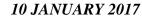
# BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 48-307, VOLUME 2



Aerospace Medicine

EN ROUTE CRITICAL CARE



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OPR: AMC/SGK Certified by: AF/SG3/5

(Maj Gen Roosevelt Allen)

Supersedes: AFI41-307, 20 August 2003 Pages: 65

This instruction implements Air Force Policy Directive (AFPD) 48-1, Aerospace Medicine Enterprise, and AFPD 10-29, Worldwide Aeromedical Evacuation Operations, by establishing administrative and operational responsibilities and procedures for aeromedical transport of critically ill or injured patients. This instruction provides guidance for management, qualification, training, operations, and logistic sustainment activities in support of air transport of critically ill or injured patients across the range of military operations. Guidance in this instruction applicable to Major Commands (MAJCOMs) also applies to the National Guard Bureau (NGB). Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of IAW the Air Force Records Disposition Schedule (RDS) in the Air Force Records Information Management System (AFRIMS). Refer recommended changes and questions about this publication to the OPR using AF Form 847, Recommendation for Change of Publication; route the AF Form 847 through the appropriate chain of command and parent MAJCOM. This publication may be supplemented at any level, but all direct supplements must be routed to the Office of Primary Responsibility (OPR) of this publication for coordination prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, Publications and Forms Management, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

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## **ENROUTE CRITICAL CARE**

- 1.1. Overview. AMC Office of the Command Surgeon (SG) establishes the principles for system-wide organization, equipment, training, and clinical standards for the air transport of critically injured/ill patients en route critical care. En route critical care represents a family of critical care Unit Type Codes (UTC), and non-UTC special medical transport capabilities, that share common core training and are organized, trained, and equipped (OT&E) to provide advanced, complex medical en route care in the aerospace environment. Total Force, multicommand, and joint-service coordination ensures standards for system-wide en route critical care capabilities, personnel and training requirements, mission support requirements, clinical and inflight care, team and individual performance, and critical care air transport process improvement.
  - 1.1.1. "AE" refers to the Air Force system providing time-sensitive en route care to regulated patients to and between medical treatment facilities; and, "en route care" refers to transitory medical care including AE, patient holding and staging capabilities during transport from the site of injury or onset of disease, through successive capabilities of medical care, to a medical treatment facility that can meet the needs of the patient.
  - 1.1.2. En route critical care capabilities include the following UTCs: FFCCT Critical Care Air Transport Team (CCATT), FFTCT Tactical Critical Care Evacuation Team (TCCET), and FFTCS Tactical Critical Care Evacuation Team Surgical Augmentation; as well as several non-UTC special medical attendant teams such as, Lung Teams, Neonatal Intensive Care Unit (NICU) Teams, US Army Burn Teams, etc. This instruction will primarily address the organization, mission, scope, practice, and requirements for USAF en route critical care UTCs. Special medical transport (non-UTC or AFSOC) capabilities should use this instruction as information and guidance where applicable.
- 1.2. Critical Care Resuscitative Care. Critical care medicine and intensive care medicine are branches of medical practice focused on the provision of life support or organ support in patients who are acutely or critically injured or ill and who require extensive monitoring, continuous care and treatment, and interventions to sustain life. Resuscitative care encompasses the aggressive management of life and limb threatening injuries through interventions including emergency medical treatment, advanced trauma management, and life-saving surgery to enable a patient to tolerate transport to the next level of care. For the purpose of this instruction, "Critical Care" encompasses all aspects of resuscitative and critical care such as that provided in medical treatment facilities equipped with intensive care units (ICU) and/or Emergency Departments (ED). Common equipment in these hospital critical care units includes mechanical ventilators to assist breathing through an endotracheal tube or a tracheotomy, cardiac monitors, defibrillators, dialysis equipment, equipment for the constant monitoring of bodily functions, intravenous lines, feeding tubes, nasogastric tubes, suction pumps, drains, catheters, and a wide assortment of drugs to treat the primary condition(s) for hospitalization. Medically induced comas, analgesics, and induced sedation are common tools designed to reduce agitation, pain, anxiety, and prevent secondary infections. Medical staff in hospital critical care settings typically include intensivist physicians with training in critical care, pulmonology, internal medicine, surgery, anesthesia, or emergency medicine. The hospital critical care staff also typically includes specially trained

critical care registered nurses, registered respiratory therapists, as well as nurse practitioners and physician assistants with specialized training, certified nursing assistants, Emergency Medical Technician – Paramedic (EMT-P) and other medical support personnel.

- 1.3. En Route Care Capability. "The purpose of an en route care (ERC) capability is the continuation of care during movement (evacuation) without clinically compromising the patient's condition" (Joint Publication 4-02, *Health Service Support*, 26 July 2012, p. I-6). En route critical care capabilities expand on this definition by providing advanced medical interventions during evacuation with the intent on improving a patient's condition. Patient movement (PM) involves transient medical care as well as patient holding and staging during transport from the site of injury or onset of disease, through sequential capabilities of medical care, to a medical treatment facility that can meet the needs of the patient. Each Service component is responsible for an organic PM capability for evacuation from point of injury to initial treatment at a health care facility.
  - 1.3.1. Today's lethal battlefield, with the reduced medical footprint forward, and the evacuate and replace philosophy, place a high demand on the en route care capabilities of all Services. Future conflicts will likely pose increased constraints on the size of theater medical support resources which will increase requirements to move less stable casualties out of the Main Battle Area. Consequently, PM capabilities are even more vital than in the past and Service medical elements must integrate with aerial lift operations, as well as with the associated capabilities of our Nation's allies and coalition partners.
- 1.4. En Route Critical Care Concept. The addition of an en route critical care capability on aircraft has added a revolutionary dimension to evacuation missions. With augmentation by ERCC teams, the aeromedical evacuation system serves as a distributive medical treatment facility - a "flying hospital" - along a seamless en-route system of ever-increasing medical capability from the point of injury (POI) to the rehabilitation medical facility. Specially-trained en route critical care medical personnel care for critically injured/ill patients while in-transit to a medical treatment facility – usually one providing focused medical treatment and/or a higher level of medical care than the patient's originating location. This capability ensures the level of life-sustaining medical care for critically ill and injured patients during transport by air does not diminish and in most cases projects the level of care of the receiving MTF to the embarkation point. This specialized mission requires medical professionals distinctly skilled and experienced in the practice of critical care. Expert, knowledgeable professionals in critical care practice yield positive patient outcomes with fewer patient complications. These factors are decisive in the environment in which ERCC teams perform their mission: aircraft at altitude – a situation that complicates providing the kind of highly-specialized patient care required in an emergency room or ICU.
- 1.5. En Route Critical Care Mission. ERCC UTCs are a limited, rapidly-deployable resource available in selected situations to supplement patient movement capabilities. ERCC UTCs expand the scope of medical care provided to critically ill/injured patients who require damage control resuscitation, life-saving interventions, or continuous stabilization and advanced care during transport in either an intra- or inter-theater mission support role. One or more ERCC UTCs may be employed with AE or ERC units based on operational requirements. In general, ERCC UTCs are expected to project the level of care of the receiving MTF more so than level of care of the originating location. When deployed in support of Mobility Air Force (MAF) missions, ERCC UTCs may be assigned or attached to an AE expeditionary element and become

- an Operations Group capability, within the expeditionary AE element command structure. ERCC UTCs are able to transport critically ill or injured patients utilizing a variety of aircraft platforms.
  - 1.5.1. En route critical care UTCs are designed to be flexible in response and are employed across the full spectrum of operations. This includes Aerospace Expeditionary Force (AEF) operations ranging from in-garrison care to homeland security, Defense Support of Civil Authorities (DSCA) to worldwide humanitarian relief, small-scale contingencies (SSCs) through major theater war (MTW), and any other operational tasking where their unique aeromedical skill set is required.
- **1.6.** En Route Critical Care Teams Capabilities and Compositions (Personnel UTCs). Grade and skill level substitutions are authorized per AFI 10-403, *Deployment Planning and Execution*, and *War Mobilization Plan* (WMP-1), *Air Force Medical Service Supplement*. Exception of substitution policy requires AMC/SG approval. ERCC personnel are not trained to interface with aircraft systems and must be tasked with appropriate service-specific personnel capable of interfacing between ERCC team/equipment and airframe's crew/systems.
  - 1.6.1. UTC FFCCT, Critical Care Air Transport Team (CCATT).
    - 1.6.1.1. UTC FFCCT, in conjunction with the CCATT equipment package, UTC FFCC4, provides care for a maximum patient load of up to three high-acuity patients, or up to six lower-acuity stabilized patients; loads are dependent on patient acuity levels. The members of this team are specially trained to provide critical care/specialty care during aeromedical transport. FFCCT team offers a higher level of care to stabilized/stabilizing patients during patient movement missions. UTC FFCCT has no stand-alone electrical, mechanical or oxygen equipment. Introduction of untreated or unstable patients will degrade team capability and deplete resources unless augmented. **Note:** UTC FFCCT is considered the foundation capability of all en route critical care UTCs.
      - 1.6.1.1.1. A pediatric equipment augmentation kit, UTC FFCC2, provides additional equipment/supplies to the FFCC4 equipment UTC to support FFCCT when the team is required to transport pediatric patients.
  - 1.6.2. Tactical Critical Care Transport Capabilities. Tactical critical care provides a trauma/critical care response capability to augment existing patient transport means for casualties likely to benefit from advanced damage control resuscitation, life-saving interventions, and critical care during unregulated pre-hospital and intra-MTF casualty movements. Tactical critical care differs from the FFCCT role in that, typically, tactical critical care teams move patients on unregulated missions where there is a greater demand for damage control resuscitation interventions versus intensive critical care required for patients on regulated AE missions.
    - 1.6.2.1. UTC FFTCT, Tactical Critical Care Evacuation Team (TCCET).
      - 1.6.2.1.1. UTC FFTCT, in conjunction with equipment package UTC FFTC1, provides damage control resuscitation and critical care support in the peri-surgical phase of care across the spectrum of unregulated into regulated portions of the En Route Care (ERC) system. The peri-surgical phase of care includes the care of the patient prior to access to surgical stabilization, as well as the post-operative patient

