility for deliberate plans.

2.4. Deployed Medical Commander (DMC) or Senior Medical Officer (SMO).

2.4.1. The AEW commander has a medical group commander on staff. The medical group commander is responsible for ensuring all health service assets are trained, equipped, and ready to support (a total or partial) wing deployment.

2.4.2. The wing/group/squadron commanders and the DMC/SMO are ultimately responsible for having the right personnel assigned, equipped, and trained to perform their assigned functions when deployed as part of an expeditionary medical support force package. Prior to deployment, the deploying medical commander ensures agile combat support for deployed medical assets has been coordinated with appropriate units/agencies at the deployed location.

Chapter 3

OPERATIONS

3.1. Aerospace Expeditionary Force (AEF).

3.1.1. An AEF is an organizational structure composed of force packages of capabilities that provide warfighting CINCs with rapid and responsive aerospace power. These force packages, together with their support and command and control (C2) elements, are tailored to meet specific needs across the spectrum of response options and will deploy within an Aerospace Expeditionary Task Force (AETF) as aerospace expeditionary wings (AEWs), groups (AEGs), or squadrons (AESs). Medical UTCs assigned to an AEF deploy in accordance with (IAW) mission requirements.

3.1.2. Aerospace Medical Contingency Ground Support System components deploy in various combinations to support a specific theater/regional population size, deployment scenario, and casualty rate (combat, disease and nonbattle injury [DNBI], and other). Personnel and equipment packages may be tailored, replicated, or combined with previously deployed UTCs to reach the desired capability effect. This supports the philosophy of ensuring essential medical capability is on the first plane in and the last plane out.

Figure 3.1. The Red Wedge Depicts Periods of Maximum Vulnerability

"The Red Wedge"

Sustained Operations

Ramp Up   Ramp Down

Vulnerable   Vulnerable
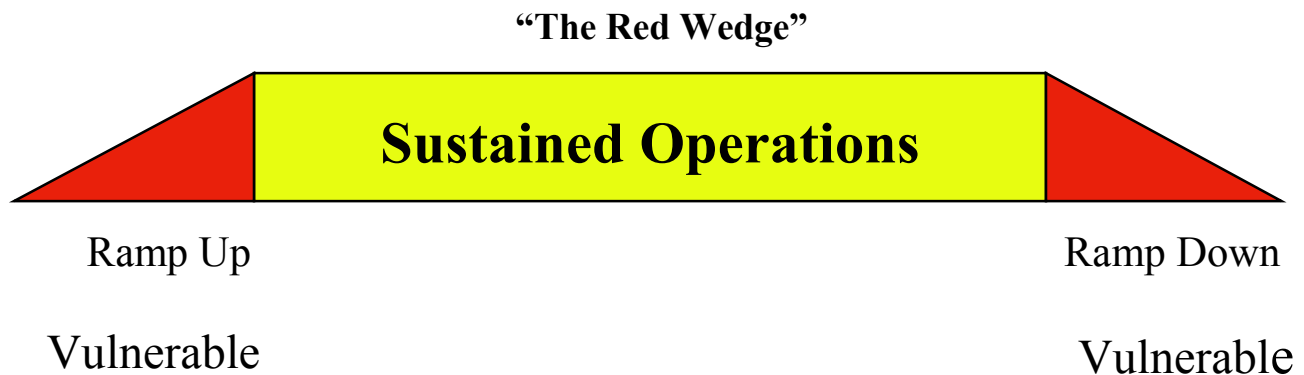
3.1.3. Figure 3.1 illustrates how we envision the military situation unfolding. The "red wedge" ramp up phase corresponds with installation deployment and build-up activities. It is during this period that military forces are at high risk for food/water/sanitation, DNBI, injury, industrial or occupational accidents, and terrorist attacks. During sustained operations, the Air Force Theater Hospital (AFTH) should be in place.

3.1.4. Doctrinally, the AFMS will provide a tiered and tailored medical capability that is driven by mission, threat scenario, airlift availability, and population at risk. The concept is to flow essential medical capability in on the first aircraft. As the operation expands, and as airlift becomes available, additional medical capability is brought in, as required.

3.1.4.1. Medical Global Reach Laydown (MGRL) teams will deploy with air mobility forces (e.g., tanker airlift control elements [TALCEs]) in the early stages of a campaign to establish the air bridge and aerial ports of delivery in theater. The MGRL teams consist of personnel and equipment required to provide medical care for injuries and illness and provide preventive medical care reducing risk of a catastrophic/detrimental event that could have an impact on mission effectiveness. The team also recommends strategies to TALCEs and mobility support team (MST) commanders for countermeasures against environmental and physiological stressors, in order to enhance mission effectiveness. Support is normally to deployed TALCE and MST operations and is under the operational control (OPCON) of HQ Air Mobility Command (AMC)/tanker airlift control center (TACC). These assets usually deploy in advance of deployment forces and are normally withdrawn after deployed medical infrastructure is in place.

3.1.4.2. The SMEs and IDMTs may deploy with their assigned squadrons. If deployed, they may be the first medics on the ground and the most forward deployed with or without their air transportable clinic (ATC).

3.1.4.3. The SPEARR team (EMEDS Basic Module 1) should arrive on the first aircraft. This 10-person team is capable of deploying within 2 hours of initial mission notification. This rapid response time is site specific and is a "best case" estimate for SPEARR team response. The 2-hour response time is dependent on the collocation of personnel and equipment and on a team standing "on-call" (or "Bravo") alert at all times. EMEDS Basic Module 2 personnel and equipment depart with the bulk of the AEF or deployed force. In certain contingency operations the entire EMEDS Basic package may deploy at the same time as a single unit. Additional EMEDS/AFTH increments are deployed based on the CINC requirements. (See Figure 1.1.)

3.1.5. The concept works in reverse for the other red wedge, the ramp down phase, which typifies installation redeployment activities. Medical capability would ramp down at a similar rate as the installation taking into account the threat scenario and the population at risk, ensuring the availability of essential medical capability.

3.2. Deployment—Air Force Theater Hospital (AFTH) Modularization Capability.

3.2.1. Squadron Medical Elements (SMEs). Each 3-member SME deploys with their assigned squadron to provide limited outpatient care, clinical care, emergency medical care (trauma and cardiac stabilization), aerospace medicine support, and in-flight emergency coverage to deployed flying units with a PAR of 1-500. This team deploys with limited supplies and requires both a shelter (building of opportunity, tent, etc.) and a vehicle of opportunity (which is capable of transporting patients on litters and responding to in-flight emergencies). Based on CINC requirements, an ATC may be deployed to support an SME. For a comprehensive description of SME capabilities refer to the SME CONOPS.

3.2.2. Air Transportable Clinic (ATC). An air transportable clinic is one 463L pallet of equipment and supplies that can be prepositioned or deployed simultaneously with the SME to support deployed flying units with a PAR of 300-500. A minimum of a 10K forklift will

be needed to transport the pallet from the airfield to the designated site. A comprehensive description of ATC capabilities is in the ATC CONOPS.

3.2.3. Independent Duty Medical Technicians (IDMTs). IDMTs deploy with their assigned squadrons (e.g., RED HORSE, air control, reconnaissance, EMEDS/AFTH), as well as augment previously deployed medical assets. They deploy to either fixed facilities or bare base sites. When deployed to a bare base site, the IDMT will require both a vehicle and a shelter of opportunity to support a myriad of operations with a PAR of 100-250. Based on CINC requirements, an ATC can be deployed to meet mission requirements. A comprehensive description of IDMT missions, requirements, training, and other capabilities is in AFI 44-103, *IDMT Program/Medical Support for Mobile Medical Units (MMUs)/Remote Sites*.

