



**DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
WASHINGTON, DC**

MEMORANDUM FOR ALMAJCOM/SG  
AFMSA/CC  
ANG/SG

JUL 14 2000

FROM: HQ USAF/SG  
110 Luke Avenue, Room 400  
Bolling AFB, DC 20332-7050

SUBJECT: Concept of Operations (CONOPs) for Aeromedical Evacuation

In 1998, AMC/SG took the lead in the development of the next generation Aeromedical Evacuation (AE) CONOPs. The attached CONOPs and associated Mission Capability Statements (MISCAPS)/Manpower Force Elements Listings (MFELs) represent the culmination of this effort. This CONOPs provides a modular, interoperable, and flexible methodology to provide light, lean, life-saving support during full spectrum operations. This CONOPs and associated MISCAPS/MFELs supersede previously registered AE Unit Type Codes (UTCs).


The following new or changed UTC MISCAPS are approved:

- a. AE Command Element (FFECE)
- b. AE Command Element Equipment (FFEC1)
- c. AE Control Team (FFAEC)
- d. AE Control Team Equipment (FFAE1)
- e. AE Crew Management Cell (FFAEM)
- f. AE Crew Management Cell Equipment (FFAE2)
- g. AE Support Cell (FFAES)
- h. AE Support Cell Equipment (FFAE3)
- i. AE Administrative Support Team (FFAST)
- j. Expeditionary AE Liaison Team (FFALA)
- k. Expeditionary AE Liaison Team Equipment (FFAL1)
- l. AE Liaison Team (FFALF)
- m. AE Liaison Team Equipment (FFAL2)

- n. Expeditionary AE Coordination Team (FFLAA)
- o. Expeditionary AE Coordination Team Equipment (FFLA1)
- p. Expeditionary AE Crew Support (FFLAB)
- q. Expeditionary AE Crew Support Equipment (FFLA2)
- r. Expeditionary AE Staging Team (FFLAC)
- s. Expeditionary AE Staging Team Equipment (FFLA3)
- t. Mobile Aeromedical Staging Facility (MASF) 25 Bed (FFLAD)
- u. Mobile Aeromedical Staging Facility (MASF) 25 Bed Equipment (FFLA4)
- v. Mobile Aeromedical Staging Facility (MASF) 50 Bed (FFLAE)
- w. Mobile Aeromedical Staging Facility (MASF) 50 Bed Equipment (FFLA5)
- x. AES 50 Bed ASF Personnel (Initial) (FFLCB)
- y. AES 25 Bed ASF Augmentation Package 1 (FFLCC)
- z. AES 25 Bed ASF Augmentation Package 2 (FFLCD)
- aa. AE Plans and Strategy Team (FFPST)
- bb. AE Plans and Strategy Team Equipment (FFPS1)
- cc. AE Command Augmentation Team (FFAEA)
- dd. AE Crew (FFQDA)
- ee. AES Patient Movement Item Medical Logistics (FFQP1)
- ff. AES Patient Movement Item Biomed Equip Maint (FFQP2)
- gg. AES In-Flight Kit (FFQDM)
- hh. AES In-Flight Kit Resupply (FFDQH)
- ii. AE Communications Equipment Augmentation Package (FFCOM)

AMC/SG should assure allowance standards revisions are accomplished and forwarded to AFMLO with a copy to AF/SGX NLT 30 April 01. The wartime requirement for these UTCs will be determined during the 17-21 July 2000 AE Requirements Workgroup. These changes will be reflected in the next Medical Resource Letter. Anticipate transition of personnel UTCs beginning in FY01. Anticipate funding for procurement of initial prototypes of these UTCs in Oct 01. Conduct initial planning and determine funding requirements for a Form, Fit, and Function evaluation of these prototype Allowance Standards in March 2002. Forward an estimate of required funding for this evaluation to AF/SGX NLT 15 Dec 00. My point of contact

on this issue is Col Pete Walsh/Col Leo Hattrup or Maj Lorn Heyne, HQ USAF/SGXR, DSN 297-0020.

  
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Attachments:

1. AFMS AE CONOPs
2. Revised AE MISCAP

**AIR FORCE MEDICAL SERVICE**

**AIR MOBILITY COMMAND  
CONCEPT OF OPERATIONS  
FOR  
AEROMEDICAL EVACUATION**

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**14 Jul 00**

**OPR: HQ AMC/SGX, Scott AFB, Illinois**

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## **EXECUTIVE SUMMARY**

**1. GENERAL.** The mission of the Air Force AE system is to provide fixed-wing intratheater and intertheater movement of sick or injured personnel, by critical care aeromedical transport teams and qualified AE crewmembers, to locations offering appropriate levels of medical care. The AE system is designed to be very flexible so that it can operate across the spectrum of potential scenarios, from humanitarian and disaster relief operations, through small-scale contingencies, to major theater war.

HQ Air Mobility Command is the lead command for Air Force aeromedical evacuation (AE). This document provides HQ AMC's concept of operations (CONOPS) for the AE system in support of the AEF/EAF. It describes command relationships, assigns tasks, and furnishes generic guidance for developing a theater aeromedical evacuation system (TAES) in support of humanitarian operations, smaller-scale contingencies (SSC), major theater wars (MTW), weapons of mass destruction (WMD) aftermath, homeland defense, and disaster response, as well as exercises in which AE forces participate. The AE CONOPS applies to AMC, USAFE, PACAF, CENTAF, SOUTHAF and all AMC-gained Air Reserve Component (ARC) units and personnel supporting operations conducted IAW this plan.

Aeromedical evacuation can significantly improve casualty recovery rates by providing timely and effective transportation of the sick and wounded to medical facilities offering appropriate levels of care. The AE system provides: (a) control of casualty movement by air transport; (b) medical personnel, operational support personnel, and equipment for inflight supportive medical care and ground support operations; (c) critical care air transport teams (CCATT) to monitor and manage specific patients requiring intensivists care, (d) facilities on or in the vicinity of airheads and air bases for the administrative processing and care of casualties entering, en route through, or leaving the AE system; (e) command and control of all theater AE forces and AE operations; and (f) an organic communication network capability between/among enroute medical facilities and airlift command and control agencies.

The nature of threats potentially impacting the AE system varies considerably within the spectrum of potential operations. Threats include, but are not limited to, terrorism, information warfare (IW), surface-to-air munitions, surface-to-surface munitions, enemy special forces activities, biological/chemical weapons, stress management, and others. As the military becomes a global medical engagement tool for the NCA, AE will be increasingly called upon to provide assistance in Disaster Response, Humanitarian Assistance and Civil Support in a CONUS peacetime WRM contingency.

Contained in the body of the AE CONOPS are a number of key assumptions and limitations with regard to aeromedical evacuation operations.

**2. DESCRIPTION/CAPABILITIES OF AE ELEMENTS.** Aeromedical evacuation unit type codes (UTC) have been developed based on the building block "plug-in/pull-out" principle, allowing planners to select specific UTCs capable of supporting the range

of steady state, contingency or major theater war OPLANs. Each UTC is developed to support command and control, patient staging, support, operational, or patient care requirements, and each have mission-specific tasks and responsibilities. Either opportune, retrograde, or dedicated aircraft are used to move casualties from forward locations to medical treatment facilities (MTF) capable of providing the required care. Many aircraft types can be configured and used to accommodate patients and cargo as mission requirements dictate.

**3. AE OPERATIONS.** In many contingencies or civil disaster response, airlift will be the preferred means of patient movement out of the area of responsibility (AOR). Services or civilian modes of transportation may be utilized to assist with the movement of casualties from a forward location or immediately after an emergent event. Once the military is involved, the unified command is responsible to provide an integrated command and control system for patient movement offering decentralized execution and intransit visibility. The unified command patient movement requirements centers (PMRC) provide medical regulating services including clinical validation of patients. The PMRC communicates patient movement requirements to the AECT function (air) or other Service components (ground/sea) that are responsible for executing an evacuation mission. The Air Force is charged with the responsibility to operate a common-user, AF fixed-wing AE system. The Air Mobility Command (AMC) has been given the overall responsibility for serving as the single AE lead command for the Air Force, managing and operating the intertheater and AE sub-systems and providing AE elements and planning assistance to the theater of operations, in intermediate supporting theaters, or in CONUS.

**4. INTERFACE WITH EMEDS/AFTH.** The Expeditionary Medical Support (EMEDS)/Air Force Theater Hospital (AFTH) system represents the manner in which the Air Force Medical Service (AFMS) supports the Expeditionary Aerospace Force (EAF) and the aerospace expeditionary forces (AEF). It serves as a critical interface point for a deployed theater aeromedical evacuation system. EMEDS/AFTH can support the entire range of Air Force health care in a theater of operations and can be used across the entire spectrum of deployed scenarios, including war operations, deterrence and contingency operations, peacetime engagement, crisis response, and humanitarian relief operations.

**5. THEATER AE COMMAND AND CONTROL.** Command and control of theater AE forces in joint, coalition, or AEF operations will be defined in the warning/execution/operations order. AE assets will be under the operational control of the joint force commander (JFC), through the joint force air component commander (JFACC), with lines of communication to the joint force surgeon. Deployed AE units will operate under the direction of the AECE through the operations group to the EMW/CC.

**6. COMMUNICATIONS.** AE forces are modular by design and can be tailored and deployed to meet theater mission requirements in a multitude of locations. The AE organic command, control, communications and computer (C<sup>4</sup>) infrastructure supports these requirements by providing worldwide deployable, secure and non-secure, voice and



data communications capabilities. The organic AE communications suite allows the greatest flexibility to support the maximum deployment and redeployment options.

**7. SECURITY.** Security for patients and personnel resources within their immediate area at each deployed TAES site is an AE element responsibility. TAES elements will be deployed to secured operating bases where the primary responsibility for base or garrison security is in the host unit. AECMs may be armed on AE mission as dictated by the current threat environment and the mission profile. TAES elements may provide their own site security measures within their immediate area as deemed necessary.

**8. TRAINING.** AE training will cover the entire spectrum of AE operations and all phases of deployment. The Readiness Training Oversight Committee (RTOC) serves as the primary tool of the Director of Medical Readiness (HQ USAF/SGX) to provide oversight and guidance for all medical readiness training courses, programs and initiatives. The Aeromedical Evacuation Executive Board (AEEB) sets the strategic direction for the global AE system, while the AE Steering Group (AESG) brings together the multiple major air commands' staffs, the Air Reserve Component staffs, and other agencies and functional areas involved in the AE System, to ensure a total force perspective on the organization, training, and equipping of the AE force.

**9. LOGISTICS AND MAINTENANCE.** The TAES will deploy with sufficient supplies to be self-sufficient until the resupply mechanism is initiated. The TAES has the capability to deploy an AE Support Cell to provide basic logistical and maintenance support. Service components are responsible for resupply until a theater logistics system is deployed and a supply account initiated with the host medical treatment facility (MTF). Base operating support (BOS) will be required at every location where a TAES element is established.

## SECTION 1 - GENERAL

**1.1. Purpose.** HQ AMC is the lead command for Air Force aeromedical evacuation (AE). This document provides HQ AMC's concept of operations (CONOPS) for the AE system in support of the AEF/EAF. It describes command relationships, assigns tasks, and furnishes generic guidance for developing a theater aeromedical evacuation system (TAES) in support of humanitarian operations, smaller-scale contingencies (SSC), major theater wars (MTW), weapons of mass destruction (WMD) aftermath, homeland defense, and disaster response, as well as exercises in which AE forces participate. Specific information to amplify and tailor guidance contained within this document will be included in the supporting OPLANs and CONPLANs. This document provides guidelines for identifying and defining TAES responsibilities; ensuring adequate AE resources are available to support global military operations; and developing AE policies, operating procedures, and training programs.

**1.1.1 Scope.** This CONOPS applies to AMC, USAFE, PACAF, CENTAF, SOUTHAF and all AMC-gained Air Reserve Component (ARC) units and personnel supporting operations conducted IAW this plan. It provides guidance for the seamless interface between AE elements and airlift, regulating, and user-Service medical elements in support of intratheater, intertheater, and continental United States (CONUS) AE operations. Information contained herein can be used by supported agencies in planning AE requirements.