with ongoing stabilization and critical care needs. FFTCT is primarily designed to augment tactical evacuation assets available in the operational theater. The FFTCT mission can be performed on rotary wing, fixed wing or other appropriate platforms. FFTCT provides a higher level of damage control resuscitation (DCR) expertise and capability than currently exists on unregulated non-ERCCT patient movements of casualties from POI and during intra-theater transfer between MTFs.

1.6.2.1.2. FFTCT is employed based on tasking algorithms (driven by the potential clinical requirements of the patient) or by mission assessment indicating a reasonable likelihood of advanced DCR being required. FFTCT provides single mission care capability to support up to three severely injured/high acuity patients per mission. Resources made available by other medical capabilities supporting FFTCT can extend the length of time care can be provided. FFTCT is comprised of medical personnel that are properly organized, trained, and equipped to execute intra-theater movement of casualties via tactical aircraft. FFTCT and associated equipment may be pared and tailored for missions based upon casualty clinical requirements and airframe limitations.

1.6.2.1.3. FFTCT may augment service-specific personnel capable of interfacing between ERCC team/equipment and the respective airframe's crew/systems, or the team may be tasked alongside aeromedical evacuation crewmembers (AECMs) and CCATTs. When transporting patients, FFTCT has medical lead for their patients' care.

# 1.7. En Route Critical Care Special Medical Attendant Teams – Capabilities and Compositions (non-UTC).

- 1.7.1. Lung Team. The Lung Team is a non-UTC ERCC capability that provides a higher and more sophisticated level of critical care and advanced respiratory capability than UTC FFCCT to manage patients with severe respiratory compromise/injury. Due to the complex nature of its mission, the Lung Team is a medical center (Level 4/5) based resource available in selected situations to augment the patient movement system after a patient has received essential care by supported forces medical personnel. A Lung Team may be comprised of US Air Force personnel and/or other Service personnel.
- 1.7.2. Extracorporeal Membrane Oxygenation (ECMO) Team. ECMO is a heart-lung bypass device which circulates and oxygenates the blood to support life while giving patients with complex cardiac conditions or diseased or damaged lungs a chance to heal. An ECMO Team is comprised of physicians, nurses, and technicians specially trained in the utilization of ECMO technology. The team is capable of transporting a single patient per mission. The number of team members transporting a patient depends on the acuity and medical treatment needs of the patient.
- 1.7.3. Neonatal Intensive Care Unit (NICU) Team. The NICU team is a non-UTC ERCC capability that provides advanced respiratory and critical care transport expertise specific to the physiology and pathophysiology of the neonate and young infant, which are outside the scope of UTC FFCCT. The NICU team is uniquely qualified to monitor and manage patients with severe respiratory and multisystem compromise in transit to a definitive care destination.

1.7.4. US Army Institute of Surgical Research (USAISR) Burn Transport Team (Burn Team). The US Army Burn Team is a specialized medical attendant team providing movement of severely burned patients requiring advanced, continued trauma and post-operative care to a dedicated burn center for definitive treatment

### **ROLES AND RESPONSIBILITIES**

- **2.1. Air Force Surgeon General (AF/SG)** . AF/SG is primarily responsible for developing and coordinating health care policy for the Air Force Medical Service (AFMS). The AF/SG also coordinates and aligns health care programs and services to integrate with other Services' medical departments and the Office of the Assistant Secretary of Defense for Health Affairs (OASD-HA). AF/SG is responsible for organizing, training and equipping AF medical forces.
- **2.2. Pacific Air Forces (PACAF) Command Surgeon (SG)**. PACAF/SG is the theater Air Component Surgeon for United States Pacific Command (USPACOM). In conjunction with the theater Air Mobility Division (AMD), PACAF/SG oversees patient transportation for the Pacific theater to include US Forces Korea (USFK) and US Forces Japan (USFJ).
- **2.3.** United States Air Forces Europe (USAFE) Command Surgeon (SG) . USAFE/SG is the theater Air Component Surgeon for United States European Command (USEUCOM). In conjunction with the theater AMD, USAFE/SG oversees patient transportation for the European theater. USAFE also supports Africa Command (AFRICOM)/SG.
- **2.4.** United States Transportation Command (TRANSCOM) (USTC). The Commander, USTC, is the Department of Defense (DoD) single manager for implementing policy and standardizing procedures and automated information system (AIS) requirements for global patient movement (PM) in coordination with the Geographic Combatant Commanders (GCCs) through the Defense Transportation System and in accordance with DoD Instruction (DoDI) 6000.11, *Patient Movement*.
  - 2.4.1. The TRANSCOM Surgeon (TCSG) orchestrates strategic, operational and tactical guidance on patient movement; guides unity of effort, total interoperability and standardization between patient movement requirements centers (PMRCs) to ensure optimal fusion of expediency and patient safety, and provides clinical and administrative support to PMRCs during peacetime and contingency operations, and maintains trained patient movement joint service enablers ready to deploy anytime, anywhere.
  - 2.4.2. PMRCs clinically and administratively validate PMRs through the TRANSCOM Regulating and Command & Control Evacuation System (TRAC2ES) per DoDI 5154.06, *Armed Services Medical Regulating*.
- **2.5.** Air Mobility Command (AMC). AMC is the Air Force component command of USTC. AMC is the lead major command for organization, training, equipping and management of forces for the global AE mission.
  - 2.5.1. AMC Command Surgeon (SG). AMC/SG serves as the AE program medical director, responsible for the overall supervision and quality of medical care provided worldwide by aeromedical evacuation. AMC/SG is the Manpower and Equipment Force Packaging System (MEFPAK) Responsible Agent (MRA) for ERCC capabilities establishing the principles for system-wide organization, equipment, training, operations, and clinical standards for the air transport of critically injured/ill patients. AMC/SG collaborates with AMC Directorate of Operations (A3) to ensure medical operations and aircrew operations are fully integrated.

- 2.5.1.1. AMC/SG En Route Medical Care Division (SGK) establishes clinical policy and procedures for AE and the clinical standardization and training of AMC medical personnel assigned to AE/patient movement duties. AMC/SGK is the primary point of contact for ERCC issues and development of Air Force ERCC capabilities. AMC/SGK directs clinical oversight and standards development for ERCC to ensure a unified, system-wide, en-route critical care transport capability. AMC/SGK is the central manager for the ERCC Operational Support Flier Program. AMC/SGK maintains the AF Portal ERCC webpage.
- 2.5.1.2. AMC/SG Medical Plans and Readiness Division (SGX), serves as the MEFPAK manager. AMC/SGX coordinates the development of Tactics, Techniques, and Procedures (TTPs), Mission Capability Statements (MISCAPS), and Mission Essential Task Lists (METLs) for ERCC capabilities.
- 2.5.1.3. AMC/SG designates ERCC UTC Pilot Units. Pilot units provide clinical, technical, manpower, equipment, and operational expertise and consultation in the development and enhancement of ERCC UTC capability.
- 2.5.2. Eighteenth Air Force (18 AF). 18 AF is the Combat-Numbered Air Force (C-NAF) within AMC; it is the AF component NAF within AMC which executes Commander United States Transportation Command (CDRUSTC) assigned missions. 18 AF collaborates with USTC and AMC to identify AE capabilities based on available resources to include organic assets and gained AFRC and ANG assets. 18 AF collaborates with PACAF and USAFE AE forces to coordinate AE support for real world, exercise and operational plan (OPLAN) support.
- 2.5.3. 618<sup>th</sup> Air and Space Operations Center (ASOC). The 618 ASOC is the tasking and execution agency for 18 AF AE missions and requirements. The 618 ASOC provides centralized command and control (C2) of all AMC air mobility operations around the globe and acts as the single point of contact for AMC operations.
- **2.6.** Wing Commander. Wing commanders exercise command over all units and personnel in their wing establishing programs, policies and procedures within the wing in support of unit objectives and missions.
  - 2.6.1. Medical Group (MDG) or Medical Squadron (MDS) Commander. Medical unit commanders enable AF mission execution by providing mission-ready medical personnel and capabilities and developing healthy Airmen and families. Medical units provide health services for all supported members and sustain the readiness skills of assigned medical personnel.
- **2.7. Integration in Air Mobility Operations.** Command and control (C2) functions exercised over ERCC PM missions are consistent with those for all air mobility missions and are conducted in accordance with the C2 processes described in Joint Publication 3-17, *Air Mobility Operations*. AE assets are integrated within the inherent mobility structure established to support airlift operations through the Air Mobility Division (AMD) to the wing and down to the assigned expeditionary AE element. For ERCC capabilities assigned to support evacuation platforms other than AE, guidance will be outlined in the operations order (OPORD).