3.2.4. EMEDS Basic (also referred to as EMEDS/AFTH 1st Increment). EMEDS Basic is first of three increments of the EMEDS/AFTH system. The 25 personnel, (which includes the 10-person SPEARR team) two 463L pallets of equipment, and one 6,000-pound trailer can be transported by one C-130 aircraft.

> **3.2.4.1. Module 1—SPEARR Team.** Module 1 is comprised of ten medics from four UTCs: the preventive aerospace medicine (PAM) advanced echelon (ADVON) team, the mobile field surgical team, the expeditionary critical care team, and the expanded capability and infrastructure module. If the SPEARR team deploys in its man-portable mode they will require a shelter of opportunity to house patient care operations. When the SPEARR team deploys with the expanded capability and infrastructure module, patient care tentage is included. The expanded capability and infrastructure module is a 6,000-pound, sling-loadable trailer that requires appropriate transportation to move it from the airfield to the field site. Once at the contingency site, the SPEARR team requires at least one, preferably two, vehicles of opportunity that can be converted into patient transport vehicles.

> **3.2.4.2. Module 2.** Module 2 consists of the remaining 15 personnel assigned to the EMEDS Basic UTCs and two 463L pallets of supplies and infrastructure. These teams arrive as various deployment scenarios dictate to augment the previously deployed SPEARR team. Transportation requirements include a 10K forklift and appropriate vehicle to transport two 463L pallets from the airfield to the field site. Patient transportation will be accomplished by utilizing the vehicle(s) of opportunity provided to Module 1.

> **3.2.4.3. Full Operational Capability (FOC) for EMEDS Basic.** FOC for EMEDS Basic is attained when facility and clinical functional areas (aerospace medicine, preventive medicine, dental, primary care, command and control, emergency care, critical care, and surgical capability) are fully established, normally within 12 hours. As a minimum, the following ECS is required during this period: electrical/ground power equipment, communications, fuel and potable water delivery, transportation, security, fire protection, all-terrain forklift, billeting, messing, and sanitary waste system. For a

comprehensive description of base operating support (BOS) requirements for EMEDS
Basic refer to the EMEDS/AFTH CONOPS.

**3.2.5. EMEDS+10 Bed AFTH (also referred to as EMEDS/AFTH 2nd Increment) and
EMEDS+25 Bed AFTH (also referred to as EMEDS/AFTH 3rd Increment).**

3.2.5.1. EMEDS+10 rapidly augments EMEDS Basic and provides 10 inpatient beds,
which increases capacity and diagnostic capability but maintains a similar scope of care
provided by EMEDS Basic. The EMEDS+10 increment adds 31 people and 7 pallets of
supplies and infrastructure, one water buffalo, and one ambulance. For a comprehensive
description of the EMEDS/AFTH 2nd increment capability and BOS requirements, refer
to the EMEDS/AFTH CONOPS.

3.2.5.2. EMEDS+25 increases inpatient capacity to 25 beds as well as increasing the
scope of care. The EMEDS+25 increment adds 29 people and 4 pallets of supplies and
infrastructure and an additional ambulance. For a comprehensive description of the
EMEDS/AFTH 3rd increment capability and BOS requirements, refer to the
EMEDS/AFTH CONOPS.

3.2.5.3. Some theaters may require medical facilities with subspecialty care and large
numbers of inpatient beds for locations where no host nation fixed facility support exists.
In this case, it is possible to expand in-place resources with air transportable specialty
modules to any capacity required to meet US Air Force/joint theater requirements.

3.2.5.4. The EMEDS+10 increment adds 31 people (for a total of 56 personnel) and
seven 463L pallets of supplies and infrastructure, one water buffalo and one ambulance to
the EMEDS Basic package. Included in these 7 pallets are two 100-kilowatt mobile
electric power (MEP-7) generators. The EMEDS+25 increment adds another 29 people
(for a total of 85 personnel), four 463L pallets of supplies, and infrastructure and one
ambulance. FOC for the 2nd and 3rd increments is expected within 24 hours following
arrival at the employment location.

3.2.5.5. The entire SPEARR team through EMEDS+25 bed AFTH assemblage has 85-
personnel, thirteen 463L pallets, one 6,000-pound trailer, one water buffalo, and two
ambulances. The sling-loadable trailer and the water buffalo require a vehicle/aircraft of
opportunity to move them from the flight line to the field site. The trailer is equipped
with both a military and a civilian style hitch.

3.3. Employment—Casualty Care and Management. In general, casualties are transferred
from the deployed location (from less capable facilities and from components at forward
locations [e.g., special operations forces (SOF), ATCs]) to an EMEDS/AFTH facility and then to
the next appropriate level of care (Attachment 2). Further evacuation is determined by theater
evacuation policies, i.e., casualties not likely to be returned to duty are evacuated IAW theater
evacuation policy when stabilized. A stabilized patient is defined as: airway secured,
hemorrhage controlled, treated shock, and immobilized fractures.

3.3.1. Squadron Medical Elements (SME)—Scope of Care. The SME provides limited outpatient care, clinical care, emergency medical care (trauma and cardiac stabilization), aerospace medicine support, and in-flight emergency coverage to deployed flying units in a myriad of operations with a PAR of 1-500. SMEs collect, assess, and provide medical intelligence information. They also recommend to the deployed commander strategies to reduce and/or prevent aerospace, occupational, environmental, and public health risk factors from having a detrimental impact on mission effectiveness. ATCs provide only limited holding capability of less than 24 hours. Timely and rapid aeromedical evacuation support is critical to mission success.

3.3.2. Independent Duty Medical Technicians (IDMTs)—Scope of Care.

3.3.2.1. The capabilities of IDMTs assigned to line units are very similar to those found in Module 1 of EMEDS Basic. The main role of the IDMT is to provide aerospace medicine support, primary care, first aid, initial site survey, and limited environmental monitoring for water and food safety, field sanitation, pest/vector control, sewage, and heat stress to small (i.e., PAR of 300-500) deployed units at locations where a physician may not be available. IDMTs may also be used as physician extenders.

3.3.2.2. IDMTs perform triage, initial airway management to include endotracheal intubation and cricothyroidotomy, control of hemorrhage, basic splinting without diagnostic imaging diagnosis, intravenous fluid resuscitation, and oral re-hydration, basic life support capabilities with limited advanced life support to include defibrillation and initial trauma stabilization to include chest tube placement and/or needle thoracentesis.

3.3.2.3. Patients requiring treatment beyond the capabilities of the IDMT and SME are transported to the nearest EMEDS/AFTH facility or local host medical treatment facility (HMTF) for further treatment and/or evacuation using organically assigned field ambulances or other vehicles of opportunity. For a comprehensive description of IDMT missions, requirements, training, and other capabilities refer to AFI 44-103, *IDMT Program/Medical Support for Mobile Medical Units (MMUs)/Remote Sites.*

3.3.3. Small Portable Expeditionary Aeromedical Rapid Response (SPEARR) Team— Scope of Care.

3.3.3.1. The SPEARR team module is a highly mobile, rapid response team. Medical capability includes advanced resuscitative procedures as well as management of acute and chronic medical problems to support a wide spectrum of military missions.

3.3.3.2. The mission of the SPEARR team is to provide force health protection for up to 500 disaster or contingency support personnel, or a 500 PAR, for an initial period of 5 to 7 days. Sustainment or resupply capability (10-day resupply consistent with other EMEDS modules) ensures continued medical care and force health protection, when required. The PAR may be comprised of all US military personnel or include a combination of international military and civilian personnel in a coalition operation.

3.3.3.3. The scope of care includes public health/preventive medicine, flight medicine, environmental health, primary care, emergency medicine, emergency surgery, perioperative care, critical care stabilization, patient preparation for aeromedical transport, and aeromedical evacuation coordination/communication. The assumption is that the supported force will have received some form of predeployment health screening, immunizations, and disease prophylaxis appropriate to the theater of operations.