**1.2. Background.** During World War II, both European and Pacific-based American Armed Forces had their initial large-scale experiences with wartime AE. Large numbers of casualties with incapacitating wounds or illnesses were generated in geographic regions located far from modern facilities, necessitating the use of airlift to obtain the required medical care. In 1949, the Secretary of Defense gave the USAF the responsibility for air transport of military patients. In 1975, the USAF passed that responsibility to the Military Airlift Command (MAC) and the 375th Aeromedical Airlift Wing (AAW). On 1 Oct 90, the 375 AAW at Scott AFB, Illinois, was deactivated and the active duty AE units were assigned to their respective host bases and corresponding MAJCOMs. A new era began on 1 Jun 92 when the Military Airlift Command, Strategic Air Command and Tactical Air Command were inactivated and the Air Combat Command (ACC) and Air Mobility Command (AMC) were formed from elements of those organizations. Shortly afterward, AMC divested itself of infrastructure and forces not directly related to global reach. The majority of active and ARC C-130 airlift squadrons, as well as the active duty AE unit at Pope and the 19 gained AES units from the ARC, were transferred to ACC in order to align all theater (combat) support under one command. At the same time, the C-130 and AE squadrons at Rhein-Main were transferred to USAFE, and similar squadrons at Yokota were transferred to PACAF. Late in 1997, the airlift and AE squadrons at Pope were transferred back to AMC, where they remain today. During the Panama conflict and Desert Storm the philosophy of flying only stable patient in the AE system evolved to a "shock-stabilized and evacuate"

mode of AE. In conjunction with this new philosophy, the concept of Critical Care Aeromedical Transport Teams (CCAT) was born. The 59 MDW was used as the test bed for this revolutionary AE capability. By May 00, CCATT is being institutionalized in AE, as vital piece of this mission.

As the availability of airlift decreased in the late 1990s, it became apparent that all medical UTCs would have to become more light, lean, and life saving. Every effort must be made to make each AE team small and multi-functional as possible to reduce airlift requirements.

**1.3. Mission.** The Air Force AE system provides fixed-wing intratheater and intertheater movement of sick or injured personnel, by Critical Care Aeromedical Transportation Team (CCATT) and qualified AE crewmembers, to locations offering appropriate levels of medical care. AE can operate as far forward as fixed-wing aircraft are able to conduct airland operations. The evacuation can be from forward airfields in the combat zone to points of definitive medical care also within the combat zone (intratheater), from the combat zone to medical care in the communications zone (COMMZ) (intratheater or intertheater, depending on the theater), or from the communications zone to either an intermediate supporting theater or on to CONUS (intertheater).

Aeromedical evacuation significantly improves casualty recovery rates by providing rapid transportation of the sick and wounded to medical facilities for treatment. The AE system provides: (a) control of casualty movement by air transport; (b) medical personnel, operational support personnel, and equipment for inflight supportive medical care and ground support operations; (c) critical care air transport teams (CCATT) to monitor and manage specific patients requiring intensivist care, (d) facilities on or in the vicinity of airheads and air bases for the administrative processing and care of casualties entering, en route through, or leaving the AE system; (e) command and control of all theater AE forces and AE operations; and (f) an organic communication network capability between/among enroute medical facilities and airlift command and control agencies

**1.4. Threat.** *Global Engagement: A Vision for the 21<sup>st</sup> Century Air Force* charges USAF forces with the capability to rapidly deploy virtually anywhere in the world and conduct operations. Because of the wide variety of possible operating locations and potential adversaries, a broad range of air, ground, communication, and cyber threats can be expected to impact AE operations. As the military becomes a global medical engagement tool for the NCA, AE will be increasingly called upon to provide assistance in Disaster Response, Humanitarian Assistance and Civil Support in a CONUS peacetime WRM contingency.

**1.4.1. General.** The nature of the threat varies considerably within the spectrum of operations. Threats include, but are not limited to, terrorism, information warfare (IW), precision guided munitions, enemy special forces activities, biological and chemical weapons, radiological toxic industrial materials (TIMs) and others. The threat during a

MTW includes heightened and bolder activities, plus the additional threat of nuclear weapons.

#### **1.4.2. Medical Threat Implications.**

**1.4.2.1. Disease and Non-Battle Injury (DNBI).** Historically, this threat has accounted for over 80 percent of personnel admitted to hospitals during contingency operations. The threat is variable and depends on operating location, endemic disease, climate, terrain, socioeconomic conditions, and the military operations involved. Environmental intelligence sources, preventive medicine teams and techniques, theater epidemiology teams, proper waste management, consultation with specialists, advanced treatment modalities and diagnostics, and medical information management systems are instrumental in minimizing the threat.

**1.4.2.2. Conventional Weapons.** These weapons, including precision guided munitions, anti-personnel/vehicle mines, tube and rocket artillery, aerial bombs, cruise and ballistic missiles, and others, carry the potential to inflict personal injury in widely varying degrees. Treatment of injuries as a result of these weapons is enhanced through advanced diagnostic capability, use of equipment and techniques representative of current standard of care, specialty consultation, medical information access, the ability to process tests and data rapidly and expeditious aeromedical evacuation.

**1.4.2.3. Weapons of Mass Destruction (WMD).** For a complete discussion of biological and chemical agents, and nuclear weapons and their effects, see AFJMAN 44-151/FM8-9, *NATO Handbook on the Medical Aspects of NBC Defensive Operations*.

**1.4.2.3.1. Chemical and Biological Weapons.** Chemical and biological weapons are relatively inexpensive and are being produced by many potential adversaries. Due to proliferation of biological and chemical agent production capabilities and means of delivery, the possibility of biological or chemical attack or exposure poses a significant threat. An important biological warfare preventive measure is vaccination. Preventive medicine and medical surveillance teams, coupled with advanced medical information, communication, and diagnostic systems, represent medical defense capabilities which work in concert with other current and projected defense measures, such as reconnaissance, sampling, detection, identification, warning, and the physical protection provided by personnel protective equipment and shelters. Radiological TIMs are also a threat.

**1.4.2.3.2. Nuclear Weapons.** A nuclear incident has the potential to instantaneously produce a very large number of casualties, severely burdening the entire medical treatment and evacuation systems. The patient can be at extremely high risk, frequently requiring ventilator support. Effectiveness of treatment is related to accessibility of the injured, appropriate supply levels, advanced diagnostic capability, use of equipment and techniques representative of current standard of care, specialty consultation, medical information access, aeromedical evacuation, and the ability to process tests and data rapidly.

**1.4.2.3.3. Stress Management.** The significance of stress as a major contributor of casualties cannot be overstated. Forces may be required to operate under stress for extended periods, during mobilization, airborne transportation, staging, and combat insertion. Modern combat, with its increased lethality, rapid maneuvers, technological skill requirements, exposure to nuclear, biological and chemical weapons, and day or night, all weather operations, will stress personnel to their endurance limits.

**1.4.3. Information Warfare (IW).** Information systems, their burgeoning connectivity, and the wealth of valuable information processed by, and stored in those systems, make them attractive targets. Threats to such systems are worldwide in origin, technically diverse, and growing rapidly.

## **1.5. Assumptions.**

**1.5.1.** AE units will receive sufficient warning prior to activation of an OPLAN to permit readiness activities to occur commensurate with their respective designed operational capability (DOC) statements.

**1.5.2.** ARC mobilization and deployment of AE assets will be sufficient to meet mission requirements.

**1.5.3.** AE airlift support using common-user aircraft will receive priority commensurate with other theater airlift requirements as determined appropriate within each theater airlift prioritization system.

**1.5.4.** In the near term, AE will be primarily accomplished using C-9A, C-21, C-130, C-141, KC-135, or C-17 aircraft, but future availability of these aircraft is uncertain. Any opportune airlift may also be used, keeping the best interest of the patient and crew in mind.

**1.5.5.** When the aeromedical segment (Stage II) of the Civil Reserve Air Fleet (CRAF) is activated, the B-767 will be the primary means of intertheater AE, with augmentation by military aircraft such as KC-135 and C-17, as necessary.

**1.5.7.** Patient evacuation and regulating processes will be integrated, and a consolidated patient movement requirements center (PMRC) established.

**1.5.8.** Patients will be regulated on missions based on destination to reduce subsequent redistribution requirements.

**1.5.9.** Prior to movement, patients will have a destination medical facility identified, unless precluded by operational necessity.

**1.5.10.** AE crewmembers will be qualified in a primary mission design series (MDS). AECMs will be certified, as required IAW 11-2AE, on other aircraft if used for

operational AE missions. Patient care will be performed by AE and medical personnel specifically trained to safely provide in-flight patient care in all types of aircraft with airworthy certified equipment.

**1.5.11.** The capability will exist to move stabilized (airway secured, fractures immobilized, hemorrhage controlled, and shock treated) patients. Patients will be stabilized to the extent possible by the referring facility prior to AE movement.

**1.5.12.** Deployed AE elements will normally be assigned to an expeditionary air mobility wing or group. AE crews assigned to intertheater operational sites may not change operational command (CHOP) to theater command and may remain under the operational control (OPCON) of AMC.

**1.5.13.** Aeromedical staging facilities (ASF) and some assigned AE crews may not change operational control (CHOP) to theater command, and will remain under the operational control (OPCON) of AMC.

**1.5.14.** A staging facility will initially deploy with a critical care air transport team (CCATT). The CCATT will support staging facilities patient care and operations when not otherwise tasked.

**1.5.15.** AE may transport decontaminated nuclear, biological, and chemical (NBC) casualties as determined by the theater CINC as advised by the theater surgeon and in consultation with US Army Medical Research Institute of Infectious Diseases (USARIID) guidelines.

**1.5.15.1.** Biological warfare (BW) casualties may be unknowingly transported before actual BW-related illness is diagnosed.

**1.5.15.2.** Chemical warfare (CW), radiological, and TIMS casualties will have been externally decontaminated before transport. Movement of BW/CW casualties will also depend upon en route and destination (country) concurrence

**1.5.16.** Base operating support (BOS) and other general requirements for forces deployed to support a theater of operations will have been requested for inclusion in the supported theater CINC's requirements planning and will be sufficient to meet mission requirements.

**1.5.17.** A medical logistic system will be in place to accomplish timely and effective resupply of medical materiel, general supplies, and patient movement items (PMI) to all AE elements.

**1.5.18.** All available methods of communication may be employed.

**1.5.19.** The employment theater will be capable of providing resupply and mature communications capability within established time-phased logistic support.

**1.5.20.** The theater will provide communications security support sufficient to meet operational needs.

**1.5.21.** In the event of activation of the Integrated CONUS Mobilization Operations Plan, support may be required from the Veterans Administration and the activation of the National Disaster Medical System (NDMS).

## **1.6. Limitations.**

**1.6.1.** At the onset of the deployment or hostilities, civilian, international and other military health care available in the AOR will be identified and evaluated regarding integral specialty care and standard of care capability. Conditions might be characterized by austere conditions, variable evacuation criteria, and expeditious evacuation from the theater. Patients may require ground and/or inflight resuscitative care and intervention to maintain stabilization.

**1.6.2.** Differences in communication capabilities between AE elements and AE customers may inhibit the ability to communicate among theater assets.

## **SECTION 2 – DESCRIPTION/CAPABILITIES OF AE ELEMENTS**

**2.1. AE Unit Type Codes (UTC) – Selection and Utilization.** AE UTCs are developed based on the building block “plug-in/pull-out” principle, allowing planners to select specific UTCs capable of supporting the range of steady state, contingency or major theater war OPLANs. Each UTC is developed to support command and control, patient staging, support, operational, or patient care requirements, and each have mission-specific tasks and responsibilities. Equipment packages are designed to meet highly mobile and austere conditions. As workload changes (increases or decreases), or is projected to change, UTC packages (personnel and equipment) may be deployed in small increments or combined with previously deployed UTCs at any location to provide capability as needed. The overall organizational design is to source capability to meet mission requirements – no more, no less – and to select the UTC(s) needed to support the requirement. All functional requirements will be addressed in each case.

**2.2. AE UTC Employment Concept.** The TAES employs UTCs alone, incrementally or as force packages to provide AE command, control, communications, patient care, and AE system support to meet mission requirements under potentially changing conditions. At a minimum, in order for a TAES to exist UTCs must be deployed to 1) establish a communication link between the user and the AE system, 2) provide patient staging at an airfield and 3) provide inflight care. Force packages are groupings of UTCs that are deployed to meet a unique or enhanced capability requirements. AE UTCs are specifically designed to provide the maximum amount of flexibility to commanders and planners to meet the full spectrum of AE operations to include wartime, humanitarian, and disaster response operations. The following paragraphs describe each of the UTCs

and the capability the UTC provides. The UTCs are divided into three categories: 1) command and control, 2) AE support, 3) patient care.