# 2.8. Contingency Operations.

- 2.8.1. Air Force Forces (AFFOR), Theater Command Surgeon (SG). The AFFOR/SG is responsible for the quality of medical care provided within the AOR.
- 2.8.2. The Director of Mobility Forces (DIRMOBFOR), the Commander, Air Force Forces (COMAFFOR) and/or Joint Forces Air Component Commander's (JFACC) are continuing authority for air mobility operations within an Area of Responsibility (AOR) coordinating with all commands and agencies both internal and external to the joint force. The DIRMOBFOR is normally under ADCON of the COMAFFOR and is normally a senior officer with an extensive background in air mobility operations and is familiar with the AOR. The DIRMOBFOR provides, on behalf of the COMAFFOR, guidance to the Air Mobility Division (AMD) on air mobility matters, but such guidance should be responsive to the timing and tempo of operations managed by the AOC director.
- 2.8.3. AMD. The AMD plans, coordinates, tasks, and executes the air mobility mission. The AMD is located in the AOC in the deployed environment and is directed by the DIRMOBFOR. Among the AMD's many responsibilities, it coordinates air refueling planning, tasking, and scheduling to support inter-theater and intra-theater air operations. The AMD also ensures intra-theater air mobility missions are visible in the AMC standard command and control system, and is reflected in the ATO. The AMD remains under the control of the AOC director who manages the execution of operations for the COMAFFOR.
- 2.8.4. AE Control Team (AECT). The AECT provides operational control for aeromedical elements directing and managing oversight of missions originating and terminating within the assigned theater of operations. The AECT is the operational center for overall planning, coordinating and directing of all theater AE forces.
- 2.8.5. Deployed ERCC UTCs supporting AE forces are organized within the constructs of the Air and Space Expeditionary Task Force (AETF) and are tailored based on the size and scope of the operation. C2 of theater AE forces in contingency operations is defined in the warning/execution/operation order (WARNORD/EXORD/OPORD). AE assets may be under the operational control (OPCON) of the Joint Force Commander (JFC) through the JFACC and, when not appointed as the JFACC, the COMAFFOR for administrative control (ADCON).
- 2.8.6. When ERCC teams are deployed for contingency operations in support of a GCC, the ERCC teams may fall under the OPCON and Tactical Control (TACON) of the JFACC/COMAFFOR exercised through the Director of Mobility Forces-Air (DIRMOBFOR-AIR), and may be assigned to a deployed ERC evacuation element. When deployed in direct support of AMC AE operations, ERCC teams fall under the OPCON or TACON of the 618 Air and Space Operations Center (Tanker/Airlift Control Center) (618 AOC (TACC). The 618 AOC coordinates the management and expectation of ERCC teams with the 18 AF/SG. Command relationships are defined in the warning/execution/deployment order. When tasked for a non-traditional en route critical care role, the team may not necessarily be assigned to an AE unit or Operations Group, but may be aligned under a different execution and command and control organization.
- 2.8.7. AF Theater En Route Critical Care Director. During major contingency operations, the GCC may establish a Theater En Route Critical Care Director to oversee en route critical care operations within the region. This position will be filled by a qualified AF ERCC member. In coordination with AMC/SGK, the HQ AF/SG CCAT Consultant will select a

qualified individual for the position from a list of candidates to be maintained by the consultant. Generally, the Theater En Route Critical Care Director will be assigned to the Air Force Forces (AFFOR)/SG staff. The Theater En Route Critical Care Director serves as an advisor to Combatant Command Surgeon (CCMD/SG) and AFFOR/SG for the development, utilization, and optimization of a theater-wide en route critical care capability. This includes UTCs FFCCT, FFTCT and other special en route critical care capabilities such as Lung Teams, as well as other special and coalition medical critical care air transport capabilities. The Theater En Route Critical Care Director serves as an authoritative consultant to the AECT on the utilization of ERCC teams. The Theater En Route Critical Care Director also serves as a consultant to the Theater Validating Flight Surgeon (TVFS) regarding clinical considerations for critical care transport, but does not validate Patient Movement Requests (PMRs) – validation authority is the responsibility of the TVFS.

- 2.8.7.1. The Theater En Route Critical Care Director will meet the same pre-deployment training and currency requirements as other personnel deploying within the FFCCT UTC. The Theater En Route Critical Care Director will be provided operational support flier (9C) aeronautical orders (AOs) allowing him/her to travel to locations with deployed ERCC assets as needed and in coordination with AFFOR/SG. To evaluate the clinical operations of the AOR en route critical care system, the Theater En Route Critical Care Director is authorized to participate in intra-theater or inter-theater AE missions and has the same priority as ERCC teams and AE crews to return to the point of origin at the conclusion of these missions.
- 2.8.8. AE Element CCATT/ERCC Director. When deployed, one or more ERCC UTCs (typically FFCCT) may be attached/assigned to a deployed expeditionary AE element. The AE element commander will appoint a unit CCATT/ERCC Director for management and oversight of all assigned ERCC teams and to serve as team liaison to/for the AE command section. The CCATT/ERCC Director reports directly to the AE element commander and is integrated into the AE element executive leadership structure at the equivalent level of the Director of Operations (DO) and the Chief Nurse. The unit CCATT/ERCC Director will be a physician that physician may be of lesser rank but greater CCATT experience. The CCATT/ERCC Director will be responsible for managing each of the ERCC teams assigned to the AE element, establishing the rotational schedule, reviewing clinical processes, act as liaison with local ground medical treatment facility to establish processes for critical care clinical sustainment, and be the mediator for all other team issues. If TCCET UTCs are attached to the deployed expeditionary AE element, TCCET personnel will fall under the unit CCATT/ERCC Director for management and oversight.
- 2.8.9. Team Chief. During mission execution, the physician on the ERCC team is the team lead and the clinical authority for patients assigned to the team; and, with the other team members, is responsible for documenting and providing care. The physician may be called upon to consult and/or assist in the care of other patients under the direct care of the AE crew on board. Any participation by the physician in the care of a patient assigned to the AE crew must be documented on the AE patient medical record and a DD Form 2852, *Patient Movement Event/Near Miss Report.* For non-AE missions (no MCD/AECMs on board), the ERCC Team Chief will ensure the documentation is accomplished. Significant change in status will be communicated to the C2 agency and Patient Movement Requirements Center (PMRC) (if regulated patient) governing the mission. When in-flight, the ERCC team works

with and receives mission operational direction from the MCD or non-AE platform comparable member (e.g., Combat Search and Rescue (CSAR) Pararescue Jumper (PJ), DUSTOFF Senior Flight Medic, etc.).

## EN ROUTE CRITICAL CARE UTC ASSIGNMENT

## 3.1. En Route Critical Care Team Candidate Selection.

- 3.1.1. All candidates for ERCC UTC assignment and duty undergo a position-specific clinical skill validation process administered by the US Air Force School of Aerospace Medicine (USAFSAM), Air Force Expeditionary Medical Skills Institute (AFEMSI), under the authority and direction of AMC/SG. (Reference AFI 41-106)
- 3.1.2. Medical unit commanders with ERCC UTCs assigned are responsible for evaluating assigned personnel for nomination to an ERCC UTC so that only clinically competent personnel are assigned; ensuring ERCC UTC-assigned personnel are clinically experienced, trained and equipped for this vital mission. Commanders are also responsible for maintaining the clinical capability of assigned ERCC teams to provide medical care during transport of critically ill or injured patients in support of war operations, humanitarian assistance, homeland security/defense operations, disaster response, and other taskings. Commanders screen assigned medical personnel for eligible candidates holding primary or allowable substitution AFSCs for nomination to a position on ERCC UTCs. **Note:** Air Reserve Component (ARC) ERCC UTC assignments may be determined at the time of accession. ARC medical unit commanders with ERCC UTCs are responsible for ensuring timely training and sustained clinical competence of all ERCC UTC assigned personnel.
- 3.1.3. Candidates for ERCC UTC membership must be world-wide qualified and able to meet the requirements for physician, nurse, or technician positions (respectively) as set forth in paragraph 3.2 below.
- 3.1.4. The critical care clinical skill validation process does not remove the responsibility for selecting, training, and preparing members for assignment to UTCs from the commander. The process is an enhancement to the medical UTC assignment system to ensure that only the most highly skilled medical professionals are assigned to ERCC UTCs. The validation process is also designed to assist commanders in determining what further experience and training a prospective UTC candidate must obtain in order to capably perform the ERCC mission.