3.3.4. EMEDS Basic—Scope of Care.

3.3.4.1. EMEDS Basic provides 24-hour sick call and emergency medical/dental care that includes the following capabilities: medical C2, preventive medicine, trauma resuscitation and stabilization, limited general and orthopedic surgery, critical care, primary care, dental care, to include limited dental stabilization, aeromedical evacuation coordination, aerospace medicine, urgent care, and limited ancillary services to support deployment of 1-2000 AEF personnel or contingency/disaster support personnel. The complete 25-person EMEDS Basic force package is capable of providing care for 7 days in an austere environment without resupply. In most operations the PAR represents AEF personnel only. For a comprehensive description of EMEDS Basic capabilities refer to the EMEDS/AFTH CONOPs.

3.3.4.2. EMEDS Basic does not have dedicated inpatient beds. EMEDS Basic is equipped with 4 beds with a holding capacity of less than 24 hours, unless driven to short-term deviations by operational issues. It is essential that urgent patients be evacuated within 12 hours of notification. Patient movement within 24-hours for non-urgent patients is critical to mission success. Extremely limited blood storage exists: type O blood only, and there is limited capability for emergency blood collection/transfusion. For information on blood support operations, refer to AFTTP 3-42.8, *Medical Logistics and Blood Support Operations*.

3.3.5. EMEDS+10 Bed AFTH (also referred to as EMEDS/AFTH 2nd Increment)— Scope of Care. This increment provides prevention, acute intervention, and primary care to support deployment of 2000-3000 worldwide-qualified personnel. The 56-person EMEDS+10 bed AFTH force package is capable of providing medical/dental care for seven days in an austere environment without re-supply. The PAR represents AEF personnel only. The 10 beds provide inpatient capability consistent with theater evacuation policy. The core infrastructure provides additional ancillary support, medical equipment maintenance and facility management. Extremely limited blood storage exists with a limited capability for emergency blood collection/transfusion.

3.3.6. EMEDS+25 Bed AFTH (also referred to as EMEDS/AFTH 3rd Increment)— Scope of Care. This increment provides prevention, acute intervention, and primary care to support deployment of 3000-5000 worldwide-qualified personnel. A 25-inpatient bed capability supports the theater evacuation policy and AFFOR Surgeon's concept of operations. EMEDS+25 bed AFTH provides the core infrastructure for specialty UTCs (e.g., critical care, gynecology, otolaryngology, neurosurgery, oral surgery, ophthalmology,

thoracic/vascular surgery, urology, mental health rapid response, and combat stress management).

3.4. Redeployment and Reconstitution Phases.

3.4.1. Redeployment of Aerospace Medical Contingency Ground Support System components mirrors the shrinking operation location/base population and base roll-up. Deployed medical personnel and equipment depart with the bulk of the AEF or deployed force. The SPEARR team (EMEDS Basic, Module 1) maintains emergency medical and surgical capability up to 1 hour prior to their redeployment and departs on one of the last aircraft. Resupply is coordinated through the sustaining base and Air Force Medical Logistics Operations Center (see AFTTP 3-42.8, *Medical Logistics and Blood Support Operations* for additional information). The deployed system will be reconstituted prior to packing unless directed otherwise.

3.4.2. The SMEs and IDMTs redeploy with their assigned squadrons. They are usually the last medics on the ground with or without their ATC. Reconstitution occurs IAW the SME CONOPS.

3.5. Air Force Medical Service (AFMS) Support in Humanitarian Operations.

3.5.1. The spectrum of medical support provided to humanitarian missions ranges from public health to subspecialty clinical care depending on the contingency. When disasters occur, resources such as potable water, sanitation, nutrition, fuel, and shelters may be unavailable or in short supply during the emergency relief phase. Due to the lack of these resources and overcrowded conditions, enteric diseases (diarrhea), upper respiratory tract infections, and vector borne diseases such as malaria and dengue fever, cholera, and typhoid may be common. The demographics of a population displaced from war or natural disaster may include a larger percentage of the young and elderly and more women and children than the typical military active duty profile.

3.5.2. The SPEARR team serves as the basic building block for a modular approach to medical support in humanitarian missions. The following UTCs designed to support MTWs also have applicability in humanitarian missions: primary care augmentation, gynecology augmentation, infectious disease, air transportable dental clinic, and pediatrics.

3.6. AFMS Support in Major Theater War (MTW).

3.6.1. The AFTH is augmented by several teams to provide the appropriate level of medical support at or above the 25-bed capacity. Specialty and ancillary UTCs/teams are generally centralized at one to three mature theater hospitals in a theater. Mature theater hospitals are normally 50 beds or greater with a full complement of medical specialty augmentation UTCs. Contingency-specific needs will drive deviations. Specialty UTCs that may be centralized at mature theater hospitals include: gynecology augmentation, infectious disease, endodontic, periodontic, oral surgery, otolaryngology, ophthalmology, neurosurgery, thoracic/vascular, CT scan, fluoroscopy, angiography, and ancillary teams.

3.6.2. Aeromedical Staging Facilities (ASFs). ASFs support the aeromedical evacuation system. They provide inpatient holding capability at AE transfer points. Generally, command and control of ASFs falls within the C2 processes of AE units (refer to AFTTP 3-42.5, *Aeromedical Evacuation*); however, C2 of fixed ASFs may fall under the operational control of the Air Force host wing through the medical commander.

3.6.3. Patient Movement. Expeditionary battlefield philosophies have driven significant changes in medical support including minimized forward medical footprint, evacuation and replacement of patients, and transporting stabilized verses stable patients. The requirement to move patients is a joint responsibility and in today's environment, is even more critical to the health support system. Patient evacuation can be by surface (land or water) or by air (rotary-wing, tilt-wing, or fixed-wing aircraft); however, air is preferred.

> **3.6.3.1.** Several components of the Aerospace Medical Contingency Ground Support System can only provide essential care in theater. Thus, timely and rapid patient movement support is critical to mission success. For additional patient movement doctrine, reference Joint Publication 4-02.2, *JTTP for Patient Movement in Joint Operations*.

> **3.6.3.2. Patient Movement Coordination.** The patient movement process begins when a health care unit sends a request to the servicing Patient Movement Requirements Center (PMRC). The PMRC evaluates the request, validates the requirement (addressing medical, operational, and administrative issues required to safely move a patient), identifies a potential destination(s), determines the mode of transportation, and assigns patient and equipment requirements to the appropriate Service transportation component. Patient movement may be executed using ships or rotary-wing, tilt-wing, or fixed-wing assets. **Sufficient and timely coordination with the PMRC, including medical supply and equipment requirements, is essential to ensure smooth patient movement.**

3.6.4. Interface with the Air Force AE System. When the PMRC identifies the Air Force as the Service transportation component, the AE cell within the airlift center will receive the requirement, review airlift options, collaborate with the PMRC, and determine the final lift decision based on overall requirements, availability, and priorities. AE incrementalized elements are normally deployed in conjunction with the SPEARR team, EMEDS Basic, and AFTH, and provide coordination and staging capabilities for patients entering or transiting through the AE system. For further guidance on the AE system, accessing the system, and patient preparation and medical considerations, refer to AFTTP 3-42.5, *Aeromedical Evacuation.* Physician roles and responsibilities are outlined in AFJI 41-306, *Physician's Roles and Responsibilities in Aeromedical Evacuation* (draft).

Chapter 4

COMMAND, CONTROL, COMMUNICATIONS, AND COMPUTERS

4.1. Command, Control, Communications, and Computers (C4). C4 of medical operations in multinational or United Nations (UN) operations are defined in the warning, execution, and operations orders. Service component planners establish medical requirements and relay them through existing tasking messages/mechanisms to MAJCOMs and wings.

4.2. Command and Control.

    4.2.1. Unified Command Surgeon. The Unified Command Surgeon establishes theater medical policy, requirements, and medical CONOPs and communicates these matters through the AFFOR Surgeon to the deployed medical units. The chain of command for expeditionary medical units is through the Line of the Air Force (LAF).