### **2.2.1. Patient Care UTCs.**

**2.2.3.1. Critical Care Air Transport Team (CCATT) (UTCs: FFCCT & FFCCE).** Can function as a stand alone package in a C-21 or other aircraft, or provides the essential critical care requirements in conjunction with AE Crews, evacuating critically injured and/or ill patients requiring advanced care during transportation. Each team can support a maximum of four critically ill patients. Recognized as clinical experts, these teams are medically responsible for their patients and function under the inflight direction of the medical crew director (MCD) and aircraft commander. If the MCD is not a physician, the MCD will recognize that the CCATT physician is clinically responsible for the care given to CCATT assigned patients, and possibly all other patients on the aircraft, since the physician is on board the entire flight. CCATTs may be staged at crew bed-down locations with AEOTs, or at fixed and/or mobile AE staging facilities. Teams positioned in staging facilities will augment patient care capability of that facility, and will function under the administrative control of that facility. CCATTs are tasked by the AECT. (MPWR – 3)

**2.2.3.2. Expeditionary AE Coordination Team (EACT). (UTC: FFLAA).** Provides rapid response, man-portable AE coordination support for emergent and/or low intensity situations. Provides operational, clinical, and limited communication links necessary to prepare patients for flight and initiate the fixed wing evacuation of casualties. Supports small, portable, expeditionary aeromedical rapid response (SPEAR) team and other expeditionary service and civilian elements to meet patient evacuation requirements. (MPWR – 2)

**2.2.3.2.1. Expeditionary AE Coordination Team Equipment (UTC: FFLA1)**

**2.2.3.3. Expeditionary AE Crewmember Support (EACS). (UTC: FFLAB).** Provides the personnel for emergent AE crew capability. Enhances operational support and provides minimal crew management functions. When combined with the FFLAA can provide minimal staging capability. Ideal UTC to support EMEDS Basic. Interfaces with fixed- and rotary-wing aircraft. Deploys with one pallet, or two pallets if vehicle is deployed, to support patient or equipment movement. (MPWR – 7)

**2.2.3.3.1. Expeditionary AE Crewmember Support Equipment Package (UTC: FFLA2)**

**2.2.3.4. Expeditionary AE Staging Team (EAST). (UTC: FFLAC).** Provides additional management and staging capability to FFLAA and FFLAB. Provides initial capability to receive patients, administrative and supportive patient care on ground and in flight. Generally deploys as a follow-on staging capability to FFLAA AND FFLAB. When combined with FFLAA and FFLAB as one complete package provides short term 24 hour Aeromedical Staging capability for 10 patients at any one time. (MPWR – 5)



**2.2.3.4.1. Expeditionary AE Staging Team Equipment (UTC: FFLA3)**

**2.2.3.5. MASF – 25 (UTC: FFLAD).** Increases patient staging capability to 25 patients at one time. Must be deployed in conjunction with or as a follow on UTC to the FFLAA/B/C. Deploys with AE crew capability. Degradation of staging capability will occur if personnel are performing crew duties. Deploys with organic communications, enhanced power generation, and transportation capability. (MPWR – 11)

**2.2.3.5.1. MASF-25 Equipment (UTC: FFLA4)**

**2.2.3.6. MASF – 50 (UTC: FFLAE).** Increases patient staging capability to 50 patients at one time. Must be deployed in conjunction with or as a follow on UTC to the FFLAA/B/C/D (MPWR – 18)

**2.2.3.6.1. MASF – 50 Equipment (UTC: FFLA5)**

**2.2.3.7. 50-Bed ASF Initial Element (UTC: FFLCB).** The basic component of the deployed aeromedical staging mission. A fixed patient care facility located at an established airhead. Usually placed at an intertheater/intratheater hub and collocated with an AEOT. Supports transient patients within the AE system required to wait extended periods of time for fixed wing movement. Provides around the clock 24-hour operations with a patient capacity of up to 50 at any given time. (MPWR – 38)

**2.2.3.8. 25-Bed ASF Augmentation Package (UTC: FFLCC).** A 25-bed augmentation capability to support the ASF initial package (FFLCB). This increment augments the initial capability and provides additional support in mental health, nutritional medicine and pharmacy. (MPWR – 16)

**2.2.3.9. 25- Bed ASF Manpower Augmentation Package (UTC: FFLCD)** Provides manpower augmentation for 25-bed ASF expansion package in support of FFLCB and FFLCC. Designed to be added after expansion to 75 beds with FFLCB and FFLCC and then alternating with FFLCC. Provides supportive and emergency medical care for patients transiting the AE system. Coordinates and communicates with medical and aeromedical evacuation elements to facilitate patient care and movement. Provides and coordinates ground transport. Ensures patients are medically/administratively prepared for flight. UTC may only be tasked in conjunction with FFLCB and FFLCC. Critical care air transport teams may also be deployed with this UTC. (MPWR - 12)

**2.2.3.10. AE Crew Members (AECM) (UTC: FFQDA).** Performs inflight medical care and meets training requirements to function safely on board fixed-wing aircraft. UTC provides one X46F3 and two X4N0X1. The type of aircraft, patient numbers and acuity, and length of mission will dictate the number of crews needed for each mission. Crews will be augmented with additional crewmembers and CCATTs as mission requirements dictate. Can also augment any ground UTC requiring additional clinical crew management or mission support capability. This UTC is a component of the AEOT and EAST force packages. (MPWR – 3)

**2.2.3.11.** AES In-Flight Kit (FFQDM). Contains supplies and equipment required for emergency or other unforeseen situations during AE missions. In-Flight kits will be employed where AE crews are staged/located. Limiting factors for AE inflight kits include the needs for environmentally controlled and secured storage. PT Lox capability must be established. The In-Flight kit supports one mission and is re-supplied with a 30-day resupply package FFQDH.

**2.2.3.12.** AES In-Flight Kit Resupply (FFQDH). Provides a 30-day resupply for employed AES In-Flight Kits (FFQDM). The first resupply package will accompany each set of kits upon initial deployment. Further resupply packages will be requested through theater medical logistics channels

## **2.2.2. Command and Control UTCs.**

**2.2.2.1.** AE Command Element (AECE) (UTC: FFECE). The AECE advises supported commanders or appropriate personnel regarding AE CONOPS, capabilities, and requirements. Provides procedural and technical guidance and management oversight for assigned, attached and transiting AE activities. Coordinates all logistical and personnel support for subordinate elements. Normally deploys under an expeditionary mobility wing to provide administrative command for wing AE units. Can serve as the AE advanced echelon team (ADVON), when required, to arrange support requirements for follow-on AE forces. Depending on the size of the operation, a command augmentation team can be deployed simultaneously or as a follow on UTC. (Manpower (MPWR) – 7)

**2.2.2.1.1.** AE Command Element Equipment (UTC: FFEC1). Provides the equipment necessary to support personnel in command of attached AE forces, FFECE, the AE Command Element.

**2.2.2.2.** AE Command Augmentation Team (AECAT) (UTC: FFAEA). Augments any ground UTC – such as the AECE – to enhance its capability as the theater matures or command or operations requirements increase. Provides personnel to perform activities such as launch and recovery, crew management, and equipment management support for steady state, AEF, or small-scale contingency (SSC) operations. Provides capability to enhance communications or provide administrative support, personnel management and procedural/technical guidance as required. (MPWR – 8)

**2.2.2.3.** AE Control Team (AECT) (UTC: FFAEC). Located within the Air Mobility Division of the Joint Air Operations Center (JAOC), this team is responsible for operational planning, scheduling, and execution of scheduled and unscheduled AE missions through the appropriate AE elements. The AECT analyzes patient requirements, coordinates airlift to meet AE requirements, tasks the appropriate AE elements, and notifies the PMRC when mission taskings are scheduled in order to maintain full patient intransit visibility. The AECT also monitors execution of AE missions and coordinates and communicates with theater planning cells and AE command elements as necessary. The AECT advises the Director of Mobility Forces, and liaisons with Joint Task

Force/Component Surgeons on AE issues. The AECT must be able to establish communication links with other AE components and PMRC. (MPWR – 11)

**2.2.2.3.1.** AE Control Team Equipment (UTC: FFAE1). Provides the equipment necessary to support AE mission planning, management, communication, and execution of attached AE forces, FFAEC, Aeromedical Evacuation Control Team.

**2.2.2.4.** AE Plans and Strategy Team (AEPST) (UTC: FFPST). Collocated with the Combat Plans and or the Strategy Division within the JAOC, and reporting to the Director, JAOC, this team develops plans and strategies and determines number and location of AE assets needed to support operational requirements. It provides this information to the AE control team (AECT) through the Director, to the Joint Forces Air Component Commander (JFACC), for execution by the Director of Mobility Forces (DIRMOBFOR). The AEPST communicates and coordinates with other AE components as necessary, but it does not exert any direct command and control functions (MPWR – 3)

**2.2.2.4.1.** AE Plans and Strategy Team Equipment (UTC: FFPS1). Provides the equipment necessary to support personnel assigned to the AE Plans and Strategy Team.

### **2.2.3. Support UTCs.**

**2.2.3.1.** AE Administrative Support Team (AAST) (UTC: FFAST). The AAST is used to increase operational and administrative capability to meet increasing mission requirements for any ground UTC. . Personnel only. (MPWR – 5)

**2.2.3.2.** Expeditionary Liaison Team (ELT) (UTC: FFALA). Provides AE liaison support between the user and the AE system for emergent and/or low intensity contingencies, SSCs and early stages of MTWs situations. FFALA provides immediate, short duration liaison support with limited, man-portable communication capability. Provides operational, clinical, and communication links necessary to prepare patients for flight and initiate the fixed wing evacuation of casualties. (MPWR – 3)

**2.2.3.2.1.** Expeditionary Liaison Team Equipment (UTC: FFAL1)

**2.2.3.3.** AE Liaison Team (AELT) (UTC: FFALF). Provides enhanced AE liaison support between the user and the AE system for SSCs and MTW situations where expected casualty rate would require long-term, 24-hour operations. Will deploy with organic transportation and equipment package FFAL2. FFALF would provide low intensity, long duration support with fully capable redundant communication capability to meet any possible requirement. Combined with FFALA, supports intense MTW situations. Normally deploys to augment FFALA. Sustained surge operations may require augmentation with FFALA. (MPWR – 4)

**2.2.3.3.1.** AE Liaison Team Equipment (UTC: FFAL2). Provides equipment necessary to support personnel in duties of AE liaison and AE communication requirements.

**2.2.3.4.** AE Support Cell (AESC) (UTC: FFAES). Provides medical materiel, communications and aerospace ground equipment (AGE) maintenance, and ground transportation management and maintenance support to all UTCs assigned to the EAES. Team would be staged at key locations to support multiple AE elements as needed. (MPWR – 5)

**2.2.3.4.1.** AE Support Cell Equipment (UTC: FFAE3)

**2.2.3.5.** AE Crew Management Cell (AECMC) (UTC: FFAEM). Performs AE crew management functions for locations with more than 5 assigned, attached, and transiting AE crews. A single CMC can manage up to 10 crews at any given location and is also responsible for management of inflight kits. Duties involve scheduling, and alerting crews; coordinates life support, food service, transportation, lodging, launch and recovery operations and administrative duties such as mission paperwork preparation. (MPWR – 5)

**2.2.3.5.1.** AE Crew Management Cell (AECMC) Equipment (UTC: FFAE2). Provides the equipment necessary to support personnel in duties of providing supervision and crew management for assigned, attached, and transition AE crews, FFAEM, AE Crew Management Cell.

**2.2.3.6.** AE Patient Movement Items (PMI) Medical Logistics Team (UTC: FFQP1). Provides manpower for operational management of PMI center and/or cells. Duties consist of storage, reception, inventory control, issue, palletizing, shipping, and identification of requirements. In addition, updating the supporting management information system. Liaisons with AE and user Service personnel regarding PMI demands. Collocated with the AEOT or key locations to facilitate PMI movement. (MPWR – 2)

**2.2.3.7.** AE PMI Biomedical Equipment Repair Team (UTC: FFQP2). Provides regional maintenance and repair capability for equipment in PMI centers and/or cells. Duties involve scheduling and completing scheduled preventative maintenance and calibration, repair and maintenance services, and updating the PMI information system. (MPWR – 3)

**2.2.4.** Force Packages. When certain AE UTCs are combined an enhanced or specific capability can be achieved. The following are combinations of UTCs designed to create force packages that can be employed to meet mission requirements.