## 3.2. Critical Care Clinical Skill Validation Application Process.

- 3.2.1. Clinical Skill Validation Application Package. Application packages must be prepared for each ERCC UTC candidate. (T-1) Forward packages to AFEMSI for review and evaluation.
- 3.2.2. Complete application packages (see paragraph 3.2.4.) should be scanned, compiled (in one document or file) and e-mailed to: <u>USAFSAM-CVC@US.AF.MIL</u> (Note: This org box is encryption capable.)
  - 3.2.2.1. For ANG candidates, clinical skill validation application packages should be scanned electronically and sent to ANG/SGX. ANG candidate application packages will be facilitated and forwarded to the USAF School of Aerospace Medicine (USAFSAM) by the ANG/SGX office.

- 3.2.2.2. For Air Force Reserve Command (AFRC) candidates, clinical skill validation application packages are reviewed by AFRC/SGP and AFRC/SGX prior to unit submission to USAFSAM.
- 3.2.3. Qualifications. Candidates must hold one of the primary or allowable substitution AFSCs as directed in the respective ERCC UTC Mission Capability Statement (MISCAP). All candidates for ERCC UTC assignment should demonstrate independent critical thinking abilities, effective communication, team dynamics and time management skills. They must be able to obtain Operational Support Flier status (reference AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*), meet physical standards for OSF (reference AFI 48-123, *Medical Examinations and Standards*), obtain an official government passport, and have a minimum of a Secret security clearance.
  - 3.2.3.1. Physician. Physician applicants nominated for assignment to an ERCC UTC must have completed five successful intubations in live patients (not simulated) in the six month period prior to CVC application. Physician applicants must also have experience with the placement and management of arterial and central venous catheters in live patients within the prior six months.
  - 3.2.3.2. Nurse. Nurses nominated for assignment to an ERCC UTC must have a minimum of two years Critical Care/Emergency Department nursing experience. Within six months prior to the CVC application, the nurses must have experience with ventilator management (ABG interpretation, basic ventilator management), hemodynamic monitoring (knowledge and management of invasive lines, interpretation and application of labs/data, fluid/blood product management, and resuscitation standards) and titration of vasoactive intravenous medications. Nurses must demonstrate knowledge in pharmacology of commonly used medications in the respective UTC allowance standard to include, but not limited to: medication dose and use, contraindications, management and clinical indication for medications.
  - 3.2.3.3. Cardiopulmonary Technician. Cardiopulmonary Technicians nominated for assignment to an ERCC UTC must be experienced in mechanical ventilation (to include ABG interpretation, troubleshooting techniques, and capnography), medications, airway management, ARDSnet/lung protective ventilation and hemodynamic monitoring.
- 3.2.4. Candidate Clinical Skill Validation Application Package Contents.
  - 3.2.4.1. Physician application package requires (see **Attachment 2** for package checklist):
    - 3.2.4.1.1. Coversheet CVC checklist.
    - 3.2.4.1.2. Current curriculum vitae including a self-assessment documenting an indepth description of critical care activities over the previous two years. (Self-assessment must provide evidence or attestation of tasks in para 3.2.3.1. "Previous two years" does not infer candidate must have "two years of experience". Describe critical care activities experienced/performed within that time period prior to application.)
    - 3.2.4.1.3. Current Hospital Privilege List (AF Form 1562 or equivalent).
    - 3.2.4.1.4. Current copies of medical license(s).

- 3.2.4.1.5. Physicians will be current in Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) through six months from application. One-time Advanced Trauma Life Support (ATLS) course completion is required. Current ATLS and Pediatric Advanced Life Support (PALS) course is desired. (Include copy of respective certificate for each applicable certification held.)
- 3.2.4.1.6. Current copy of RSV checklist for the primary physician AFSC position listed in the MISCAP for the respective ERCC UTC, plus RSV checklist for qualifying AFSC currently held.
- 3.2.4.2. Nurse application package requires (see Attachment 2 for package checklist):
  - 3.2.4.2.1. Coversheet CVC checklist.
  - 3.2.4.2.2. Current curriculum vitae including a self-assessment to include an in-depth description of critical care activities over the previous two years. (Self-assessment must provide evidence or attestation of tasks in para 3.2.3.2. "Previous two years" does not infer candidate must have "two years of experience". Describe critical care activities experienced/performed within that time period prior to application.)
  - 3.2.4.2.3. Current nursing job description.
  - 3.2.4.2.4. Nurses will be current with BLS, ACLS, as well as Advanced Trauma Care for Nurses (ATCN) Course; or, Trauma Nurses Core Course (TNCC) in lieu of ATCN. It is highly recommended RNs have a certification in CCRN, or CEN, or CFRN. Completion of the Air Force's Emergency/Critical Care Nurse Fellowship or AACN's Essentials of Critical Care Orientation is recommended. (Include copy of respective certificate for each applicable certification held.)
  - 3.2.4.2.5. Current copy of RSV checklist for the primary nurse AFSC position listed in the MISCAP for the respective ERCC UTC, plus RSV checklist for qualifying AFSC currently held. 46Y3M will submit current copy of RSV checklist for 46Y3M AFSC.
- 3.2.4.3. Cardiopulmonary technician application package requires: (see **Attachment 2** for package checklist):
  - 3.2.4.3.1. Coversheet CVC checklist.
  - 3.2.4.3.2. Documentation of current 5-skill level or higher.
  - 3.2.4.3.3. Current curriculum vitae including a self-assessment to include an in-depth description of critical care activities over the previous two years. (Self-assessment must provide evidence or attestation of tasks in **para 3.2.3.3**. "Previous two years" does not infer candidate must have "two years of experience". Describe critical care activities experienced/performed within that time period prior to application.)
  - 3.2.4.3.4. Cardiopulmonary Technicians will be credentialed as Certified or Registered Respiratory Therapists (CRT/RRT), or possess a Cardiopulmonary Laboratory Phase II training completion certificate, or have an AF Training Record printout of AF Form 623 Part II Formal Training, or have a Single Unit Retrieval Format (SURF) printout indicating proof of training completion.

3.2.4.3.5. Cardiopulmonary Technicians will be current in BLS and ACLS. (Include copy of respective certificate for each applicable certification held.)

# 3.3. Critical Care Skill/Experience Validation.

- 3.3.1. Clinical Validation Committee (CVC) and Review. A committee composed of experienced ERCC members will review packages for recommended nominees. AFEMSI will appoint a CVC Medical Director to lead the review process for all ERCC UTC candidates. The CVC Medical Director will be responsible for assigning CVC members and the clinical skills review process. Any irresolvable conflicts between the CVC members will be referred to the CVC Medical Director. The clinical skill validation process will be completed within a 2-week (10 working days) period. The CVC is required to expeditiously conduct and complete their assessment in order to avoid a delay in the commander's ability to make timely personnel assignments to ERCC UTCs. The CVC is composed of experienced ERCC UTC members who review application packages for candidates recommended for ERCC UTC assignment - physicians review physician candidate applications, nurses review nurse applicants, cardiopulmonary technicians review cardiopulmonary technician applicants. When reviewing candidates from AFRC or the ANG, a qualified physician, critical care nurse, or cardiopulmonary technician representative from the respective air reserve component, as applicable, will be a member of the clinical validation committee for the reserve component candidate. Members of the CVC will not be in a candidate's direct chain of command. Each package will be assigned to one lead CVC member for review and processing. A structured interview of the proposed member will be accomplished by a member of the CVC. Two additional CVC members will review the package concurrently. Validation status will be assigned by a consensus of the three CVC members. Based on the committee's decision, a candidate/candidate's commander will receive a letter assigning one of the following:
  - 3.3.1.1. Approved Confirms eligibility for UTC FFCCT and entry into the CCAT Initial Course. CVC approval date must be entered into member's record in MRDSS.
  - 3.3.1.2. Disapproved Candidate does not meet eligibility requirements for an ERCC UTC. AFEMSI will immediately notify commanders on all candidates ineligible for UTC appointment. Candidates who are ineligible for ERCC UTC assignment must be immediately removed from the UTC and scheduled course attendance cancelled. Disapproval letters will cite the factors resulting in candidate disapproval and explain what further experience and training a candidate must obtain in order to capably perform the respective UTC mission. Ineligible applicants may appeal the decision through their unit commander to AMC/SG. The appeal request must include a letter of rebuttal signed by the commander fully stating/supporting justification for consideration of decision reversal, the original application package, and any additional associated documentation.