    4.2.2. Air Force Forces.

        4.2.2.1. The Commander, Air Force Forces (COMAFFOR) serves as the "single-voice" Air Force to the joint force commander. The COMAFFOR is responsible for all Air Force forces (AFFOR) assigned or attached to the air component in joint or multinational operations. The COMAFFOR employs and sustains assigned and attached AFFOR in-theater.

        4.2.2.2. A corps neutral, medical officer at the rank of colonel is a member of the COMAFFOR special staff and is the director of Air Force health services operations. This medical officer may be known as the **AFFOR Surgeon** and is responsible for overall health resources management and provides information on health surveillance and risk assessments, sustainment, and other force health protection issues. The AFFOR Surgeon does not exercise command authority over deployed medical assets but provides a planning, coordinating, and oversight role.

    4.2.3. Local Command Authority for Aerospace Expeditionary Wings (AEWs).

        4.2.3.1. The AEW/AEG commander has administrative control of all assigned AEW assets. The AEW/AEG commander may designate the deployed medical commander to serve as medical operations advisor to the wing or group staff. When deployed, the EMEDS/AFTH falls under the AEW/AEG chain of command.

        4.2.3.2. At each forward operating location (FOL), the deployed medical commander or senior medical officer reports to the AEW site commander within the chain of command. Deployed medical commanders may be granted G-Series orders at the discretion of the COMAFFOR or highest level to which OPCON is delegated. Under full mobilization, full administrative control (ADCON) authority goes to the COMAFFOR. Under less than full mobilization, the COMAFFOR may receive *specified* elements of ADCON, to include UCMJ authority, force protection requirements, and other specific authorities

written in G-Series orders. The Air Reserve Component (ARC) retains all other ADCON authorities.

4.2.4. Local Command Authority for Major Theater War (MTW). The AEW/CC designates a medical group commander, usually the deployed medical commander. The AFFOR Surgeon has coordinating authority with the DMC and/or SMO at all geographically separated sites. However, chain of command remains through LAF channels.

4.2.5. Multinational Operations. Command and control of medical operations in multinational or UN operations is defined in the warning/execution/operations order.

4.3. Communications.

4.3.1. Medical Reports and Communication. All medical reports are submitted in accordance with Air Force Manual (AFMAN) 10-206, *Operational Reporting*, and specific CINC, joint task force (JTF), and COMAFFOR guidance. The MEDRED-C (RCS:HAF-SGH(AR)8602) is a status report of medical operations readiness. This report is accomplished daily and communicated to the AFFOR Surgeon, contributing MAJCOM Surgeons, and the Air Force Surgeon General. For sustained operations, MEDRED-C may be required weekly with the concurrence of the AFFOR Surgeon.

4.3.1.1. The MEDRED-C is an on-site assessment of the deployed medical unit's ability to perform its mission. This report provides information on the operational readiness status, unit availability, and patient care activities of US Air Force Medical Service units on alert for contingency operations or are under the influence of an unusual occurrence (i.e., natural disaster or other emergencies).

4.3.1.2. Data is used to make operational decisions on medical support forces and to perform medical intelligence analyses during contingency operations. Preventive medicine personnel will submit DNBI reports to the AFFOR Surgeon, contributing MAJCOM surgeons, and other locations as directed by the theater surgeon and Service policy. Data will be used to identify, track, and minimize the impact of disease and nonbattle injury.

4.3.1.3. DNBI data will also be used for exposure tracking and record-keeping in accordance with DOD and Air Force policy. This data may also be submitted to the US Army Center for Health Promotion and Preventive Medicine (USACHPPM), the Air Force Institute for Environmental Risk Analysis (AFIERA), or other specialized organization to meet theater surgeon preventive medicine requirements.

4.3.2. Secure/ Nonsecure Communications. Any classified information must be transmitted by secure means. Situation reports (SITREPs), MEDRED-Cs, medical surveillance, site locations, and compiled patient data are all examples of information that can be classified and will need safeguarding. The types of secure communications equipment usually available include secure telephone unit (e.g., STU IIIs) and various other encryption devices. Medical or casualty information becomes an operations security

(OPSEC) issue when linked to a particular military mission or operation. While medical information itself is not normally classified, in the context of a mission, it should be protected as part of the CINC's overall OPSEC program to deny information to the enemy.

4.3.3. Telephones and Radios. Secure/nonsecure telephones and radios are other communication devices used with EMEDS/AFTH. Users must be familiar with the procedures and proper operation of telephone and radios prior to deployment. The radio equipment is interoperable with a wide variety of DOD and commercial radios. Use of these radio sets in operations outside the United States must be approved through the appropriate theater CINC.

4.3.4. Satellite Communications (SATCOM). SATCOM assets are deployed with the EMEDS/AFTH force package. Though satellite connectivity is the preferred connection, factors such as bandwidth availability and CINC priorities may dictate SATCOM usage. Theater deployable communications (TDC) provides other methods for theater communications. In these cases the theater CINC may direct priorities. Telemedicine, medical logistics support, video transmission, and electronic mail require SATCOM capability when there is no local area network (LAN)/wide-area network (WAN) connectivity or a TDC network. Satellite communications may be military or commercial systems.

4.3.5. Classified Information. Classified information that is not under the personal control and observation of an authorized person is to be guarded or stored in a locked security container. A General Services Administration (GSA) approved field safe can be used. However, one- or two- drawer light containers must be securely fastened to the structure or under constant surveillance to prevent theft.
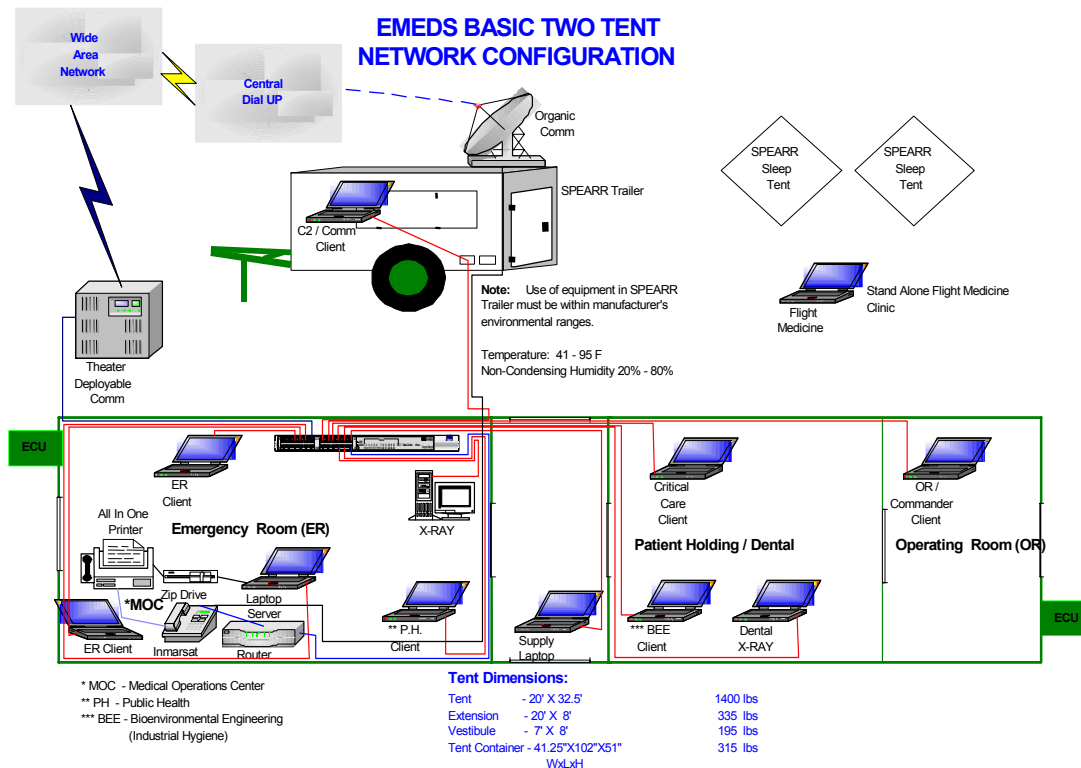
4.4. Systems.