**2.2.4.1.** AE Operations Team (AEOT) Force Package (UTC: FFQCY). (Includes FFAEA, FFQDA, FFAE3, FFAST) A force package which provides operational and mission management; crew management for assigned attached, and transiting AE crews; and inflight medical equipment management, to include supplies medications and sufficient liquid oxygen. Directs launch and recovery activities, supervising ground handling and on/offload of patients. Ensures appropriate aircraft configuration and equipment availability. Duties also involve scheduling and alerting crews; coordinating

life support, food service, transportation, and lodging; and administrative duties such as mission paperwork preparation. Supports all aircraft transporting patients, including CRAF. The AEOT can be deployed incrementally, but a complete AEOT force package consists of an AE command augmentation team, AE crew, two crew management cells, and an AE administrative support team. The AECAT is the initial UTC to deploy from this force package, and subsequent elements are added as mission requirements dictate. (MPWR – 26)

**2.2.4.2. AE Liaison Team Force Package UTC: FFXXX)** A force package that consists of the Expeditionary Liaison Team (ELT) (FFALA) and AE Liaison Team (FFALF). When fully employed, provides high intensity, long duration support with fully capable redundant communication capability to meet any possible requirement. Provides continuous 24-hour operations, communications and flight clinical coordination interface with the user Service/customer. UTCs can be employed incrementally or in conjunction to meet mission requirements. (MPWR – 7)

**2.2.4.3. Expeditionary Aeromedical Staging Facility (EASF) Force Package (UTC: FFXXX).** A force package that consists of the Expeditionary AE Coordination Team (FFLAA), the Expeditionary AE Crewmember Support (EACS), and the Expeditionary AE Staging Team (EAST). When fully deployed, provides 24-hour short term Aeromedical Staging capability for 10 patients at any one time. Extended, or anticipated operations at surge capability beyond 72 hours may require augmentation with FFLAD. (MWPR – 14)

**2.2.4.4. Mobile Aeromedical Staging Facility (MASF) Force Package (UTC: FFXXX).** A force package that consists of UTCs FFLAA, FFLAB, FFLAC, and FFLAD and FFLAE. Designed to support MTW requirements. Provides the personnel for supportive patient care, patient staging and emergent AE crew capability. Can be employed incrementally, or as a force package to meet mission requirements. Interfaces with fixed and rotor wing aircraft. (MPWR – 46).

**2.2.4.5. Aeromedical Staging Facility (ASF) Force Package (UTC: FFXXX).** A force package that consists of UTCs FFLCB and FFLCC. Supports the deployed aeromedical staging mission at strategic-tactical interface points within a theater or area of operations, strategic hub or CONUS interface point. Provides the personnel to support AE command, control, communications, patient care, patient staging, and system support. Can be employed incrementally, or as a force package to meet mission requirements. (MPWR – TBD)

**2.3. AE Casualty Movement.** Movement of casualties from forward locations to communications zone (COMMZ) medical treatment facilities (MTF) can be accomplished using opportune, retrograde, or pre-planned/dedicated aircraft, as authorized by the supported CINC and the Joint Movement Control Center (JMCC).

**2.4. Theater Airlift Resources.** The overseas theater commander has OPCON of theater-assigned/attached aircraft through the AOC, which allocates those airframes to

meet operational requirements. Non-theater-assigned aircraft may be used for theater patient movement on an opportune basis. The C-130 is the primary aircraft for moving casualties from and within the combat zone. Although considered a theater asset and able to fly into the combat zone, the C-9A will normally move casualties within the COMMZ. Airlift can be scheduled in either a retrograde or pre-planned/dedicated role at the discretion of AMD. When used in a retrograde manner, the aircraft flies into an airfield, offloads the cargo/ passenger load, and is reconfigured for AE for the return (retrograde) leg. Retrograde aircraft utilize litter-configuration equipment organic to the aircraft. Retrograde aircraft allows the theater to maximize use of all airlift options at points where AE crews are available to support the mission. To use dedicated airlift, the supported CINC must agree to allow a portion of the theater's airlift to be committed to an AE role. These aircraft can then be configured for aeromedical evacuation prior to mission origination. Scheduling of dedicated AE missions is conducted in the AMD. This enables AE mission planners to use the same aircraft to make multiple stops, which facilitates scheduling of the mission(s) to meet AE requirements (e.g. increased flexibility with APOE/APOD selection). This permits an increased AE litter configuration, thereby reducing the overall number of airframes needed to support AE requirements. However, using dedicated AE also reduces the number of airframes available to the theater commander for logistical support. General aircraft characteristics for theater support aircraft are outlined below.

**2.4.1. C-130 Hercules.** The C-130 is a long-range, high-wing, four-turboprop-engine aircraft. For AE purposes, it is predominately used for intratheater (tactical) rather than intertheater (strategic) or CONUS (domestic) evacuation. The AE contingency planning factor for the C-130 is 50 patients. The aircraft can be fully pressurized, heated, and air-conditioned. The C-130 can maintain a sea-level cabin altitude at an ambient altitude of 19,000 feet and an 8,000-foot cabin altitude at an ambient altitude of 35,000 feet. It can land and take off on short runways, allowing rapid transportation of personnel and equipment. The C-130 can be readily configured for aeromedical evacuation by using seat and litter provisions stowed in the cargo compartment. The C-130 can hold a maximum of 70 litters or a maximum 92 ambulatory patients, or a combination of litter and ambulatory.

**2.4.2. C-9A Nightingale.** The C-9A is a military version of the DC-9 commercial aircraft. The C-9A is the Air Force's only aircraft specifically designed for aeromedical evacuation. An integral folding ramp enables efficient enplaning and deplaning of litter patients. The C-9A can hold a maximum of 40 litter patients, 40 ambulatory patients, or a variety of combinations of litter and ambulatory.

**2.4.3. C-141 Starlifter.** This aircraft has been the mainstay of the Air Force's cargo fleet for many years and has served as the traditional airframe for intertheater AE. As the C-141 transitions out of the inventory, other "non-traditional" airframes such as the KC-135 are being used to perform this vital role. The maximum litter capacity is 103 with no ambulatory patients. Several different configurations will serve a varying patient mix of litter and ambulatory. The C-141 is projected to continue to transition out of service between 2006 and 2010.

**2.4.4. C-17A Globemaster III.** The newest airlifter in the Air Force inventory, the C-17 is in such high demand that it is currently only used as an opportune AE platform. However, this long-range jet engine aircraft has an organic litter capability of 9 or can floor load 60 litters. When additional litter stanchion provisions are brought on, it can carry a maximum of 36 litters. It has intrinsic patient oxygen and electrical systems compatible with medical equipment.

**2.4.5. KC-135 Stratotanker.** In service for over 40 years, the KC-135 Stratotanker provides long-range aerial refueling support for the Air Force, Navy, Marine Corps, and allied aircraft. It has the capability to offload 6,500 pounds of fuel per minute, enough to operate the average family car for a year. In addition to its refuel capability, the KC-135 has a deck above the refueling systems to hold passengers and cargo. Depending on fuel storage configuration, the Stratotanker can carry up to 83,000 pounds of cargo or 80 passengers. For AE missions, it can accommodate 52 ambulatory patients or, currently, 8 floor-loaded litters. Some integral environmental modifications are necessary in order to conduct routine AE mission. Palletized litter systems are currently being investigated.

**2.4.6. C-21A.** The C-21A, the military version of the Lear Jet 35A business jet, is a short-range, twin-turboprop-engine aircraft used for cargo and passenger airlift. When equipped with the Spectrum patient transport system, the C-21A is able to carry one litter patient, along with required oxygen, suction, and compressed air.

**2.4.7. Civil Reserve Air Fleet (CRAF) B-767.** The airlines contractually pledge aircraft to the various CRAF segments, ready for activation when needed. The B-767 is the airframe that will be used for AE. This aircraft will provide dedicated intertheater AE and can be configured to handle either 87 or 111 litters. The use of CRAF for AE makes for faster turn-around of crews and equipment and a reduced reliance on C-141 assets. A specially designed patient-loading system was developed to accommodate the use of CRAF and must be available in the absence of jetway capability. Medical CRAF is initiated during Stage II of CRAF activation.

**2.4.8. Non-Traditional AE Aircraft.** Instances may occur that require the use of aircraft other than those normally used and compatible with AE operations, including C-5, C-12, etc. AE missions can be flown on these aircraft only after careful planning consideration for the loading, placement during flight, and unloading of patients. On occasions when AECMs may be required to accompany patients on a nontraditional aircraft, AECMs must be certified on that aircraft.

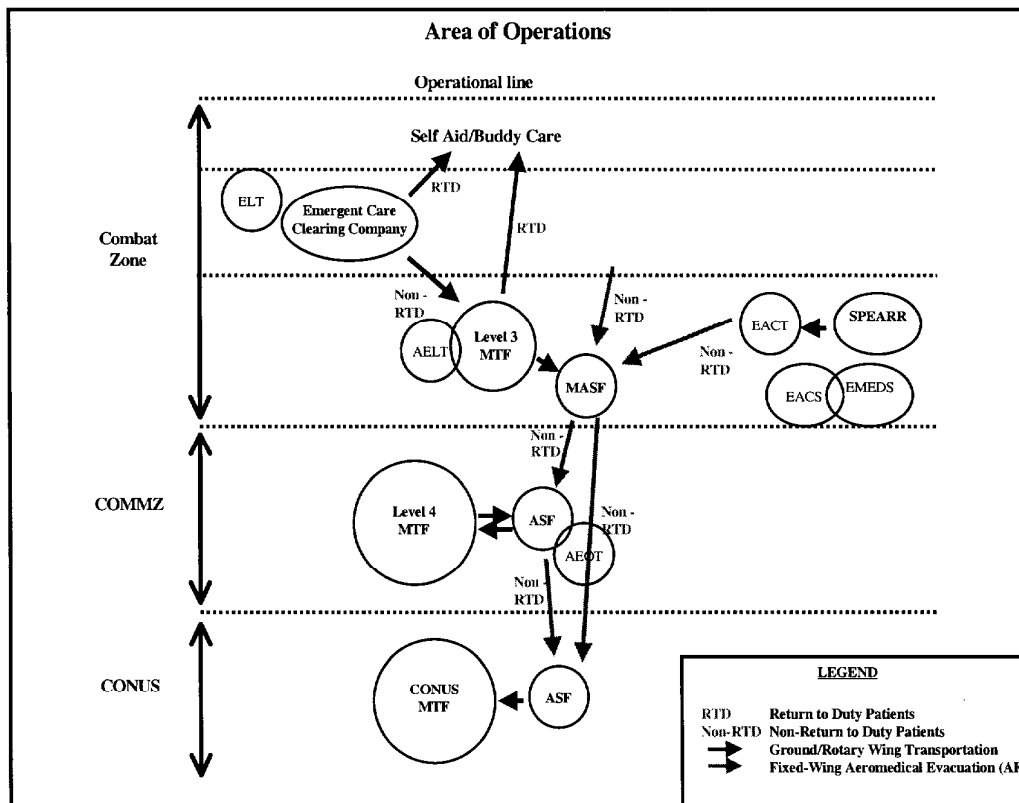
**2.4.9. Non-USAF Aircraft.** With MAJCOM approval, AECMs may perform appropriate duties in non-US Air Force aircraft if it is in the interest of the US government and approved by the authority that controls the aircraft. Prior to authorizing these missions, appropriate authority will ensure a valid requirement exists which cannot be accomplished using USAF aircraft. AECMs should make every attempt to conduct just in time certification training on the aircraft.