### **OPERATIONS**

- **4.1. ERCC Scope of Care.** ERCC teams provide advanced specialty medical capability to evacuate critically ill/injured patients requiring surgery, resuscitation or advanced care during transport. Patients requiring transport by an ERCC team include those requiring resuscitation, intensive nursing care, constant monitoring, mechanical ventilation, frequent therapeutic interventions, or other medical or surgical interventions vital to sustain life limb and eyesight during movement of the patient. A wide variety of adult and pediatric patients with serious medical and surgical conditions may potentially require transport by ERCC teams.
  - 4.1.1. These patients are usually in a state of hemodynamic, physiological flux, including patients whose resuscitation may still be in evolution. Prior to transport, the role of the ERCC team is to assess the patient's ability to tolerate air transport and prepare the critically ill/injured patient for movement. The ERCC UTC will normally originate with a patient from a nearby/co-located MTF located at a theater ERC hub. ERCC teams may also be transported from an ERC hub to forward locations to pick up patients for transport to higher levels of care. The ERCC team accompanies the patient from the originating facility to the aircraft and continue to monitor and intervene during in-flight operations as required. Specialized ERCC UTCs with training in pre-hospital trauma care may provide primary stabilization, DCR, critical care, or damage control surgical intervention. At the end of the mission, the ERCC team accompanies the patient from the aircraft to the destination facility and continue to monitor and intervene as required until the patient is handed-off to destination facility medical staff.
- **4.2. Range.** ERCC UTCs are designed to be flexible in response and could be employed to move critically injured or ill patients across the spectrum of operations. This includes AEF operations ranging from in-garrison care to homeland security, DSCA to worldwide humanitarian relief, small scale contingencies through major theater war, and any other operational tasking where this unique patient care skill set is required. Movement can occur on any appropriate platform and include patients regardless of whether or not they are validated or regulated.
- **4.3. Force Health Protection.** Global engagement requires forces to rapidly deploy in different parts of the world at a moment's notice. It is assumed medical personnel may potentially operate in a biological or chemical environment. People, systems, and facilities of supporting bases are essential to the launch, recovery, and sustainment of aerospace platforms, usually as part of an AEF. Air Force medical services are crucial to base defense and resumption of operations during a wide spectrum of AEF operations. ERCC teams must be deployed with appropriate training and individual protective equipment (IPE) to counter threats. When deployed, whether as an AE component or supporting other medical transport operations, ERCC teams will be exposed to the same conditions as the members of the unit they are supporting and must be provided the same level and type of personal protective equipment (PPE).

#### 4.4. Mission Essential Items.

4.4.1. When flying on any mission, ERCC UTC members will have, at minimum, the following items on hand: (T-1)

- 4.4.1.1. Identification (ID) card.
- 4.4.1.2. Dog tags.
- 4.4.1.3. Appropriate Aeronautical Order.
- 4.4.1.4. NATO, TDY, and/or Deployment orders (as applicable).
- 4.4.1.5. Government Travel Card.
- 4.4.1.6. Official Government Passport. Personnel assigned to ERCC UTCs are required to have a current and valid Official Government Passport (no-fee/maroon cover) on hand at all times in order to comply with country entry requirements specified in the *Foreign Clearance Manual* (also referred to as *Electronic Foreign Clearance Guide, eFCG*). Failure to accomplish will result in mission restrictions. Passport applications should be submitted immediately upon assignment to ERCC UTC. Applications for passport renewals should begin 3 months prior to passport expiration to prevent mission restriction. (**Note**: Do not use "tourist" passports with a blue cover.)
- **4.5.** ERCC UTC and Special Medical Attendant Team Relationship with Aeromedical Evacuation Crewmembers (AECMs)/ En Route Care Crewmembers . Personnel assigned to ERCC UTCs are not considered a part of the AE aircrew UTC, FFQDE, and are not rated or non-rated aircrew-members. ERCC UTC members are operational support fliers. Non-UTC members of ERCC special medical attendant teams are classed as medical attendants. (Note: Reference AFI 11-401, Aviation Management, for guidance on rated Flight Surgeons performing ERCC duty.) ERCC personnel are vital members of the USAF's en route medical care capability during deployments and patient transport missions. When assigned or attached to AE or ERC units, the AE or ERC unit commander is responsible for effective communication, coordination and integrity, and will ensure ERCC teams are supported.
  - 4.5.1. During missions utilizing ERCC UTC teams or ERCC special medical attendant teams to transport patients via AE, the Medical Crew Director (MCD) has operational control over all aspects of the AE mission. The ERCC senior team physician is the team leader and has clinical authority of the assigned patient(s) during the mission. The ERCC team leader updates the MCD on any changes in the patient's clinical status and will direct requests for changes in any aspect of the flight (i.e. cabin altitude or flight plan) to the MCD. For ERCC UTCs not assigned to support AE, gaining organization C2 is responsible for ensuring effective integration of ERCC members into the unit and the unit's mission.
  - 4.5.2. During missions utilizing ERCC teams to transport patients on non-AE ERC missions (i.e., CASEVAC, MEDEVAC, etc.), the senior crewmember has operational control over the mission. The senior ERCC team member has clinical authority of the assigned patient(s) during the mission. The ERCC team leader updates the senior crewmember on any changes in the patient's clinical status and will direct requests for changes in any aspect of the flight (i.e. cabin altitude or flight plan) to the senior crewmember. It is the responsibility of the senior crewmember and the ERCC Team Chief assigned to a particular ERC mission to ensure team cohesiveness and integrity between ERCC teams and the flight crew. For ERCC teams assigned to support ERC units, gaining organization C2 is responsible for ensuring effective integration of ERCC members into the unit and the unit's mission.

- **4.6. Support.** ERCC teams receive all base support from the unit of attachment. During deployment operations, the gaining unit will be responsible for providing all required support for the ERCC teams including billeting, food, water, shelter, transportation, medical oxygen support, communication and coordinate resupply of medical equipment and supplies, and any other items determined essential for the ERCC teams to accomplish their mission. UTC FFEC1, *Expeditionary Support Package*, has been designed to provide essential basic shelter and equipment storage for ERCC teams and AECMs deployed to secure, forward airfields in support of tactical operations where their presence exceeds requisite shelter-support capability at the host site.
  - 4.6.1. If a patient transport mission terminates at a location different from the host unit's or deployed unit's location, the Aeromedical Evacuation Control Team (AECT) or applicable C2 agency ensures integrity between aircrew members, ERCC team members, and support personnel is maintained until all have returned to the point of origin. If the ERCC team members are separated from the flight crew, the ERCC team-chief is responsible to ensure required support by contacting the base command post and controlling C2 agency (i.e., 618 AOC, AMD). The ERCC team chief ensures the originating unit command/administration is advised of latest travel information, plan, limitations, and obstacles to returning to point of origin.

# 4.7. Tasking and Employment.

- 4.7.1. ERCC Team Utilization Regulated Critical Care Patients. ERCC teams are a limited, rapidly deployable resource available in selected situations to enhance patient movement capability. A PMRC VFS validates the necessity for ERCC patient movement. The request for ERCC teams to support a patient movement requirement comes through a coordinated effort among the originating, sending physician, PMRC validating flight surgeon, and destination accepting physician. When a sending physician believes ERCC is required for transport, this is reflected on the patient movement request (PMR). Following review of the PMR, the validating flight surgeon will either concur with the request or collaborate with the sending physician to arrive at a final determination. The validating flight surgeon also has the option to require an ERCC team, even if not originally requested by the sending physician. In the case of complex ERCC patient movements, the PMRC validating flight surgeon will collaborate with the Theater ERCC Director, sending physician, accepting physician, and the transporting ERCC physician when planning and coordinating a patient's transfer. Consultation between the sending physician, ERCC team physician, the PMRC VFS and/or the Theater En Route Critical Care Director will be required prior to mission execution to determine the appropriate provider mix to transport neonatal and pediatric critical patients.
  - 4.7.1.1. Non-Critically Ill/Injured Patients. The PMRC will not validate patients whose condition would require a medical attendant because of the presence of an ERCC team on a mission. ERCC teams will only be responsible to provide care for the patient(s) validated as requiring an ERCC team for transport. The assignment of additional non-critical patients to an ERCC team substantially reduces the capability of the ERCC team to provide care for assigned critical care patients. Should a mission be diverted en-route to pick up additional critically injured or ill patients, the ERCC team may not be able to continue to provide care for a non-critical patient. Such non-critical patients should be validated with a medical attendant.