4.4.1. Applicable Air Force C4 Policy. Air Force Instruction (AFI) 33-108, *Compatibility, Interoperability, and Integration of C4 Systems,* establishes guidance and responsibilities to ensure compatibility, interoperability, and integration for new and modified C4 systems, including automated information systems (AIS)**.**

4.4.2. Network Management Policies. AFI 33-115V1, *Network Management*, identifies responsibilities for supporting critical Air Force communications and information networks, primarily through Network Operations and Security Centers (NOSCs) and Network Control Centers (NCCs). Air Force network management adheres to the Defense Information Infrastructure Control Concept (DIICC) consisting of areas of distributed responsibility at global, regional, and local levels.

4.4.3. Communications and Computer System Support. Deployed medical assets utilize Air Force communications units, which provide base communications, voice, data infrastructure, and long-haul theater connectivity. Communication requirements and frequency allocation issues must be coordinated prior to deployment. Medical assets must deploy with dedicated computers and printers compatible with AEF infrastructure. These

computers should provide word processing, database management, store-forward telemedicine, telemaintenance, medical logistics support, message text formatting, graphics, and LAN/WAN interface capability (Figure 4.1).

Figure 4.1. Depicts an Example of Network Configuration

4.4.4. Communication Resources. The communication systems and support equipment must be interoperable with the joint arena communications and frequency management operations. Communication planners must coordinate frequency requirements through appropriate frequency management channels (e.g., installation, MAJCOM, and theater) to ensure all radiating equipment is spectrum certified and frequency supportable. Also, host-nation coordination must be initiated before a full-scale deployment. Tactical radios and land mobile radios (LMRs) are normally deployed with medical units, for local use at the operational site.

4.4.5. Technology Utilization. Telemedicine involves providing health care consultation services via electronic transmission of medical information. Telemedicine has several forms ranging from its most simple form involving a telephone call to a consultant to its most sophisticated form of real-time live video conferencing. Telemedicine is split into two main forms.

    4.4.5.1. Real-time Video Conferencing. Real-time video conferencing is a sophisticated form of communication and uses video technologies for live, "real-

time, face-to-face" interactions with others. Generally, real-time video conferencing requires a large bandwidth to efficiently transmit and receive signals.

4.4.5.2. "Store and Forward" Information. "Store and forward" information is a capability whereby clinical information including radiographs, photographs and other clinically related data are electronically transmitted from one computer to another in a manner similar to e-mail. Of these two types, store and forward requires much less hardware and bandwidth to transmit the information and is ideal for nonemergent teleconsultation situations. It simply becomes the electronic equivalent of a SF 513 (Medical Record – Consultation Sheet) with attached digitized photographs and radiographs.

4.4.6. Organic Communications Equipment.

4.4.6.1. The EMEDS/AFTH facility is equipped with organic communications equipment (SATCOM and tactical radios). Prior to deployment, medical units should ensure EMEDS/AFTH organic communication and computer systems are compatible with deployed forces' communication and computer systems. EMEDS Basic, EMEDS+10/25 bed AFTH LAN configurations are included in the organic equipment package. The MEFPAK Surgeon for each Aerospace Medical Contingency Ground Support System UTC establishes and maintains a summary of all required deployable communications systems and line-of-business software applications. The summary may include specific information for bandwidth requirements, transmission control protocol (TCP) port utilization, external communication interfaces with associated Internet protocol (IP) addresses, time of day utilization cycles, restoration priorities, etc. Voice and data communications links are vital for sustaining command and control, medical logistics support, patient movement data, and general message traffic capabilities.

4.4.6.2. EMEDS/AFTH deploys with organic satellite communications capability. Tactical and satellite communication sets or radios are allocated IAW the allowance standard and individual contingency operational considerations. EMEDS/AFTH requires ECS for deployed NCC functionality, supplying networking core services (e.g., WAN network access, information protection, NOS domain architecture, and TCP/IP addressing). Other deployed elements may provide alternate sources of communications in the event EMEDS/AFTH primary communications become inoperable.

4.5. Intelligence, National Agencies, and Space Support.

4.5.1. Intelligence.

4.5.1.1. Accurate medical intelligence is crucial to threat identification and application of appropriate preventive medicine measures. Prior to deployment, units, groups, and/or individuals tasked to support an operation require deployment briefings in accordance with AFI 41-106, *Medical Readiness Planning and Training*, and AFI 10-402, *Mobilization Planning,* for the area of responsibility (AOR). During

the employment stage of an operation, medical personnel require periodic briefings for their deployed location and for areas they are transiting while conducting medical operations.

4.5.1.2. The public health specialist (either the public health officer or noncommissioned officer [NCO]) serves as the Medical Intelligence Officer (MIO) to the deployed medical commander. The MIO is the main focal point for collection and dissemination of medical intelligence. The AFFOR Surgeon is responsible to ensure periodic medical and environmental intelligence updates are provided to all assigned units. Wing and group commanders, IAW operational directives, coordinate communication of medical intelligence information.

4.5.2. National Agencies. The Defense Intelligence Agency (DIA) and the Armed Forces Medical Intelligence Center (AFMIC) are primary sources for current medical intelligence. In a deployed environment the AFFOR Surgeon is the primary source for theater/regional medical intelligence.

4.5.3. Space Support. Space-derived intelligence, weather updates, and troop movements are examples of valuable information that are primarily acquired through base support units/organizations. Accurate medical intelligence is crucial to threat identification and application of appropriate preventive medicine measures. The AFFOR Surgeon is responsible for ensuring assigned units receive periodic medical /environmental intelligence updates. Space-based communication systems, linked with terrestrial C2 systems, give the theater surgeon and deployed medical commander the ability to more effectively and efficiently direct, monitor, and employ the deployed medical forces and resources. C2 systems such as the Global Command and Control System (GCCS) and the Global Combat Support System (GCSS) are key to successfully directing, monitoring, and employing deployed medical forces.

Chapter 5

PLANNING CONSIDERATIONS

5.1. Force Integration and Interoperability. Integration and interoperability of deployed assets in a theater or area of operation are critical for successful medical operations. Given that potential Aerospace Medical Contingency Ground Support System deployments include the full spectrum of deployed scenarios, it is essential that medical integration and interoperability occur with line elements of an AEF, components of the aeromedical evacuation system, joint medical counterparts, SOF medical components, and other federal and civilian support systems. Integration with the line is particularly critical for ECS and aeromedical evacuation.

5.2. Integration and Interoperability With Other Systems.

5.2.1. ECS requirements are significant and critical to delivery of health care support services. ECS requirements include, but are not limited to: messing, water, ice, fuels, billeting, latrines, showers, laundry, mortuary affairs, public affairs, chaplain, linguist, waste management, transportation (to include ambulance-type vehicles), vehicle maintenance support, vehicle decontamination, equipment maintenance, general supplies, contracting, information and communications systems support and maintenance, personnel decontamination, and security.

5.2.2. Support may be provided using HARVEST EAGLE or HARVEST FALCON, Air Force Contract Augmentation Program (AFCAP) or commercial assets. In contaminated environments, base support may be required for decontamination of deployed medical facility infrastructure and vehicles to include decontamination of the site location when necessary.