## SECTION 3 – AE OPERATIONS

**3.1. General Overview.** In many contingencies or civil disaster response, airlift will be the preferred means of patient movement out of the area of responsibility (AOR). Services or civilian modes of transportation may be utilized to assist with the movement of casualties from a forward location or immediately after an emergent event. Once the military is involved, the unified command is responsible to provide an integrated command and control system for patient movement offering decentralized execution and intransit visibility. The unified command patient movement requirements centers (PMRC) provide medical regulating services including clinical validation of patients. The PMRC communicates patient movement requirements to the AECT function (air) or other Service components (ground/sea) that are responsible for executing an evacuation mission. The Air Force is charged with the responsibility to operate a common-user, AF fixed-wing AE system. The Air Mobility Command (AMC) has been given the overall responsibility for serving as the single AE lead command for the Air Force, managing and operating the intertheater and AE sub-systems and providing AE elements and planning assistance to the theater of operations, in intermediate supporting theaters, or in CONUS. USAFE and PACAF are responsible for theater-assigned AE and airlift units. During contingencies which exceed the capability of theater-assigned AE squadrons and associated airlift squadrons, AMC will provide mission-specific augmentation forces to support increased theater requirements and will expand or establish the intertheater capability to support movement between theaters of operation, or to CONUS, as required.

**3.2. Evacuation Policy.** The theater evacuation policy is a command decision indicating in number of days, how long casualties may be held within the theater for treatment. Patients who, in the opinion of responsible medical officers, cannot be returned to duty status within the period prescribed are evacuated by the first available means, provided the travel involved will not aggravate their disabilities. USAF fixed-wing aircraft will normally evacuate casualties from the combat zone to the communications zone or from communications zone to CONUS. Occasionally, if the situation dictates, patients may be aeromedically evacuated from the combat zone directly to definitive treatment facilities. Additionally, although evacuation of patients from within the combat zone or to the communication zone is normally a Service responsibility, Air Force AE units may, depending upon the operational situation, evacuate casualties from forward airfields when requested to do so by the theater surgeon or CINC. (See Figure 1)





**Figure 1 Example Wartime Patient Evacuation Process**

**3.2.1. Planning Factors.** The theater evacuation policy is a key planning factor in determining the number of patients to be evacuated. It also provides physicians with one guideline for determining when patients should be considered for evacuation for further care. The theater evacuation policy is set by the Secretary of Defense in coordination with the geographic combatant commander (CINC) prior to operation plan (OPLAN) execution. Upon execution, the CINC adjusts the theater evacuation policy as needed. The number of definitive care beds available in, or deployable to, the theater, in relationship to actual or estimated casualties, is a key component in establishing the evacuation policy. Skip policies and evacuation delay, the determination of whether a level of care will be skipped and how long a patient will be held at a particular level of care or operational zone, will also affect in-theater beds and impact the evacuation policy. The evacuation policy does not imply that a casualty must be held in the theater for the entire period of the theater evacuation policy. Casualties who are not expected to return to duty within the number of days expressed in the theater evacuation policy are evacuated as soon as their medical condition permits. Responsible medical authorities must determine that travel is necessary because appropriate care is not locally available. Suitable reception medical treatment facilities and transportation with appropriate level of medical and critical care if necessary, should be arranged when needed. Critical care support in the AE system will be planned for stabilized casualties.

**3.3. Patient Regulating, Validation and Movement.** Medical regulating is the selection of the source of care to which casualties are evacuated, and the matching of these casualties with medical capability. These actions are centered in a system that supports patient movement requirements. The United States Transportation Command (USTRANSCOM) Global Patient Movement Requirements Center (GPMRC) functionally integrates intertheater and CONUS (including USSOUTHCOM) medical regulation responsibilities, including, validation, and coordination, as well as related activities supporting patient movement requirements identification and data collection. The theater patient movement requirements centers (TPMRC) in USEUCOM and USPACOM are responsible for medical regulation within their theaters. USEUCOM is also responsible for USCENCOM. A Patient Movement Requirement Center (PMRC) is responsible for regulating the movement of patients during steady state operations and from the area of operation to selected hospitals in the COMMZ, and, if required, for coordinating the regulation of patients to CONUS. A Joint Patient Movement Requirements Center (JPMRC) will be established as required, to regulate the movement of patients within a sub area in the theater at the discretion of the JTF surgeon in coordination with the G/TPMRC. All patient movement requests are validated before being turned over to the Service component for execution. Validating a patient movement request addresses all pertinent medical, operational, and administrative issues required to safely move the patient.

**3.3.1. Patient Movement Request.** The medical evacuation process begins with a patient movement request (PMR) to the PMRC by the medical regulating officer (MRO). This request is transmitted to a PMRC. The PMRC evaluates the request for necessity and acuity, validates the need for movement, and determines the most appropriate mode of transportation. The validated request is then passed to the appropriate Service component for execution. For aeromedical evacuation, this tasking is coordinated with the AECT.

**3.3.2. Role of the AECT.** The AECT is the source of AE operational expertise within the AMD. The AECT will coordinate AE operational mission planning, tasking, and scheduling of airlift and AE assets to support patient movement requirements validated through the PMRC. The AECT is required to identify and coordinate with airlift operations centers to obtain suitable airframes to accomplish the patient aeromedical evacuation. Every effort should be made to accommodate a patient movement request from a facility in a timely and effective method as possible. Recognizing that medical units and their staffs in the field have limited communications capabilities and may have multiple other tasks to challenge them, every effort will be made to validate and act on a request in a manner that adds minimum additional workload to deployed medical units. The AECT members work closely with the Strategy Division, coordinates with the Airlift or Refueling Control Team within the AMD for airlift, and ensures AE assets are completely integrated into the air tasking order (ATO) which is forwarded through the Expeditionary Mobility Wing (EMW). The AECT contacts appropriate AELTs and AE elements with airlift/patient information to ensure patients are properly prepared for the ensuing AE mission. The AECT will also coordinate with the PMRC when mission taskings are scheduled in order to maintain full patient intransit visibility. Information will be passed back to the PMRC to distribute to MTFs.

**3.3.3. Communication Systems and Information Requirements.** During the ensuing mission, once the patients depart the staging element (MASF or ASF), that element will communicate to the other appropriate AE elements (AELT and AECT) the time of departure and the final patient load. The AECT, in turn, will communicate the information to the PMRC. In order to provide AE with C<sup>4</sup>I across the spectrum of contingencies, AE UTCs require multi-mode, short- and long-haul communications capabilities. These capabilities must adapt to different theater needs and at the same time increase reliability. All of these capabilities are required to operate with the appropriate degree of security. (See SECTION 4 – COMMUNICATIONS)

**3.3.4. CONUS AE.** AE missions returning patients from the theater will deliver the patients to those airfields designated as CONUS reception stations. The GPMRC will be responsible for coordinating all patient movement once the mission has passed into US airspace, ensuring that patients are continued to their final destination as appropriate using the most efficient mode of transportation. GPMRC will communicate/coordinate airlift requirements with the AE cell within the Tanker Airlift Control Center (TACC). GPMRC will notify receiving medical facilities of aircraft arrival time and types and numbers of patients to be offloaded. The CONUS patient redistribution system and AE requirements will be defined in the Integrated CONUS Medical Operations Plan (ICMOP) created by United States Joint Forces Command.

**3.3.5. Unregulated Casualties.** Unregulated casualties provide challenges for the AE system. However, every effort will be made to support the deployed medical unit in the field. Commonly, in today's environment, unregulated casualties may have to be transported. When security or operational conditions exist such that casualties need to move immediately, patients may be moved unregulated. A medical authority will be identified to validate the patients to the best of their capabilities. In each case, the originating AE component will make an attempt to ensure that the AECT is alerted of the departure of AE missions with unregulated patients. The AECT will then notify the PMRC.

**3.4. Patient Preparation.** The AE system is a transportation system with limited availability of supplies and equipment. AE crews provide basic supportive care that is necessarily limited by the austere environment of cargo aircraft. It is therefore imperative that originating medical facilities properly prepare their patients for aeromedical evacuation. The decision to transfer a patient by air to another medical facility rests with the patient's physician. The physician should consider the care needed both in the air (availability of special equipment, cabin altitude) and at interim stops and should consult with a validating flight surgeon as required. The physician has responsibility for patient selection, classification, movement precedence, reporting, documentation, and preparation. The AELT at the originating medical treatment facility will ensure that the patients are prepared for entrance into the air evacuation system.. Normally weapons will be retained by the originating MTF. If patients arrive at the MASF with weapons, they will either be returned to the user Service or cleared and transported IAW aircraft

regulations. Generally, explosive and hazardous items found with patients will be returned to the user Service.

**3.4.1. Patient Stability.** Prior to movement, the patient's airway must be secured, fractures immobilized, hemorrhage controlled, and shock treated. The following goals should also be considered before evacuation: stable vital signs and cardiopulmonary status, stable hemoglobin or hematocrit and adequate fluid and hydration status, as well as other requirements as indicated under specific patient conditions (i.e. head, chest, and abdominal). In some instances, patients may not be clinically stable due to severity of wounds or medical condition, limited medical resources or time constraints, and they may require more professional support while awaiting transport at an airhead or during flight. It is impossible to dictate specific rules to fit all contingencies, but common sense should prevail, as well as an understanding of the support for patients that exist within the system. However, the patient's clinical instability may be the very reason that they are being moved by air from lesser capable facilities to those of greater capability in the first place. Patients moving long distances should be stable enough to tolerate a 12-hour, bed-to-bed move with a low probability of incurring complications that would require invasive treatment or intervention. Patient transfers will normally be from the originating MTF to Air Force AE staging elements or directly to the aircraft if an USAF staging facility is not employed.

**3.4.2. Patient Essentials.** Patients will be transported with their medical records or evacuation battle tag, valuables, personal effects and medically essential items IAW established regulations. While in theater, patients should also be transported with their CW/BW gear as applicable. When patient needs are coordinated with the AE system in advance, most of the required items can be provided from the AE staging base. When not coordinated, the originating MTF will be responsible for providing the items.

**3.5. Documentation.** The DD Form 602, *Patient Evacuation Tag*, or AF Form 3899, *Aeromedical Evacuation Patient Record*, should accompany each patient to ensure appropriate care during transport and serve as the legal record of patient care while in the AE system. These documents are primarily used to direct and record en route care. Medical orders should be clearly written and information should include both primary and secondary diagnoses, correct patient classification, and orders for all en route medications, care, and special diets. A concise, pertinent nursing note from the referral MTF should be written on the back of the form as a transfer note. At a minimum, the note should include the dates and times of medications and treatment rendered. A DD Form 601, *Patient Evacuation Manifest*, should be completed for each AE mission if an automated manifest is unavailable.

## **SECTION 4 – INTERFACE WITH EMEDS/AFTH**

**4.1. General.** The AE UTCs interface with the whole spectrum of Expeditionary Medical Support (EMEDS) capabilities. This interface begins with initial medical elements, to include forward surgical, SPEARR, or special operations teams, with a communication, AE liaison, and flight clinical coordinator function. The EACT is

designed to provide initial AE coordination and patient preparation for the SPEARR. The EACS is established at the airhead in support of EMEDS to transport stabilized casualties. If additional collocated staging capability is required an EAST can be deployed. . Simultaneously, incrementalized command and control AE agencies at the expeditionary wing and AMD level are built as the AOR is being built. Additionally, staging capability throughout the AOR, theater, and/or in CONUS, as applicable, are built based on operational plans and requirements. PMI centers are also staged to support equipment issues and resupply channels. EMEDS/AFTH represents the entire range of Air Force health care and force protection in support of the full spectrum of deployed scenarios, including war operations, deterrence and contingency operations, peacetime engagement, crisis response, and humanitarian relief operations. The AE system provides a critical service through rapid casualty evacuation.

## SECTION 5 – THEATER AE COMMAND AND CONTROL

**5.1. General.** Command and control of theater AE forces in joint, coalition, or AEF operations will be defined in the warning/execution/operations order. AE assets will be under the operational control of the joint force commander (JFC), through the joint force air component commander (JFACC), with lines of communication to the joint force surgeon (See Figure 2). Deployed AE units will operate under the direction of the AECE through the operations group to the EMW/CC.