- 4.7.2. Unregulated Critical Care Patients. ERCC tasking for unregulated patient movement may be supported by fixed or rotary wing evacuation platforms. Tasking may be initiated by a 9-Line MEDEVAC request, PMR Prime (12-line), or a Mass Casualty (MASCAL) PMR. "Intelligent tasking" either by medical assessment or defined protocols should be used to assess the appropriateness of utilizing ERCC capabilities OT&E'd to assess, resuscitate and treat unstable casualties for specific missions. In some situations, operational constraints limiting C2 visibility of casualties'/potential casualties' medical condition will require proactive assignment of ERCC capabilities to an evacuation mission.
  - 4.7.2.1. These operating environments may require AE assets to evacuate patients from locations where the ability to generate and evaluate PMRs utilizing the AE system is ineffective or impossible. The role of ERCC providers on these missions includes "accepting physician" and/or medical authority.
  - 4.7.2.2. When security or operational conditions exist that would require casualties to be moved immediately, the patient may be moved without prior PMRC validation. However, a Clearing Flight Surgeon or designated medical authority clears the ERCC patients for transport. In each case, the MCD contacts AECT prior to taxi in order to correct the manifest and the total number of personnel on board. The AECT then notifies the PMRC.
- 4.7.3. Mission Tasking. Once the requirement to transport a critically injured or ill patient has been determined, the ERCC team may be tasked by the theater AECT, 618 AOC AE cell, or other ERC PM control agencies through the respective command chain for the required mission. Requirements for support are based on expected casualties, location, available medical capability, and en route care requirements. The number and mix of personnel are based on the requirement identified at execution.
  - 4.7.3.1. Tasking ERCC teams for AE missions mirrors the same process as for AE crews. In determining the extent of a requirement for ERCC assets, the AECT considers capabilities and maximum patient loads with regard for acuity of patients and potential care requirements. The AECT consults with the Theater ERCC Director for expert critical care clinical guidance when ERCC teams are tasked.
    - 4.7.3.1.1. High acuity patients are generally stabilizing or stabilized patients requiring mechanical ventilation, multiple vasoactive medications, ongoing resuscitation, or other advanced treatment modalities.
    - 4.7.3.1.2. Low acuity patients are generally those who are hemodynamically stable but require hemodynamic monitoring and some form of more intensive care such as titration of vasoactive medications, ventilator management, monitoring of intracranial pressure, etc.
- 4.7.4. Pediatric/Neonatal Transports. During operations where ERCC teams are deployed, there may be occasions when it is necessary to transport pediatric patients. UTC FFCC4 does not provide equipment to support pediatric patients. A pediatric equipment augmentation kit, UTC FFCC2, has been developed which provides additional equipment/supplies to FFCC4 equipment to support FFCCT when a team is required to transport pediatric patients. If transport of pediatric patients is anticipated during operations, one or more of these augmentation kits should be requested by the Combatant Commander

- (CCDR). Consultation between the sending physician, ERCC team physician, Theater ERCC Director and the PMRC validating flight surgeon will be required prior to mission execution considering such factors as patient acuity, transport care requirements, age, weight, and size of patient to determine the ideal support necessary to transport pediatric critical patients.
  - 4.7.4.1. A NICU team will most likely be notified for AE missions when neonatal requirements have been identified for patient movement from the originating station. These are extremely limited assets typically tasked to support limited, specific beneficiary or humanitarian transports. A NICU team will generally be utilized to transport patients from birth up to three months old. The limiting factor in determining a "maximum/minimum" patient age of three months is the size of the transport isolette.
- 4.7.5. Non-Standard Regulated En Route Care Missions. For patient transports with an ERCC team utilizing smaller, space-limited airframes such as C-21, C-12, etc., the evacuation platform crew may be constrained due to weight and space limitations. In cases of extensive patient care and support requirements, an ERCC team may be required to move a patient without an AECM or other medical crewmember. In such cases, prior approval shall be obtained from MAJCOM (COMAFFOR when applicable)/A3/DO with mission execution authority (reference AFI 11-202, Volume 3, General Flight Rules) for regulated evacuations. (T-1). MAJCOM (COMAFFOR)/A3 should be informed that the ERCC team members are not aircrew and are not qualified to interface with any aircraft systems or portable oxygen systems or configure the interior of an aircraft to accept patients independent of AECMs. ERCC allowance standards do not include portable oxygen (PTLOX) or a portable frequency converter. ERCC members are not qualified to operate PTLOX or portable frequency converters independent of AECMs. In cases where the use of PTLOX or frequency converter is not required, the ERCC team operates under the auspices of the onboard front-end crew and only operate the equipment using battery power. When PTLOX or a frequency converter is required for the mission, a qualified AECM will be assigned to the mission for interface between aircraft systems and medical equipment. ERCC team members need to be able to communicate the amperage requirement for equipment brought on board, what equipment may operate on aircraft (400Hz) power, and what equipment must use a frequency converter when plugged in. A crewmember qualified in the particular aircraft must brief the ERCC team on ground operations, flight safety, egress, loading/unloading, etc. It is the responsibility of the ERCC team leader to ensure members are adequately briefed prior to the mission. (T-2). It may also be necessary to pare and tailor ERCC team personnel and/or equipment. The ERCC team physician, in coordination with the tasking authority, evaluates the mission requirements to ensure patient and mission needs are met with the appropriate team and equipment complement utilized.
- 4.7.6. Non-AE Missions. ERCC teams may be utilized on any patient transport of critically ill or injured patients in order to save life, limb or eyesight on opportune aircraft (IAW AFI 11-401). In such cases, care and caution must be exercised on the use of this limited asset. Platforms include, but are not limited to, rotary wing aircraft, CV-22, C-212, C-23, HC-130, coalition nation aircraft, and other aircraft of opportunity. Support for critically injured/ill patients is a priority but should be systematically weighed against over-arching theater requirements, mission risk and threat conditions, and the appropriateness and availability of

other assets to move the patient(s). ERCC personnel may transport critically ill or injured patients on non-AE missions when operational or patient requirements dictate.

- 4.7.6.1. Utilization of ERCC teams on non-AE missions should be approved through the theater command and control agency governing theater ERCC. (T-2). ERCC teams are not required to fly with AECMs on non-AE missions. For ERCC UTCs trained for unregulated missions, this approval can be assumed by the tasking of the UTC to the TACON of an unregulated evacuation asset. ERCC teams will follow directions of the assigned aircraft crew on factors pertaining to operating on-board the particular aircraft. Prior to transporting patients on non-AE missions, ERCC members must be properly oriented and equipped for these missions, and briefed on ground operations, flight safety, egress, patient loading/unloading, etc. by a crewmember qualified in the particular aircraft. (T-2). Due to space and weight limitations on some airframes, it may be necessary to pare and tailor both the personnel and equipment. The ERCC team physician, in close coordination with the tasking authority, evaluates the mission requirements to ensure patient and mission needs are met with whatever team and equipment complement is utilized. The theater command and control agency governing ERCC will ensure an alternate oxygen and electrical source that is approved for use on that aircraft is available if required as ERCC team members are not qualified to operate PTLOX or portable frequency converters. The ERCC team utilizes the oxygen and electrical source that is used by the aircraft medical crewmember. In cases where there is no medical crewmember support, the ERCC team operates medical equipment on battery only.
- 4.7.7. Peacetime Taskings. "Peacetime" (i.e., other than war support contingency operations) taskings may include, but are not limited to, President of the United States (POTUS) support, special operations support, within continental United States (CONUS)/outside continental United States (OCONUS) beneficiary transports, DSCA, i.e., hurricane evacuation, humanitarian assistance/disaster response, etc. These taskings could be of short notice and may be brief or extended in duration. ERCC team members must meet and maintain currency in all training requirements stated herein to perform these missions. (T-1). Missions within the U.S. Pacific Command (PACOM) AOR and U.S. European Command (EUCOM) AOR will be managed by their respective AF supporting commands and/or assigned numbered air force (NAF). An on-call schedule for ERCC teams required to support DSCA operations has been established by AMC/SGX and distributed to all MAJCOMs/units with ERCC UTCs assigned.
  - 4.7.7.1. Disaster Relief. During DSCA operations such as pre- and post-hurricane landfall evacuations, or other disaster response operations, patients must be transported via local community transportation assets to a patient staging area established at or near an aerial port of embarkation (APOE) suitable for handling large mobility aircraft. ERCC teams will not leave the vicinity of the APOE to be transported to area medical treatment facilities or long-term care facilities to receive patients, but will receive their patients from the staging activity at the APOE. Consideration must be given to establishing a ground patient staging/holding capability able to provide care for critically ill and/or injured patients at the APOE until ERCC teams arrive to transport patients out of the area. APOE critical care staging assets have pre-positioned critical care equipment and supplies same as in the ERCC kit to support critically ill and/or injured patients

awaiting transportation. Patients are transported via mobility aircraft to pre-determined medical treatment/care facilities located near established aerial port(s) of debarkation (APOD). ERCC teams may or may not transport patients from the APOD to nearby MTFs. Ideally, transport services capable of providing care for critically ill and/or injured patients should receive critically injured or ill patients at the APOD and transport the patients to nearby MTFs without degradation in the level of care. This will enable ERCC teams to "quick-turn" back to the APOE to facilitate the swift evacuation of additional patients. Careful attention must be paid to the proper work/rest cycle management of ERCC teams during disaster operations. Team members must be rested and fully able to care for their patients. ERCC teams must be provided proper rest during these operations (reference paragraph 4.8., this publication).

4.7.7.2. Tricare Beneficiary Patient Transports. Prior to the start of Operation IRAQI FREEDOM, CCATTs routinely conducted beneficiary patient transport on AE missions within CONUS and OCONUS. On occasion, ERCC teams may still be tasked to support a beneficiary patient transport mission. This may occur more frequently in the European and Pacific theaters, but includes CONUS and other theaters as well. When an ERCC team is required for a beneficiary patient transport mission, the patient's originating medical treatment facility contacts the respective PMRC. The PMRC then contacts the closest medical facility with ERCC capability to support the transport.