5.3. Medical Planners. Theater medical planners in coordination with the supporting command will integrate medical and AE elements to provide intra/ intertheater AE support to Aerospance Medical Contingency Ground Support Systems. AE assets may be collocated with components of the this ground support system and include AE crewmembers (AECMs), Critical Care Air Transport Teams (CCATTs), AE Liaison Teams (AELTs), Mobile Aeromedical Staging Facilities (MASFs), and fixed ASFs. The AE system is described in the AMC Omnibus Plan, the AE CONOPS, and AFTTP 3-42.5, *Aeromedical Evacuation*. Theater medical planners will receive support and planning guidance from AMC, ANG, and AFRC.

5.3.1. Theater Patient Movement Requirements Center (TPMRC).

5.3.1.1. The TPMRC is the single responsible agent in their respective theater or AOR for collaborative patient movement planning, management, and in-transit visibility. The PMRC evaluates patient movement requests (PMR), validates the requirement (addressing medical, operational, and administrative issues required to safely move the patient), identifies a potential destination(s), determines the mode of transportation, and assigns patient and equipment requirements to the appropriate Service transportation component. TPMRCs have the authority to ensure lift and bed requirements are

communicated to supporting agencies, healthcare facilities, and government agencies within their AOR.

5.3.1.2. Deployed medical assets must submit a PMR to the TPMRC in accordance with prescribed procedures using available communications support systems. When a TPMRC is not available in-theater, PMRs are submitted IAW theater policy. Aerospace Medical Contingency Ground Support System personnel should contact the TPMRC to request both intra and intertheater patient movement.

5.3.2. Global Patient Movement Requirements Center (GPMRC). The GPMRC provides intertheater medical regulating services. In certain contingencies, Aerospace Medical Contingency Ground Support System personnel may have to coordinate directly with the GPMRC for patient regulation and evacuation.

5.3.3. Special Operations Forces (SOF) Medical Support. Air Force Special Operations Command (AFSOC) is designated as an "AEF enabler." AFSOC capability to support this role includes Level 1 (First Responder) and limited Level 2 (Casualty Collection and Forward Resuscitative Surgery) medical support, which is primarily aligned with AFSOC operational units. Unique personnel and equipment packages are designed to support worldwide special operations, including far-forward missions. In an "AEF enabler" role, these SOF assets interface and/or integrate with LAF and conventional medical and aeromedical elements, as well as joint SOF medical support components. Details of SOF operational medical support are provided in AFTTP 3-42.6, *USAF Medical Support for Special Operations Forces (SOF)*, and the AFSOC Medical CONOPs.

5.4. Security, Medical Resource Protection, and Medical Logistics.

5.4.1. Medical personnel and equipment are noncombatant assets. Security within the immediate area for patients and personnel resources at each deployed medical site, with the exception of enemy prisoner of war (EPW) patients, is a medical responsibility. Medical personnel are issued small arms IAW AFI 32-207, *Arming and Use of Force*. Deployed medical site assets, such as narcotics, are protected as a controlled area in accordance with AFI 31-209, *The Air Force Resource Protection Program*. Additional force protection measures should be determined by the DMC or SMO based upon terrorist force protection condition (FPCON) and the advice of the Defense Force Commander (DFC).

5.4.2. Medical Logistics. Medical logistics personnel in concert with LAF and medical planners provide insight into when, where, what, how much, at what rate, and for how long, WRM is required. WRM equipment may be prepositioned or incrementally deployed to ensure adequate materiel is available or on-hand. Logistics objectives are to reduce the physical footprint and airlift requirement without degrading medical capability and to provide the right materiel and a tailored logistics support system to ensure responsive sustainment. EMEDS/AFTH increments initially contain 7 days of supplies. A limited item 10-day resupply package is available as either a "push" or "pull" asset. Fully integrated material acquisitions, status, flow, and transportation information is required. A highly automated and integrated logistic system is used to manage high-velocity logistics.

Additional information on logistics support and processes can be found in AFTTP 3-42.8, *Medical Logistics and Blood Support Operations*.

5.4.3. Medical Storage Requirements. EMEDS/AFTH assets are stored in a ready mode for rapid deployment. Modules may be stored at one location or maintained/sourced from other locations. At both home station and the deployed site, medical assets must be stored in facilities that provide security and a climate-controlled environment that prevents degradation to dated and temperature sensitive assets. All surgical instruments/trays should be stored in a ready to use condition (sterilized and packaged).

5.4.4. Expeditionary Combat Support (ECS) Requirements. Once delivered to an operational site, the medical staff will erect each increment of the EMEDS/AFTH and attain full operational status. Base support personnel will be needed to connect the EMEDS/AFTH to the base infrastructure. ECS support for patients and deployed medical staff will be provided using host base capabilities.

    5.4.4.1. The DMC or SMO must assure expeditionary combat support arrangements are coordinated with appropriate agencies prior to deployment. Other base support service requirements include, but are not limited to; transportation (for up to 13- 463L pallets, a 6,000-pound trailer, personnel, and patients until the ambulance arrives) contracting, billeting, food service, general supplies, sewage and waste disposal, potable water, laundry, fire protection, transportation, vehicle maintenance, and communications, including radio maintenance.

    5.4.4.2. Pending arrival and set-up of deployed medical facilities, the bare base should provide a shelter of opportunity for interim use.

        5.4.4.2.1. Bare base electrical power systems provide prime and backup power for EMEDS/AFTH facilities and equipment. Initial support will be provided using low voltage tactical mobile power generators, e.g., MEP-7. High voltage primary power will be provided once installed, and the tactical generators allocated for emergency backup power. Ground power equipment specialists will be provided to connect power distribution panels (PDPs) to commercial or bare base power. Field deployable environmental control units (FDECUs) are embedded in the EMEDS AS. [See the EMEDS Basic and EMEDS+10/25 bed AFTH Power Grid Configurations in the EMEDS CONOPS.] Ground fuels support will normally be obtained on a contract basis. Fuels for EMEDS/AFTH vehicles, generators, etc., should be included with other base requirements.

        5.4.4.2.2. Liquid oxygen (LOX) and other gases should be included in base requirements and should be obtained from fuels or on a contract basis.

        5.4.4.2.3. The EMEDS CONOPS provides a descriptive list of EMEDS/AFTH ECS requirements. Operations involving SPEARR team deployments may require a different mix of ECS. The SPEARR team, with the trailer, is equipped to supply its own

power, food, communications, and shelter for 5 days. The list of SPEARR team ECS requirements is listed in the SPEARR CONOPS.

Chapter 6

EDUCATION AND TRAINING

6.1. Education Programs.

6.1.1. Education programs must retain the flexibility to quickly adapt to emerging concepts and ideas. Within the dynamic global security environment education programs must remain relevant. Education programs that remain entrenched in out-of-date concepts do not adequately prepare individuals to cope with changing environments and lose credibility within the institution and with individuals. Education programs must improve the airman's contribution across the full range of military operations.

6.1.2. Education programs built around realistic scenarios and which demand decision making within realistic time frames serve to increase the educational effect. This is achieved through dynamic curricula that anticipate the evolving security environment. Education programs involving the full range of aerospace power capabilities within a wide range of military operations provide a comprehensive educational experience (AFDD 2.4.3, *Education and Training*).

6.1.3. Education programs should never be designed haphazardly. Careful consideration must be given to the desired outcome of the program. While no two programs will be alike, there are some common aspects that should always be considered. The benefit of education programs can be maximized through: flexibility to adapt educational objectives to emerging concepts and ideas; versatility to encompass the full range of military operations in education programs; priority on relevant concepts through objective evaluation, feedback and input; balance between academic concept, operational reality, and historical perspective; and centralized development of education programs through a systematic approach involving mentally challenging, realistic educational goals.

6.2. Expeditionary Medical Support (EMEDS)/AFTH Training.

6.2.1. Ready-to-deploy, trained, medical personnel assigned to an EMEDS UTC are defined as having completed the following:

6.2.1.1. Formal EMEDS/AFTH specific medical field operational training (taught at USAF School of Aerospace Medicine [USAFSAM] at Brooks AFB, Texas).