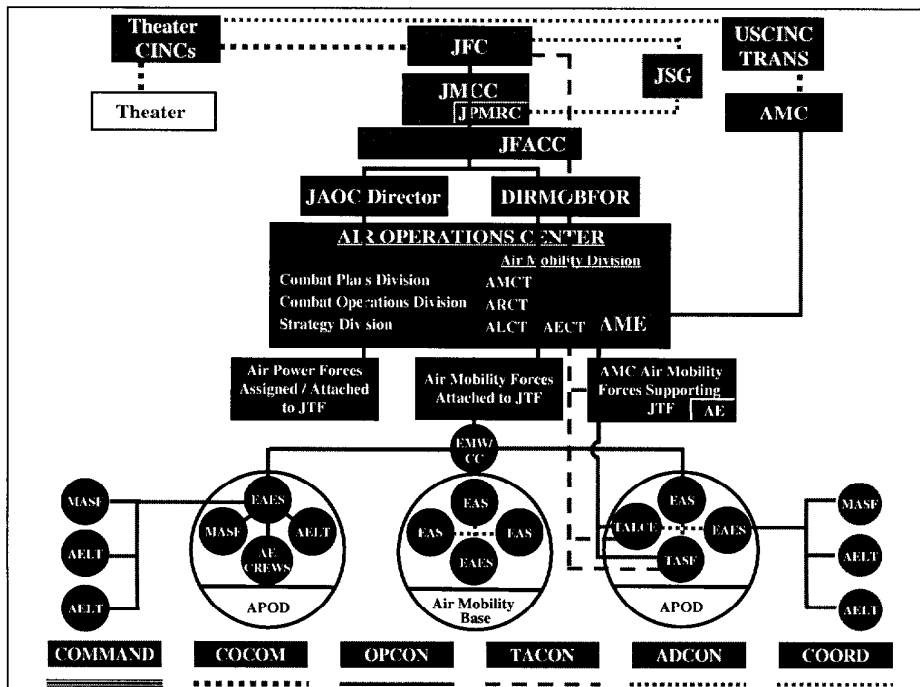


Figure 2 TAES within Joint Task Force Structure

**5.2. Joint Force Commander (JFC).** Responsible for patient movement in their area of responsibility. The JFC shall establish and maintain a Joint PMRC to perform the PMRC functions. Joint force commanders below the geographic combatant commander level exercise OPCON over assigned and attached forces.

**5.2.1. Joint Force Surgeon (JFS).** Appointed by the JFC to serve as the theater or JTF special staff officer responsible for establishing, monitoring, or evaluating joint force health service support, including evacuation of the wounded, injured or sick. (JP 4-02) The JFS is responsible for coordinating and integrating health service support within the area of responsibility.

**5.3. Joint Force Air Component Commander (JFACC).** The joint force air component commander (JFACC) derives authority from the joint force commander who has the authority to exercise operational control, assign missions, direct coordination among subordinate commanders, redirect and organize forces to ensure unity of the air component effort in the accomplishment of the overall mission. AE operations are an important part of the JFC's mission, and the JFACC plays a critical role in successful AE operations. The JFACC exercises OPCON or TACON of assigned or attached forces.

**5.3.1. Director of Mobility Forces (DIRMOBFOR).** Normally a senior officer who is familiar with the area of responsibility or joint operations area and possesses an extensive background in airlift operations. The DIRMOBFOR serves as the designated agent for all airlift issues in the area of responsibility or joint operations area, and for other duties assigned. The DIRMOBFOR also exercises coordinating authority between the airlift coordination cell, the air mobility element, the TACC, the joint movement center, and the air operations center in order to expedite the resolution of airlift problems. Finally, the DIRMOBFOR has a responsibility to ensure that AE mission are properly planned and executed.

**5.3.2. Plans and Strategy Team.** AE Plans and Strategy Team (AEPST) works with the Combat Plans and Operations Division within the AOC providing information concerning AE force laydown, status and capabilities to the Joint Surgeon and the Director of Mobility Forces through the JAOC. The team develops plans and strategies and determines number and location of AE assets needed to support operational requirements. It provides this information to the AE Control Team (AECT) for execution. .

**5.3.3. AE Control Team.** This team is located within the Air Mobility Division of the JAOC and is responsible to the DIRMOBFOR for current AE operational planning and mission execution. The AECT coordinates airlift to meet AE requirements, tasks the appropriate AE elements, and passes mission information to the PMRC. This team analyzes PMRs and identifies and tasks appropriate AE elements (e.g., CCATT, AEOT, CMC when applicable) to meet special medical requirements.

**5.3.4. Chief, AE Operations (CAEO).** The CAEO, an individual who possesses extensive experience in AE, is a member of the DIRMOBFOR staff, provides liaison with the Joint Surgeon and component surgeons, and serves as the senior AE representative in theater. This individual is responsible for gathering component medical force laydown plans, casualty estimates, and consulting on AE safety, inflight patient care guidance and regulatory guidance to the DIRMOBFOR, Joint/theater SG, AEPST and AECT. (Forward to XP for inclusion in DIRMOBFOR UTC, recommend 06 rank)

#### **5.4. Expeditionary Mobility Wing**

**5.4.1. Expeditionary Mobility Wing Commander (EMW/CC).** Exercises OPCON over assigned mobility forces at a particular location. Responsible to the DIRMOBFOR for execution of an expeditionary mobility wing mission.

**5.4.2. Expeditionary AE Squadron (EAES).** The EAES is the execution portion of the TAES and is assigned to an expeditionary mobility wing and operations group. Depending upon its location and particular mission, it could include AE elements such as patient staging, aeromedical evacuation crews, critical care air transport teams, communications, user component liaison and supporting elements. The AE command element (AECE) exercises operational control over AE elements assigned to an expeditionary airlift wing EAES. The AECE serves as an advanced echelon (ADVON) team to arrange support requirements for follow-on AE forces as required and advises supported commanders or other appropriate personnel regarding AE CONOPS, capabilities, requirements, and mission execution.

### **SECTION 6 – THEATER LAYDOWN**

**6.1. Theater AE System Laydown Model.** This model describes a notional employment of AE forces from initial phase to a major contingency operation.

Figure 3 depicts medical assets employed in the initial phase of an AEF or short duration small-scale operation. EMEDS/AFTH is in place near forward airheads in anticipation of support to initial AF operations, potential hostilities and resultant casualties. Tanker airlift control elements are directing airfield operations. At this stage, the expeditionary AE Coordination Team (EACT), aeromedical crew member support team (EACS) and staging team (EAST) maybe collocated with the SPEARR/EMEDS elements as mission requirements dictate.

At the next level of operational maturity, air mobility forces have arrived in theater (see Figure 4). An expeditionary airlift wing (EAW) has established an air mobility base. At this point, in place aeromedical assets could include aeromedical evacuation liaison teams (AELT) collocated with forward-deployed user Services; the first increment of a mobile aeromedical staging facility (MASF) at a forward landing strip; an expeditionary AE squadron (EAES) located at the airlift bed-down location; an aeromedical evacuation control team (AECT) located in the Air Mobility Division in the Air Operations Center

(AOC); and an aeromedical evacuation plans and strategy cell, collocated within the Strategy Division in the AOC. Other aeromedical evacuation UTCs in theater could include AE crews collocated with either a MASF or an EAES. This level of aeromedical evacuation capability could support an AEF engaged in long term small-scale contingency operation.

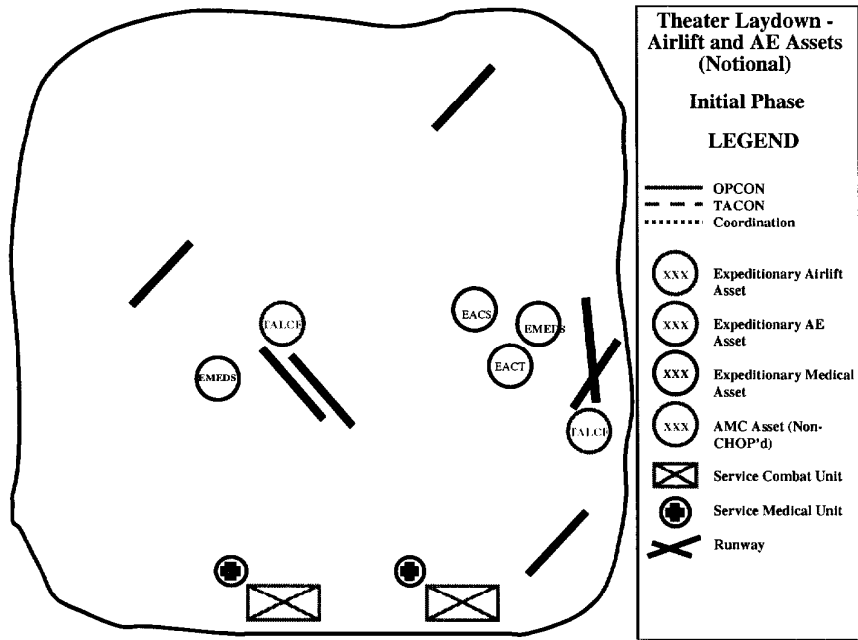
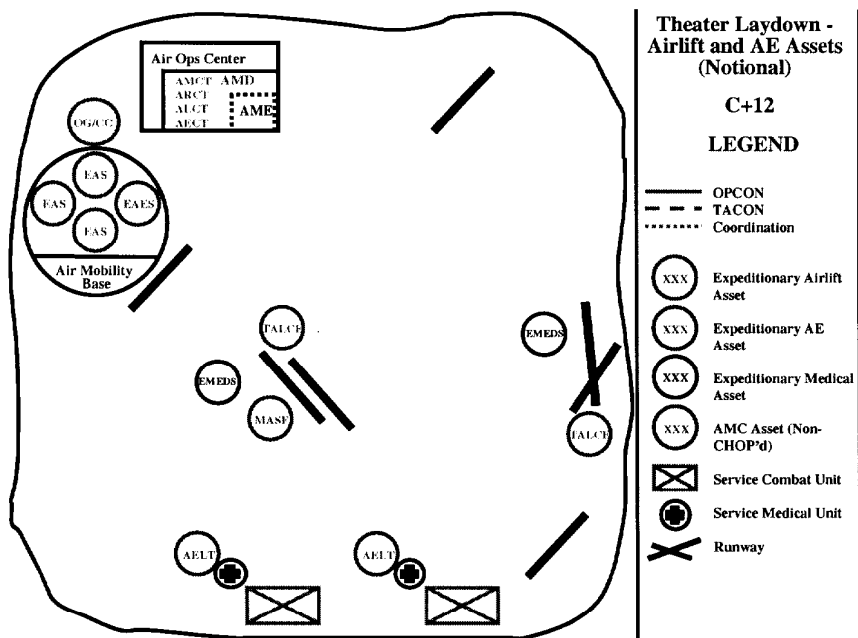


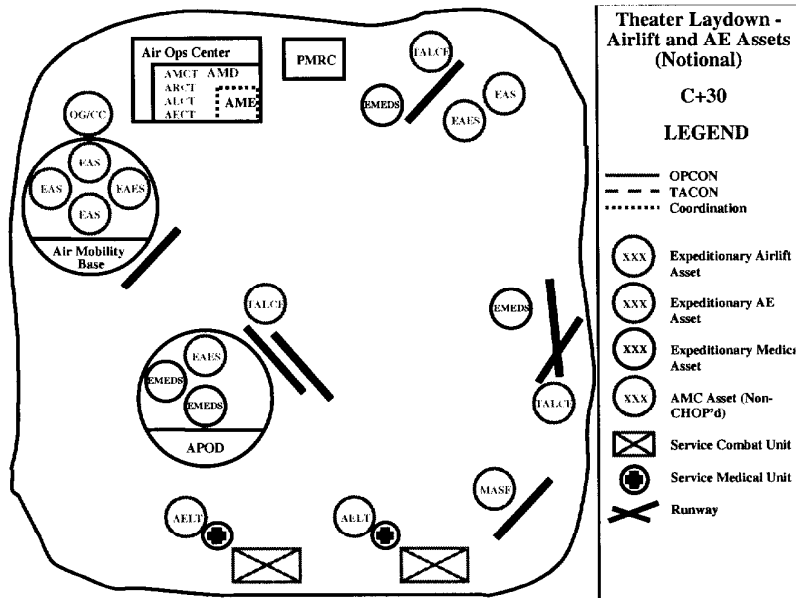
Figure 3 Theater Laydown (Notional) – Initial Phase





**Figure 4 Theater Laydown (Notional) – C+12**

As the theater matures to support larger operations, additional air mobility units and expeditionary AE squadrons would be deployed (see Figure 5). EMEDS/AFTH is operational at an aerial port of debarkation (APOD), along with an EASF/MASF that has received its additional equipment/personnel increments and is now operating a full capacity. A PMRC has become operational to better manage patient regulation. Additional AE crews may be located at beddown bases and APOD locations. Depending upon theater size and level of maturity, an aeromedical evacuation operations team (AEOT) may be located in theater to facilitate forward AE operations. Theater medical logistics and supply operations must be in place at this time to maintain sustainability of AE units. This stage represents a higher level of AEF operations or first stage build up for major theater war (MTW) deployment.