# 4.8. ERCC Work/Rest Cycle (Team Endurance).

- 4.8.1. General. The work/rest cycle for ERCC teams does not equate to Aircrew Crew Duty Time and should not be used for mission planning purposes. The guidelines herein are to be used to assess the ability of team members to continually provide optimal patient care for the duration of the mission, as well as to ensure ERCC team members are given adequate time for rest/recovery prior to subsequent mission taskings or returning to point of origin.
- 4.8.2. To ensure adequate time for rest/sleep cycles for ERCC teams, a rotational schedule is established among the deployed teams at a particular location. The ERCC Director at the ERC element establishes the rotational schedule and communicates the schedule to the AEOT or equivalent. In special circumstances, this rotational schedule may be disrupted according to the flow of patients or when the ERCC Director (or designee, if not available) determines that it is medically or operationally necessary to accomplish the mission successfully.
- 4.8.3. Contingency (i.e. Wartime/DSCA/Humanitarian) Operations. Under typical operating conditions, the standard work cycle for the ERCC teams is 16 hours. The 16-hour work period begins with show time for mission preparation. The work period ends when the team has delivered the patient(s) to the next level of care, the receiving facility has assumed care responsibilities for the patient, and all duties have been completed (to include replenishment of supplies/kits, pallet building when required, etc.). For ERCC teams, a minimum rest and duty policy should define no more than 16 hours of duty in a 24-hour time frame or scheduling multiple team members to allocate a rotation of tending the patient and resting. ERCC members must not consume alcoholic beverages within 12 hours of the beginning of the work period.
- 4.8.4. Non-contingency Individual Beneficiary Transports. When the ERCC team originates at the same medical treatment facility as the patient being transported, the 16-hour work

- period begins four hours prior to scheduled take-off. When the ERCC team is transported via aircraft to another facility (pre-positioned) to pick up a patient, the work period begins three hours prior to scheduled take-off of the pre-positioning leg. ERCC members must not consume alcoholic beverages within 12 hours of the beginning of the work period.
- 4.8.5. Under certain circumstances, such as delays en route due to an aircraft maintenance issue, the ERCC team chief may extend the work period beyond 16 hours in order to meet patient care requirements, to a maximum of 24 hours without outside coordination with the governing C2 agency. The team chief should consider potential benefits (including minimizing remain overnight (RON) stops and continuity of patient care) and potential harm (due to delay or fatigue). When extending the work period, the ERCC team chief notifies the MCD/Pilot-In-Command who will notify the governing C2 agency (AECT, 618 AOC (TACC) or assigned AOC).
  - 4.8.5.1. Prior to the work period and throughout a mission, the ERCC team chief is responsible for continual assessment of the team's health and mental and physical abilities to safely complete a mission and provide optimum critical care. The ERCC team chief should also consider the ability of the entire team to rest when not engaged in patient care, the appropriateness of the team resting in shifts while engaged in patient care, the team's response to fatigue countermeasures, and individual team member factors affecting operational risk management. At any point, if the team is assessed as unsafe, the ERCC team chief notifies the MCD/PIC who will coordinate ERCC mission re-tasking with the AEOT, AECT or 618 AOC (TACC) or other appropriate C2 as applicable.
- 4.8.6. There may be times (inclement weather, winds, crew duty day, etc.) when an AE mission must RON at locations where local medical care is less capable than the care provided by the ERCC team. The ERCC team may be required to continue caring for the patient, impacting work/rest cycles. The local MTF commander (or equivalent), MCD, and ERCC team chief should collectively determine the optimal solution to satisfy competing requirements. In instances where the ERCC team's work period is projected to or has exceeded the 16-hour period, the ERCC team chief has the authority to determine if any of the ERCC team members are in need of rest/sleep and authorize rest/sleep if deemed necessary.
- 4.8.7. It will be the responsibility of the AE or ERC element to assist the ERCC team in returning to the duty location of the team (point of origin) as soon as the team has had time for rest and replenishment/reconstitution of expended supplies. For inter-theater missions, the ERCC team should be allowed eight hours of uninterrupted sleep at the destination, prior to returning to their point of origin in the theater/area of operations. When teams are allowed to sleep at the destination, teams will be more capable of flying again once they return to their duty location.
- 4.8.8. Any ERCC team whose total work period has extended beyond 24 hours, inclusive of mission support, positioning or de-positioning for a mission, and patient care activities will require a minimum 12 hours of uninterrupted rest/sleep prior to returning to their primary duty location. (T-1).
- 4.8.9. Any ERCC team that can be returned to the point-of-origin duty location within 24 hours from show time of the originating mission may be returned without a rest period.

When this occurs, the team shall have a minimum 10 hours of continuous restful activities including an opportunity for at least 8 hours of uninterrupted sleep during the 12 hours immediately prior to a mission (rest period will begin after release from return to point of departure). (T-1).

- 4.8.10. In coordination with the Theater En Route Critical Care Director, if one is designated for the operation, the AECT/AOC may re-task an ERCC team for patient transport prior to returning the team to its home station, to support theater requirements. When an ERCC team is re-tasked for patient transport immediately following completion of a previous mission, the total duty day, inclusive of mission support and patient care activities should not extend beyond 24 hours. If operational requirements prompt the re-tasking of an ERCC team in this manner, the ERCC team chief will assess whether the team is mentally and physically able to complete the mission. If the team is assessed as unsafe, the team chief will notify the Theater ERCC Director, who, in turn, notifies the AEOT and AECT to coordinate tasking for another ERCC team.
- 4.8.11. ERCC Work/Rest Cycle policy may be waived by the Theater En Route Critical Care Director (or AECT if a Theater En Route Critical Care Director is not appointed) when there is an operational requirement for a team to be returned sooner to the AOR, or to be re-tasked for a patient transport mission.
- 4.8.12. Alert ERCC Team. For an ERCC team sitting alert and awaiting a mission tasking (i.e. TCCET awaiting critical care MEDEVAC tasking), every effort should be made not to exceed 24 hours of continuous alert without at least 16 hours of rest with 8 hours of protected sleep prior to the next alert cycle.

# 4.9. Flight Operations.

- 4.9.1. Assessment of Critical Care Patients Permissive Environments. Prior to a regulated mission, the PMRC validating flight surgeon works with the Theater ERCC Director, sending physician, accepting physician, clearing flight surgeon, and the transporting ERCC physician when planning and coordinating the patient's transfer. For critically ill or injured patients, assessment of the patient's clinical status for flight should be accomplished by the ERCC team at the originating medical treatment facility whenever feasible. Upon arrival at an MTF or staging location, the ERCC team: assesses the patient's clinical status for flight, performs required interventions, determines continuing in-flight care requirements, and recommends the need for critical care augmentation in flight. Patients should be transitioned to ERCC equipment and assessed for stability in an MTF environment when geographically feasible. Any interventions required to enhance stability for transport should be performed prior to transport. The transporting ERCC physician makes the final determination whether or not a patient will be transported after assessment, considering the patient's ability to tolerate transport and operational considerations.
  - 4.9.1.1. For regulated evacuations, if the patient is not stable enough to transport, the ERCC physician consults with the sending physician and clearing flight surgeon to consider withdrawing the PMR and removing the patient from the flight manifest.
  - 4.9.1.2. During AE missions, the transporting ERCC physician will consult with the theater validating flight surgeon from the location of patient origin if the number of patients or the acuity of patients exceeds the capability of the team. Deviations from

- maximum ERCC patient loads will be at the discretion of the ERCC team physician and based on patient acuity, resources required/available, mission requirements, and any other factors affecting team ability to provide patient care without degrading capability. Deviations from tasked patient loads will be coordinated with the TVFS and communicated to the MCD prior to loading.
- 4.9.1.3. Allowance Standard Utilization. ERCC teams will perform missions with complete equipment sets, regardless of the patient load, except on smaller, space-limited airframes. ERCC teams may pare and tailor equipment sets for use on smaller, space-limited airframes according to patient requirements. When considering paring/tailoring equipment for missions on space-limited airframes, the CCATT team chief, in consultation with the TVFS and the mission tasking authority, must consider unanticipated events to include but not limited to: patient requirements due to possible changes in patient condition, the possibility of receiving additional, unanticipated patients at the pick-up point, the possibility for mission re-tasking prior to return to home-station, the possibility of diverting en route to pick up unexpected, additional patients, etc.
- 4.9.2. Assessment of Critical Care Patients Less Than Permissive Environments. ERCC personnel, especially those assigned to unregulated ERCC capabilities, may be required to evacuate patients from the point of injury or MTFs unable to provide required medical care for fresh or under-resuscitated casualties. Operational factors may necessitate evacuation of patients that would normally be considered inadequately stabilized for patient movement. In these cases, ERCC personnel attempt to stabilize the casualty prior to evacuation, if possible, and provide continued resuscitation en route to the nearest appropriate MTF.
  - 4.9.2.1. ERCC UTC's tasked to support unregulated patient movement may augment or be re-tasked to support ERCC/AE UTCs in situations requiring long range pre-hospital evacuation of fresh casualties such as in Anti-Access/Area Denial (A2/AD) environments.
- 4.9.3. ERCC Patient Assessment Unregulated Patients. Due to the nature of unregulated patient movement, it is expected that pre-mission medical planning will be significantly abbreviated. When operational constraints allow, ERCC personnel are expected to assess patient at the bedside and initiate ERCC movement from that point. As POI and some Role 1/2 evacuations may require ERCC to receive patients at a trans-load location or from a casualty collection point site, ERCC teams may be expected to perform their initial assessment during evacuation.
- 4.9.4. AE Mission Responsibilities. The AE crew ensures all power and oxygen requirements are met and properly configured for ERCC patient requirements. The ERCC physician is responsible for all clinical decisions regarding critically ill patients under their care during patient movement, including notifying the MCD of any changes in patient status requiring collaboration through the AOC with the PMRC and validating flight surgeon. The MCD incorporates the ERCC team's capabilities into pre-mission planning and briefings for patient emergencies, as appropriate
- 4.9.5. ERCC physician on-board may be consulted at any time during a mission by the MCD/FN to evaluate an AE patient who has exhibited a change in condition. If deemed necessary by the ERCC physician, primary responsibility for the care of the patient is transferred to the ERCC team and further care will be documented on the AF Form 3899L,