6.2.1.2. Completion of the medical Readiness Skills Verification Program (RSVP), which defines Air Force Specialty Code (AFSC) specific readiness skills.

6.2.1.3. Advanced trauma/critical care clinical training (for selected personnel) at a Center for Readiness Skills Training.

6.2.1.4. Other training requirements as stipulated by AFI 41-106, *Medical Readiness Planning and Training*.

6.2.2. Education and training need to be conducted in an environment that permits the personnel assigned to the modules of EMEDS/AFTH to exercise simultaneously using the skills/knowledge they already possess with the actual equipment and supplies in the EMEDS/AFTH modules. Educating and training together permits personnel to learn and perform the duties of other team members.
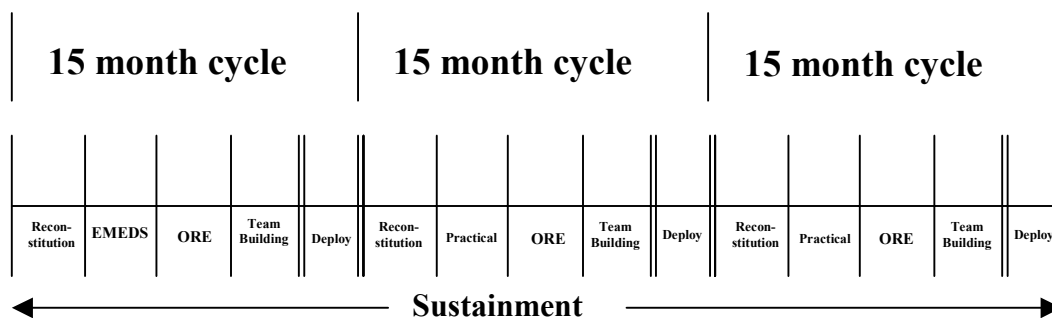
6.2.3. The idea of cross-functionality becomes reality and engenders the capability of a commander to move personnel in and between the modules for those circumstances where membership has to be reconstituted because of illness, temporary duty (TDY), leave, or administrative actions. Familiarity with the operation of the SPEARR, EMEDS Basic, and EMEDS+10/25 bed modules while these modules train together strengthens a person's understanding of the concept of operations and their personal capability to deploy regardless of the original assignment to a specific module.

6.2.4. In garrison, the medical group (MDG)/CC is responsible for ensuring all training is completed and properly documented. Training documentation is maintained within the unit Medical Readiness Office while at home station. The Medical Readiness Office is responsible for reporting the training statistics to their parent MAJCOM using the MAJCOM prescribed format.

6.2.5. When deployed, the DMC should appoint an individual who will ensure education and training continues IAW AFI 41-106, *Medical Readiness Planning and Training,* and that the training is appropriately documented in the medical readiness training record. Air Reserve Component (ARC) EMEDS/AFTH UTCs not sourced against AEFs will meet formal UTC training requirements IAW 41-106, *Medical Readiness Planning and Training*. When ARC personnel are unable to attend formal training (due to scheduling difficulty) with their assigned units as a complete unit, they can attend training with other units.

6.2.6. EMEDS/AFTH UTC training is based on three 15-month cycles (Figure 6.1). Team training consists of three training elements: a **formal** element, centralized at one site for standardization; a **practical** follow-on element, designed to provide a team exercise experience; and a **sustainment** element, completed at home station. The formal element consists of the EMEDS formal course. This training occurs during the first 15-month cycle but no later than 30 days prior to deployment vulnerability. The practical element is conducted during the second or third 15-month cycle. The third element, sustainment training, should be continuous throughout the three cycles.

Figure 6.1. Depicts AEF Rotation Schedule/3-Month Blocks

15 month cycle	15 month cycle	15 month cycle

Recon-stitution	EMEDS	ORE	Team Building	Deploy	Recon-stitution	Practical	ORE	Team Building	Deploy	Recon-stitution	Practical	ORE	Team Building	Deploy

◄————————————————— **Sustainment** ——————————————►

6.2.6.1. Formal Training.

6.2.6.1.1. EMEDS/AFTH training is implemented on a 15-month training cycle, alternating the formal EMEDS/AFTH course with practical training, based on the AEF rotation schedule. The in-residence formal training is required for all EMEDS/AFTH teams every 45 months. Formal SPEARR team training is included in the formal EMEDS curriculum requirements. Attending the EMEDS/AFTH formal course provides full credit for continuing medical readiness training (CMRT). Unit/team integrity is maintained to the maximum extent possible. Assigned personnel must be flexible in what they are trained to do, to include multifunctional roles within the EMEDS/AFTH teams. Course C4A or an equivalent course is required for the EMEDS/AFTH commander and deputy commander.

6.2.6.1.2. Upon completion of EMEDS/AFTH formal training, each team member is issued an AF Form 1098, *Task Certification*, documenting all training received to include those additional sustainment elements from AFI 41-106, *Medical Readiness Planning and Training, Attachment 3*. The incorporation of expeditionary medical support concepts is included in all formal medical readiness training (i.e., Expeditionary Medical Readiness Course [EMRC]/Basic Expeditionary Medical Readiness Training [BEMRT], Combat Readiness Training Center [CRTC] - ANG Medical Readiness Training Site [MRTS], Reserve Medical Readiness Field Training [RMRFT], and Medical Readiness Indoctrination Course). These formal courses serve as EMEDS/AFTH training platforms beyond the EMEDS/AFTH formal course.

6.2.6.2. Practical Training. Practical training gives the EMEDS/AFTH teams an opportunity to reinforce the skills taught during the formal course. EMEDS/AFTH practical training will take advantage of these opportunities to integrate and train with all EMEDS/AFTH increments in an exercise based format. EMEDS/AFTH training should also take advantage of deployment and joint exercises. As with formal training, the practical training will be documented on an AF Form 1098, *Task Certification.*

6.2.6.3. Sustainment Training.

6.2.6.3.1. Sustainment training consists of AFSC-specific activity and training events that enhance and maintain a team member's operational skills. These events can include any formal courses (i.e., advanced trauma life support [ATLS], advanced cardiac life support [ACLS], Trauma Nursing Core Course, etc.) and exercises where the Aerospace Medical Contingency Ground Support System concept is deployed. Sustainment instruction is expected throughout each training cycle. Units collocated with Aerospace Medical Contingency Ground Support System equipment sets are required to set up, inventory, and exercise the set annually. Additional training is conducted IAW DODI 1322.24, *Military Medical Readiness Skills Training*, AFI 41-106*, Medical Readiness Planning and Training,* and AFSC-specific training (core competencies). AFSC-specific training will focus primarily on the AFSC position filled within that UTC. Additionally, each team member must be familiar with multifunctional roles.

6.2.6.3.2. Sustainment training may also include clinical training received through initiatives such as the Center of Readiness Skills Training (i.e., Ben Taub Medical Center or Jefferson Barracks experiences, or equivalents). The purpose of the Center of Readiness Skills Training is to train at a high-volume, civilian trauma center IAW the clinical requirements specified in the RSVP. Like the formal training, unit/team integrity is vital to this experience. Clinical sustainment training provides a focused experience that supports the provision of total medical support for a patient, potentially from point of injury through disposition, while deployed.