**Figure 5 Theater Laydown (Notional) – C+30**

At maturity, another APOD is operational (see Figure 6). Additional AELTs have been inserted to support the increased number of medical units. The forward-deployed MASF may have built up incrementally to a 50 or 75-patient capacity. This MASF may move to another location as needed or another MASF may be deployed. These flexible, mobile units manage patient flow at forward, potentially intense & austere, locations. Patients not returned to duty are normally transported to a fixed ASF for continued care. HQ AMC may have collocated non-chopped AE assets within theater to facilitate intertheater patient movement, including an aeromedical staging facility (ASF) at theater/strategic hubs. An ASF may also deploy to replace or add to a MASF or EAST located at a now mature or strategic airlift APOD. This stage represents AE operations during an MTW.

Figure 7 depicts notional command and control relationships between the various elements. The JTF commander has COCOM over all AE assets in theater. The expeditionary wing commander exercises OPCON over the AE squadrons through the

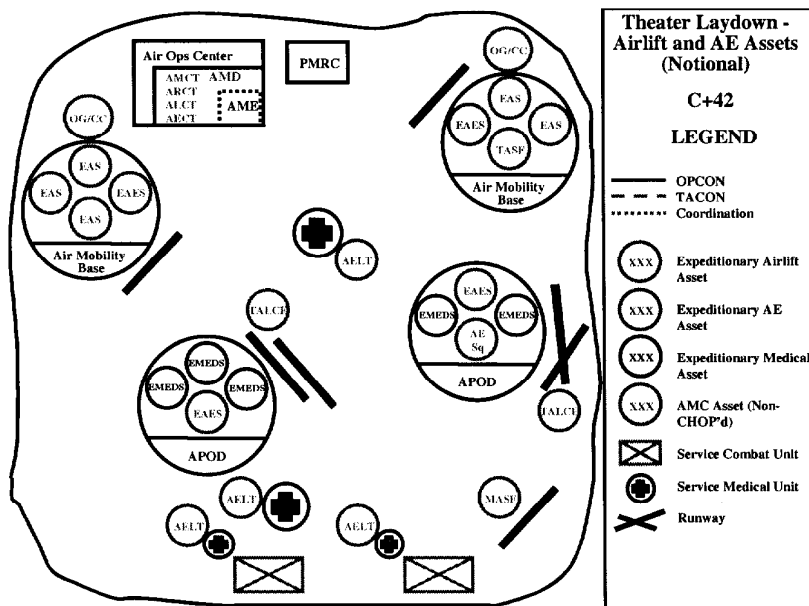
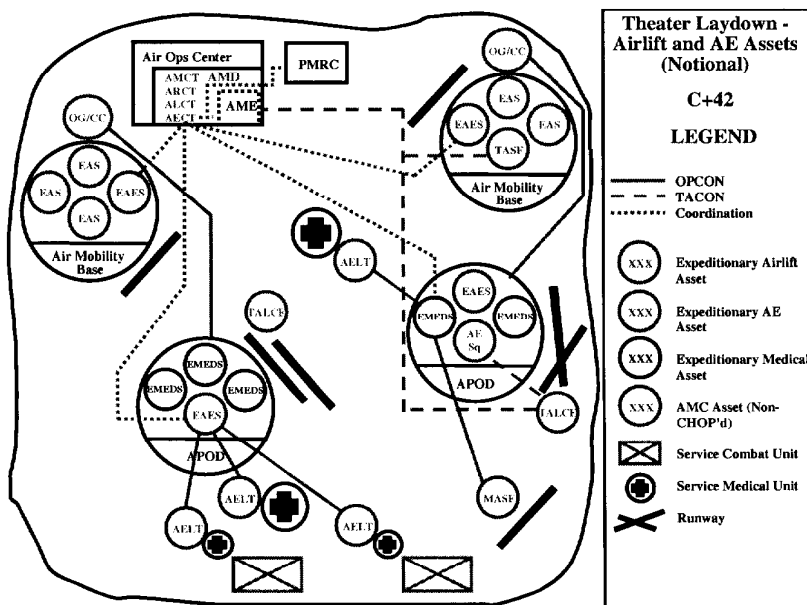


Figure 6 Theater Laydown (Notional) – C+42



### **Figure 7 Theater Airlift and AE Command and Control Relationships (Notional)**

operations group commander. AE squadron command elements, in turn, have OPCON over the deployed/CHOP'd AE elements (ASF, MASFs, AELTs, AEOTs, etc.) in their region. The AECT coordinates with the various EAESs or directly with individual AE elements to accomplish mission objectives.

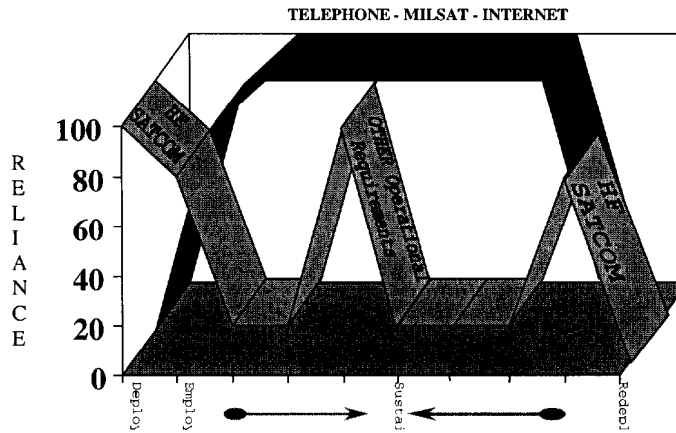
**6.2. AE Support for AEF Operations – Major Theater War.** During a major theater war, AE forces would be employed as depicted in the above scenarios, except that employment of forces would be on a much larger scale. Command and control would remain unchanged, and both command and coordinating elements could be augmented with additional staff to manage increased administrative and management demands. Additional PMRCs could be employed as required to handle patient regulation for various areas of the theater.

## **SECTION 7 – COMMUNICATIONS**

**7.1. Concept Philosophy.** AE forces are modular by design and can be tailored and deployed to meet theater mission requirements in a multitude of locations. The AE organic command, control, communications and computer (C<sup>4</sup>) infrastructure supports these requirements by providing worldwide deployable, secure and non-secure, voice and data communications capabilities. The organic AE communications suite allows the greatest flexibility to support the maximum deployment and redeployment options. During the early stages of a contingency, common-user communications capability (i.e. theater deployable communications) is not likely to be available, so there may be complete reliance on organic communications capability. As common-user communications capabilities begin to stand up and the reliance upon organic assets is reduced. Planners should consider integral communications capability when building the AE communication requirement. The sustained phase of the operation full reliance is placed on the common-user communications assets and organic communications are held for locations not served by mature theater infrastructure and also for backup capability. During the redeployment phase, as common-user communications capabilities stand down, AE organic assets provide communication support until termination of AE operations. Figure 8 depicts a graphical representation of the concept philosophy.

**7.2. Communications Threat.** The AE system and associated assets will be deployed to support theater requirements throughout the full spectrum of conflict. During such deployments, the success of AE communications between and among the multitude of AE and supporting elements will be critical. However, the threat to such communications could be significant. Such a threat could take four forms:

## PHASES OF AE COMMUNICATION SUPPORT



**Figure 8, Phases of AE Communication Support**

**7.2.1. Physical.** AE equipment, including communications equipment, is not intended to survive the physical threats created by fire, blast or chemical exposure. However, the separation of assets, required redundancy and mutually exclusive transmission modes provide a survivable environment by precluding a single component from causing failure or disruption of the AE communications mission.

**7.2.2. Spectrum Interference.** In time of crisis, the AE communication capability is subject to a hostile communications environment and is vulnerable to potential disruption and jamming. AE command and control utilizes alternate sources of communication to overcome spectrum interference.

**7.2.3. Exploitation of Intercepted Communications Signals.** To avoid exploitation of intercepted communications, medical and operational information transfer will be provided an appropriate level of protection

**7.2.4. Computer Security.** Physical security of the equipment is commensurate with the level of threat. Security assigned to the operating echelons and or other measures will protect the system against unauthorized access in accordance with approved standards and procedures. Appropriate data management and security procedures will be in place to prevent degradation of mission accomplishment.

**7.3. Modes of Communication.** The modes of communication are a function of the following links and are simultaneous:

**7.3.1.** Air-to-ground-to-air.

**7.3.2.** Point-to-point within AE system.

**7.3.3.** Intra-site and local base.

#### 7.3.4. Common-user access.

**7.4. AE Communications Requirements.** Joint Publication 4-02.2, *Joint Tactics Techniques, and Procedures for Patient Movement in Joint Operations*, states "...support of patient movement must provide reliable, real-time, and when possible, redundant communications within a theater and from theater to CONUS." Theater aeromedical evacuation system communications capabilities are affected by the availability of a communications infrastructure from the most forward point of patient entry into TAES through each level of care. This availability could range from a robust communications infrastructure at an established base to minimal infrastructure at the initial employment phase of a forward operating location of the user Service.

In addition to maturity of the theater communications infrastructure, variables that affect the establishing of a theater AE communications system include the quantity (volume), type and protocol (format) of message traffic, number of communications nodes, scope of conflict, spectrum management, topography, weather, electromagnetic environment, propagation conditions, cost, and other special theater needs. Theater communications systems planning and implementation procedures must be evaluated, planned and executed. Frequency requests, traffic volume analysis, link profiles, antenna configurations, power requirements, site surveys and vulnerability corrections are particular for each theater and are part of the AE communications system planning. The variability of specific theater expectations, threat levels, and the ability to operate in any part of the globe mandate a continuous and in-depth correlation effort to define current and developing AE communications requirements.

In order to provide AE with C<sup>4</sup>I across the spectrum of contingencies, AE UTCs require multi-mode, short and long haul communications. These capabilities must adapt to different theater needs and at the same time increase reliability. Multi-mode short and long haul capabilities translate into having high frequency (HF), very high frequency (VHF) and ultra high frequency (UHF) radio, military and civilian multi-band satellite and cellular service, and accessibility to DSN and public switched telephone networks. All of these capabilities are required to operate with the appropriate degree of security and transmit traffic volumes (through put) and format (protocols) as required by theater surgeons and CINCs. The full communications requirements are detailed in the Requirements Correlation Matrix for Aeromedical Evacuations Communications. (Add methods or ways AE UTCs communicate with one another, i.e. message traffic – Alpha, Bravo, Charlie?)

## SECTION 8 – SECURITY

**8.1. Classification.** The AE command and control system will be capable of processing classified information up to and including "SECRET." Medical information itself is not classified, but may be an OPSEC indicator requiring encryption for transmission. Aircraft scheduling and other operational information is classified by determination of the theater CINC, or other designated classifying authority.

**8.2. Personal Security.** TAES elements will be deployed to secured operating bases where the primary responsibility for base or garrison security is with the host unit/user service. Additional security for patients and AE personnel protection within their immediate work area is the TAES element responsibility. AE personnel may be armed on to perform ground security duties or for AE mission support as dictated by the current threat environment and theater command. Medical personnel are considered non-combatants under the Geneva Conventions when performing medical duties.

**8.3. Physical Security.** Cryptological devices such as KL-43, which are attached to workstations outside controlled/secured, areas will themselves be secured in cryptological safes or otherwise protected IAW existing Air Force regulations. All hardware will be capable of being purged of all classified information.

**8.4. Operational Security (OPSEC).** OPSEC is concerned primarily with the operational signature that may compromise sensitive operations, whether classified or not. Good OPSEC planning will identify operational vulnerabilities and provide courses of action as appropriate.

**8.5. Communications Security (COMSEC).** COMSEC procedures emphasize the need to protect classified and other sensitive information transmitted via various communications media. The AE system will deploy with current months COMSEC material plus a 90-day supply. The AE system will have to establish a COMSEC account within the AOR if the operation will require secure communications beyond 90 days.

## **SECTION 9 – TRAINING**

**9.1. Training Scope.** The emphasis of AE training should be readiness and preparation for wartime or other contingency operations. AE crewmember training will be accomplished to train personnel on the entire spectrum of AE and airlift operations. AE units should train regularly on all phases of deployments to include predeployment, deployment, employment, redeployment, and post-deployment activities. This also includes training required for trauma patient care, opportune aircraft, AE mission, communications systems, hazardous cargo certification, cargo processing, pallet building, vehicle loading, aircraft load planning, and interface with airlift operations.