6.3. Forms Prescribed.

6.3.1. SF Form 513, *Medical Record – Consultation Sheet.*
6.3.2. AF Form 1098*, Task Certification.*

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

JP 4-02, *Doctrine for Health Service Support in Joint Operations*
DODI 1322.24, *Military Medical Readiness Skills Training*
AFDD 2-4.2, *Health Services*
AFDD 2-4.3, *Education and Training*
AFM 10-206, *Operational Reporting*
AFI 10-400, *Aerospace Expeditionary Force Planning*
AFPD 33-1, *Command Control, Communications, and Computer (C4) Systems*
AFI 33-108, *Compatibility, Interoperability, and Integration of Command, Control, Communications, and Computer (C4) Systems*
AFI 33-115V1, *Network Management*
AFI 41-106, *Medical Readiness Planning and Training*

Supporting Information

Small Portable Expeditionary Aeromedical Rapid Response (SPEARR) Concept of Operations
Expeditionary Medical Support (EMEDS) Concept of Operations

Abbreviations and Acronyms

ACC	Air Combat Command
ACLS	advanced cardiac life support
ADCON	administrative control
ADVON	advanced echelon
AE	aeromedical evacuation
AECM	aeromedical evacuation crewmembers
AEF	Aerospace Expeditionary Force
AEFC	Aerospace Expeditionary Force Center
AEG	aerospace expeditionary group
AELT	Aeromedical Evacuation Liaison Team
AES	aerospace expeditionary squadron
AETF	Aerospace Expeditionary Task Force
AEW	aerospace expeditionary wing
AFCAP	Air Force Contract Augmentation Program
AFFOR	Air Force forces
AFI	Air Force Instruction
AFIERA	Air Force Institute for Environmental Risk Analysis
AFMAN	Air Force Manual
AFMIC	Armed Forces Medical Intelligence Center
AFMS	Air Force Medical Service
AFPD	Air Force Policy Directive

AFRC	Air Force Reserve Command
AFSC	Air Force Specialty Code
AFSOC	Air Force Special Operations Command
AFTH	Air Force Theater Hospital
AIS	automated information systems
AMC	Air Mobility Command
ANG	Air National Guard
AOR	area of responsibility
ARC	Air Reserve Component
AS	allowance standard
ASF	Aeromedical Staging Facility
ATC	air transportable clinic
ATLS	advanced trauma life support
BOS	base operating support
C4	command, control, communications, and computers
CBW	chemical and biological warfare
CCATT	Critical Care Air Transport Team
CINC	commander in chief
CMRT	continuing medical readiness training
COMAFFOR	Commander, Air Force Forces
CONOPS	concept of operations
CONUS	continental United States
CSAF	Chief of Staff, United States Air Force
CT	computerized tomography
DECON	decontamination
DFC	Defense Force Commander
DIA	Defense Intelligence Agency
DIICC	Defense Information Infrastructure Control Concept
DIRLAUTH	direct liaison authorized
DMC	Deployed Medical Commander
DNBI	disease and nonbattle injury
DOD	Department of Defense
DODI	Department of Defense Instruction
DRMD	Deployment Requirements Manning Document
EAF	Expeditionary Aerospace Force
ECATT	expeditionary critical air transport team
ECS	Expeditionary Combat Support
ECU	environmental control unit
EMEDS	Expeditionary Medical Support
EPW	enemy prisoner of war
FDECU	field deployable environmental control unit

FOC	full operational capability
FOL	forward operating location
FPCON	force protection condition
GCCS	Global Command and Control System
GCSS	Global Combat Support System
GPMRC	Global Patient Movement Requirements Center
GSA	General Services Administration
HMTF	host medical treatment facility
HSS	health service support
IAW	in accordance with
IDMT	independent duty medical technician
IP	Internet protocol
JP	joint publication
JTF	joint task force
LAF	Line of the Air Force
LAN	local area network
LMR	land mobile radio
LOX	liquid oxygen
MAJCOM	major command
MASF	Mobile Aeromedical Staging Facility
MDG	medical group
MEDREDC	Medical Report for Emergencies, Disasters, and Contingencies
MEFPAK	Manpower and Equipment Force Packaging
MEP	mobile electric power
MFST	mobile field surgical team
MGRL	Medical Global Reach Laydown
MIO	Medical Intelligence Officer
MMU	mobile medical unit
MST	mobility support team
MTF	medical treatment facility
MTW	major theater war
NBC	nuclear, biological, and chemical
NCC	Network Control Center
NCO	noncommissioned officer
NOSC	Network Operations and Security
OASD-HA	Office of the Assistant Secretary of Defense for Health Affairs
OCONUS	outside the continental United States
OPCON	operational control

OPSEC   operations security
ORE   operational readiness exercise

PAM   preventive aerospace medicine
PAR   population at risk
PCM   primary care management
PDP   power distribution panel
PMR   patient movement request
PMRC   Patient Movement Requirements Center

RSVP   Readiness Skills Verification Program
RTD   return to duty

SATCOM   satellite communications
SG   Surgeon General
SITREP   situation report
SME   squadron medical element
SMO   Senior Medical Officer
SOF   special operations forces
SPEARR   small portable expeditionary aeromedical rapid response
STU   secure telephone unit

TACC   tanker airlift control center
TALCE   tanker airlift control element
TCP   transmission control protocol
TDC   theater deployable communications
TDY   temporary duty
TPFDD   time-phased force and deployment data
TPMRC   Theater Patient Movement Requirements Center

UCMJ   Uniform Code of Military Justice
UN   United Nations
USACHPPM   US Army Center for Health Promotion and Preventive Medicine
USAFSAM   USAF School of Aerospace Medicine
UTC   unit type code

WAN   wide-area network
WRM   war reserve materiel

Attachment 2

LEVELS OF CARE

A1.1. The Health Service Support (HSS) System. The HSS system consists of five levels of care. Patients are transported through various modes between these levels. These levels, and the increasing degree of medical capabilities, are defined below. Patient movement forward of Level 3 is a Service responsibility, but if operationally directed, AE may be tasked to go as far forward as there is a suitable airstrip.

A1.2. Levels of Care.

A1.2.1. Level 1 (L1)—First Responder. Level 1 care consists of care rendered at the unit level. It includes self-aid, buddy aid, combat lifesaver skills, examination, and emergency lifesaving measures such as the maintenance of the airway, control of bleeding, prevention and control of shock, splinting or immobilizing fractures, and prevention of further injury. Treatment may include restoration of the airway by invasive procedure; use of intravenous (IV) fluids and antibiotics; and application of splints and bandages. These elements of medical management prepare patients for return to duty (RTD) or for transportation to a higher level of care.

A1.2.2. Level 2 (L2)—Casualty Collection and Forward Resuscitative Surgery. Level 2 care, at a minimum, includes resuscitation and stabilization and may include advance trauma management, emergency medical procedures, forward resuscitative surgery capability, basic laboratory, limited x-ray, pharmacy, and temporary holding facilities. Patients are treated and returned to duty, or are stabilized for evacuation to an MTF capable of providing a higher level of care.

A1.2.3. Level 3 (L3)—Theater Hospital—EMEDS+10/25 Bed AFTH. Level 3 care includes clinical capabilities normally found in an MTF that is located in a lower-level enemy threat environment. The MTF is staffed and equipped to provide resuscitation, initial wound surgery, and post-operative treatment. This level of care may be the first step toward restoration of functional health, as compared to procedures that stabilize a condition to prolong life. It does not normally have the crisis aspects of initial resuscitative care and can proceed with greater preparation and deliberation.

A1.2.4. Level 4 (L4)—Mature Theater Hospital—EMEDS+50 Bed AFTH and Up. Level 4 care provides the surgical capabilities found at Level 3 and also provides rehabilitative and recovery therapy for those who can RTD within the theater evacuation policy. This level of care may only be available in mature theaters. The mature theater hospital may be an outside the continental United States (OCONUS) fixed medical treatment facility.

A1.2.5. Level 5 (L5)—Definitive Care—Large Fixed Facility CONUS or CINC-Approved Safe Haven. Level 5 care is definitive, convalescent, restorative, and rehabilitative and is normally provided by military, Department of Veteran Affairs (DVA),

CONUS civilian hospitals, and CINC-approved safe havens. This level may include a period of minimal care but with increased physical activity necessary to restore patients to functional health and allow them to RTD or to a useful and productive life.