### **9.2. AE Training Oversight.**

**9.2.1.** The Readiness Training Oversight Committee (RTOC). The RTOC serves as the primary tool of the Director of Medical Readiness (HQ USAF/SGX), to provide oversight and guidance for all medical readiness training courses, programs and initiatives, including the Aeromedical Evacuation Contingency Operations Training (AECOT) course. In addition, AF Directorate of Operations maintains responsibility for AE standardization/ evaluation policies and procedures, and aircrew waivers.

**9.2.2.** The Aeromedical Evacuation Executive Board (AEEB). The AEEB, which is chaired by the AMC Surgeon, consists of senior leaders of agencies having vested responsibilities for AE, including each of the MAJCOM surgeons. The board, which is chaired by the AMC Surgeon, sets the strategic direction for the global AE system.

**9.2.3.** AE Steering Group (AESG). The purpose of the AESG, which is subordinate to the AEEB, is to bring together the multiple major air commands' staffs, the Air Reserve Component staffs, and other agencies and functional areas involved in the AE System, to ensure a total force perspective on the organization, training, and equipping of the AE force. The AESG members include HQ USAF/SGX, AMC/SGX, ACC/SGX, PACAF/SGX, USAFE/SGX, ANGRC/SGX, AFRES/SGX, USAFSAM/AN, USTC/GPMRC, 59 MDW/CCATT, and HQ USAF/SGXR-MOC.

**9.2.4.** Global AE Training Team (GAETT). The GAETT is the clearinghouse for all clinical and operational training issues (all UTCs) that impact the global AE system. The GAETT interacts with the AESG and other agencies to develop, standardize, deploy and evaluates programs and platforms in response to customer requirements.

**9.2.4.1.** Equipment Review Working Group (ERWG). The ERWG is chartered by the AESG to serve as the AE logistics review authority. It is empowered to provide continual review and oversight of the AE system, thereby ensuring the AE force is appropriately supplied and equipped to perform the AE mission.

**9.2.4.2.** Communications Working Group. The Communications Working Group is chartered by the AESG to serve as the AE communications review authority. Similar to the functions of the ERWG, it is chartered to provide continual review and oversight of communications requirements for the AE mission and system.

**9.3. Master Training Plan.** The master training plan (MTP), currently under development, will provide the necessary information for commanders, planners and programmers to appropriately program and resource medical readiness training. Using the processes included in the plan, planners will be able to produce the necessary documentation and justification to program medical readiness training during both the execution year and beyond. The MTP is a tool that will be of use to the entire AFMS, from the individual, to the unit, to MAJCOMs and higher headquarters.

#### **9.4. Training Requirements.**

**9.4.1.** Aeromedical evacuation crewmember (AECM) training will be conducted IAW existing Air Force and/or MAJCOM directives at the USAF School of Aerospace Medicine (USAFSAM) and at each AE unit. USAFSAM develops, conducts, and evaluates training programs for flight nurses, aeromedical evacuation technicians, and critical care air transport teams (CCATTs) to ensure operationally directed learning objectives are met. They also provide in-flight instruction to students in multiple aircraft systems, and consultative support on aeromedical evacuation and medical readiness

issues. Flight qualification is accomplished IAW operational guidance in the AF instructions 10 and 11 series, Airlift Operations and Training.

**9.4.2.** TAES training for all medical and non-medical support personnel will also be conducted IAW USAF guidance for medical readiness training. The Aeromedical Evacuation Contingency Operations Training course, conducted at the 882d Training Group, Sheppard AFB, has been developed to ensure the AE system has well-trained personnel familiar with standardized aeromedical ground support requirements during contingency operations. All AECM and TAES training will be in addition to Air Force specialty code (AFSC) specific formal training courses attended for initial AFSC qualification. Training can also be conducted in conjunction with JCS-sponsored or local training exercises. AE units should also participate in regular joint training rotations at the Joint Readiness Training Center (JRTC) or similar joint service exercises.

**9.5. Exercises.** Exercises are the primary means for maintaining the readiness of the TAES. Exercises should be designed to provide maximum realism, while allowing headquarters and assigned forces an opportunity to assess readiness and evaluate employment concepts.

## **SECTION 10 – LOGISTICS AND MAINTENANCE**

**10.1. General.** The TAES has the capability to deploy an AE support cell to provide basic logistical and maintenance support. The fully deployed TAES capability will deploy with sufficient supplies (72 hours-to-5-days worth, depending upon the element) to be self-sufficient until a resupply mechanism is initiated. Service components are responsible for resupply of AE assets until a theater logistics system is deployed and a supply account is initiated with the host medical logistics. The TAES will deploy with basic spare parts and tools to provide maintenance to AGE and communications equipment. Vehicle maintenance will be acquired through local host or the closest base with vehicle maintenance capability.

**10.2. Initial Response.** AE forces will deploy with sufficient supplies and equipment to operate for 72 hours to 5 days without resupply. Full increment MASFs should deploy with one 15-day resupply package. Resupply will be provided by the area or theater commander to ensure uninterrupted service. Component surgeons will be advised in advance of anticipated resupply requirements.

**10.2.1. MASF Resupply Package.** A 15-day resupply package for MASFs has been developed. When possible, these packages will be assembled and prepositioned in theater. The remaining packages (total of one per MASF) will be assembled at execution and deployed to each theater.

**10.2.2. Personal Equipment.** All deploying medical personnel will have individual clothing and equipment (mobility) bags and any other unit/mission-directed equipment.



### **10.3. General Operating Support**

**10.3.1. Medical Support.** Medical support of deployed AE forces will be provided by host base medical service at deployment locations, when available. Deployed EMEDS/Air Force Theater Hospitalization assets, or other comparable medical support sized to the specific operation, will provide limited outpatient and emergency medical care to deployed AMC flying, ground support, and other en route support elements at bare-base locations for AMC personnel. Hospitalization for deployed AMC forces employed in the theater of operations or in an intermediate supporting theater will be provided by the respective supported CINC, either using in-place theater assets or through deployment of deployable medical facilities, as outlined in appropriate OPLANs/OPORDs.

**10.3.2. Resupply.** Resupply of AMC AE assets deployed in support of the regional plans will be provided or arranged for by the AFFOR Surgeon and/or theater CINC. In those limited operations where AMC provides all, or nearly all, of the deploying Air Force forces, AMC must be prepared to coordinate/arrange/provide logistics resupply.

**10.3.3. Base Operating Support (BOS).** Messing, billeting, POL, real estate, and other support requirements for deployed AE elements, will normally be provided or arranged for by the component Service for whom the support is provided. Early deploying elements may be required to be prepared to be self-sufficient until component support can be established locally. Support requirements for deploying AMC forces will be identified by HQ AMC/SGX to the AFFOR Surgeon or other supporting Component Service Surgeon.

**10.3.4. Weapons/Munitions Support.** The host base will provide weapons maintenance, resupply, storage, and ammunition. Casualties' weapons will be retrieved and turned over to the host base for disposition. AE forces may require host force personnel to assist with the removal of weapons and munitions (anti-hijack) of casualties if unusual ordinance is found in which AE personnel do not have the expertise to handle safely.

**10.3.5. COMSEC Resupply.** The AE system will deploy with current month's COMSEC material plus 90-day supply. The AE system will have to establish a COMSEC account within the AOR if the operation will require secure HF communications beyond 90 days.

**10.4. Deployment Support.** TAES elements do not have the capability to self-deploy their deployment packages to a theater. The sizing and tailoring of AE UTCs will be designed to meet a variety of theater and commander requirements. TAES elements will require strategic airlift assistance to the theater and may not be deployed to the same location as their parent wing.

## GLOSSARY OF ACRONYMS

<u>Abbreviations</u>	<u>Definitions</u>
AAST	Aeromedical evacuation administrative support team
AAW	Aeromedical airlift wing
ACC	Air Combat Command
ADVON	Advance echelon
AE	Aeromedical evacuation
AECAT	Aeromedical evacuation command augmentation team
AECE	Aeromedical evacuation control element
AECM	Aeromedical evacuation crewmembers
AECMC	Aeromedical evacuation crew management cell
AECOT	Aeromedical evacuation contingency operations training
AECT	Aeromedical evacuation control team
AEF	Aerospace expeditionary force
AELT	Aeromedical evacuation liaison team
AEOT	Aeromedical evacuation operations team
AEPST	Aeromedical evacuation plans and strategy team
AES	Aeromedical evacuation squadron
AESC	Aeromedical evacuation support cell
AESG	Aeromedical evacuation Steering Group
AETC	Air Education and Training Command
AEW	Aerospace expeditionary wing
AF	Air Force
AFMS	Air Force Medical Service
AFSC	Air Force specialty code
AFSOC	Air Force Special Operations Command
AFTH	Air Force Theater Hospital
AGE	Aerospace Ground Equipment
AMC	Air Mobility Command
AMD	Air Mobility Division
AOC	Air Operations Center
AOR	Area of Responsibility
ASF	Aeromedical staging facility
ASMRO	Armed Services Medical Regulating Office
ASTS	Aeromedical staging squadron
BMET	Biomedical equipment technician
BW	Biological warfare
C <sup>2</sup>	Command and Control
C <sup>4</sup> I	Command, Control, Communications, Computers and Intelligence
CAEO	Chief, Aeromedical Evacuation Operations
CBW	Chemical/Biological Warfare
CCATT	Critical Care Aeromedical Transport Team
CENTAF	US Central Air Forces
CENTCOM	US Central Command

CHOP	Change operational control
CINC	Commander-in-chief
COMAFFOR	Commander, Air Force forces
COMMZ	Communications zone
COMPUSEC	Computer security
COMSEC	Communications security
CONOPS	Concept of operations
CONPLAN	Contingency plan
CONUS	Continental United States
CRAF	Civil Reserve Air Fleet
CW	Chemical warfare
DIRMOBFOR	Director, Mobility Forces
DNBI	Disease/non-battle injury
DOC	Designed operational capability
DSN	Defense switching network
EACT	Expeditionary AE Coordination Team
EACS	Expeditionary AE Crew Support
EASF	Expeditionary AE Staging Facility
EMEDS	Expeditionary Medical Support
EMW	Expeditionary Mobility Wing
EAES	Expeditionary AE Squadron
EAF	Expeditionary Aerospace Force
EAST	Expeditionary aeromedical staging team
EAW	Expeditionary airlift wing
ELT	Expeditionary Liaison Team
GAETT	Global Aeromedical Evacuation Training Team
GPMRC	Global Patient Movement Requirements Center
HF	High frequency
IAW	In accordance with
ICMOP	Integrated CONUS Medical Operations Plan
IM/IT	Information management/information technology
INMARSAT	International maritime satellite
IW	Information warfare
JAOC	Joint air operations center
JRTC	Joint Readiness Training Center
JTF	Joint task force
MAC	Military Airlift Command (now AMC)
MAJCOM	Major command
MASF	Mobile aeromedical staging facility
MCD	Medical crew director
MDS	Mission design series
MEFPAK	Manpower and equipment force package
MOG	Maximum (aircraft) on the ground
MRO	Medical regulating officer
MPWR	Manpower
MTF	Medical treatment facility

MTW	Major theater war
NBC	Nuclear, biological, chemical
NDMS	National Disaster Medical System
OPCON	Operational control
OPLAN	Operation plan
OPSEC	Operations security
PACAF	Pacific Air Forces
PAR	Population at risk
PMI	Patient movement item
PMR	Patient movement request
PMRC	Patient movement requirements center
RTD	Return to duty
RTOC	Readiness Training Oversight Committee
SG	Surgeon general
SPEARR	Small, portable expeditionary aeromedical rapid response
SOF	Special operations forces
SOUTHAF	US Southern Air Force
SSC	Small-scale contingency
TACC	Tanker Airlift Control Center
TACON	Tactical control
TAES	Theater aeromedical evacuation system
TPFDD	Time-phased force deployment data
TPMRC	Theater patient movement requirements center
US	United States
USAF	United States Air Force
USAFE	United States Air Force in Europe
USCENTCOM	United States Central Command
UTC	Unit type code
WMD	Weapons of mass destruction
WRM	War reserve materiel
Z	Zulu (Greenwich Mean Time)