Patient Movement Record En Route Critical Care. Participation of the physician with/for any AE patient's care is documented on the AE patient medical record and a DD Form 2852.

4.9.6. During ground transportation at the completion of the mission, the patient is transferred to the receiving expeditionary medical platform/MTF via means with appropriate critical care capability.

## **4.10.** Ground Operations .

- 4.10.1. Mission Support. ERCC teams should be included in duties related to expeditionary squadron/element deployment, employment (including camp set-up), and re-deployment activities while maximizing operational mission readiness and appropriate work/rest cycles. Launch and recovery operations and standard aircraft configuration are the responsibility of AECMs or other service branch crewmembers or ground support personnel. ERCC teams may assist trained, experienced personnel in aircraft configuration duties and other ground operations when authorized by the CCATT Director (when appointed), when not on primary call and are governed by the work/rest rules. Before assisting, ERCC personnel must be fully oriented and trained in the performance of ground mission support duties and may perform these duties **only** under the supervision of, and in conjunction with, experienced ground support personnel. Under no circumstances will ERCC personnel be required to perform launch and recovery of aircraft, aircraft configuration, and other ground support activities without proper orientation/training and without experienced ground support personnel.
  - 4.10.1.1. AE or ERC units should regard the ERCC teams as expert critical care medical consultants, available to provide advice whenever questions arise about care of patients during transport. ERCC teams may provide clinical in-service training sessions to assigned AE or ERC element personnel, if requested, as operations allow.
- 4.10.2. Local MTF Assistance during Deployed Operations. Critical care skills deteriorate quickly and must be practiced continuously in order to maintain the highest expertise and proficiency level. AE or ERC element commanders shall encourage assigned ERCC members to seek opportunities to assist personnel at a local MTF with the care of critical patients in order to maintain clinical currency and proficiency. ERCC personnel may supplement local MTF staff only when practical and not on alert. This practice has the added benefit of providing the ERCC team with prior knowledge of the status and care requirements for patients they may be tasked to transport. For UTC FFCCT team assigned, the CCATT Director coordinates assigned FFCCT teams to assist in a local MTF after approval from the AE or ERC element commander. The CCATT Director is the primary liaison between AE or ERC C2 and other ground patient care facilities and determines involvement of ERCC personnel in local MTF assistance. ERCC personnel must not be scheduled for regular duty hours in a MTF due to the nature of the ever-changing flying environment assistance in a local MTF must not interrupt work/rest cycle or mission-ready status.
- 4.10.3. ERCC teams can assist in the support of non-ERCC patient reception and triage at an ERC staging location or other ERC patient interface point as befitting the team's clinical skills. The ERCC Director should ensure this support does not interfere with their primary assigned duties, work/rest rule, and their mission-ready status.

- **4.11. Documentation.** AF Form 3899L, *Patient Movement Record En Route Critical Care* is prescribed for use during transport of critically ill or injured patients. The form is used to direct and record care. A copy of the form accompanies each patient to ensure appropriate care is documented during transport and serves as the record of patient care while in the AE system. If additional AF Form 3899 attachments (e.g. A-K) are required, they should be used in addition to, not in place of, the AF 3899L. Examples include progress notes that require additional space, additional medication sheets, detailed Input-Output recording, restraint use, or patient resuscitation. If available, copies of patient medical documentation including operative reports should be provided to the ERCC team chief. ERCC teams are required to participate in the AE Patient Safety Program, (reference AFI 48-307, Volume 1, *Aeromedical Evacuation Medical Operations*). **(T-2).**
- 4.12. CCATT Quality Improvement/Performance Improvement (QI/PI) Program. The CCATT QI/PI Program is a patient safety program and peer review activity under AFI 44-119, Medical Quality Operations, and 10 U.S.C. Section 1102, Confidentiality of Medical Quality Assurance Records: Qualified Immunity for Participants. AMC/SG has designated the CCATT Pilot Unit at the 59th Medical Wing (MDW) as the central manager for the CCATT QI/PI It is the responsibility of the CCATT Pilot Unit to obtain all CCATT mission documentation and maintain a performance improvement platform to ensure safe patient The goal of the program is to identify and correct patient care issues directly impacting patient outcome throughout the continuum of care. Identification of potential problems occurs through two primary channels: 1) CCATT QI/PI manager participates in the weekly clinical theater video teleconference identifying potential areas for improvement; 2) all pages of the completed AF 3899s are sent to the 59th Medical Wing for each ERCC patient transported. After reviewing the documentation, the CCATT QI/PI manager enters data into the CCATT registry. When an item for potential improvement is identified, a PI event is opened in the registry. At the completion of the investigation, the item is closed by the CCATT Pilot Unit Medical Director and feedback is provided to the involved CCATT team. When a global area for improvement is identified, the information is forwarded to AMC/SGK, and the cadres of the CCAT Initial and Advanced Course for potential inclusion in the curriculum.
  - 4.12.1. The CCATT Pilot Unit is the central collection point for all CCATT medical documentation. It is the responsibility of each CCATT to forward medical documentation to the CCATT Pilot Unit on each patient transported during all operations and missions whether "peacetime" beneficiary movements, contingency, or disaster relief operations. When the CCATT arrives at the destination medical treatment facility, after giving a patient report to the receiving facility, the team copies/scans the AF 3899L and supporting documentation, for each of their patients. The team must then forward the copy of the medical documentation to the Pilot Unit via Fax (DSN 554-5053 or CML 210-292-5053) or scan and e-mail the documentation to: ccattpilotunit.59mdw@us.af.mil. (T-2). Appropriate Health Insurance Portability and Accountability Act of 1996 (HIPAA) security statements must be included. Faxes are received in a locked office with no through-access. The records are entered into the theater medical information system, and the QI/PI Manager uploads the documentation into the Joint Theater Trauma Registry (JTTR) for analysis, research, and tracking of trends.
    - 4.12.1.1. If an ARC CCATT is involved and a global issue for improvement is identified, AMC/SG will forward the feedback/information to ANG and AFRC Surgeons' offices.

**4.13. Security.** Medical personnel and equipment are non-combatant assets. Personnel may be armed as dictated by theater instructions. Security for ERCC personnel and equipment is the responsibility of the host unit. All ERCC team members are issued and qualified on the assigned weapon for their UTC/position, (reference AFI 10-401, *Air Force Operations Planning and Execution and* AFI 41-106, *Medical Readiness Program Management*). **Note:** Enlisted personnel on UTC FFCCT do not carry the M-16; they will be issued the M-9.

## OPERATIONAL SUPPORT FLYING

- **5.1. Operational Support Flier (OSF).** Personnel assigned to ERCC UTCs are operational support fliers. ERCC team members are not considered, nor do they qualify to obtain, rated or non-rated aircrew status aircrew rules/instructions do not apply to OSF personnel. (Exception: Active flight surgeons holding an aircrew position indicator (API) 5 position performing duties as ERCC retain crewmember status. Ref: AFI 11-401.) Members of ERCC UTCs fly in OSF (non-crewmember) status and must comply with AFI 11-401, *Aviation Management*, and AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*. Members of ERCC UTCs must be medically qualified according to AFI 48-123, *Medical Examination and Standards*, and have completed appropriate physiological training (reference AFI 11-403, *Aerospace Physiological Training Program*), to participate in flying activities. Once these qualifications have been met, an ERCC UTC member may be placed on OSF status. Personnel may not be employed or deployed as a member of an ERCC UTC until they meet all requirements for OSF status. As OSF, ERCC members may be eligible for hazardous duty incentive pay (HDIP).
  - 5.1.1. Original Training. First-time Original Training typically occurs while attending the CCAT Initial Course. All ERCC UTC members must have a current and cleared DD Form 2992, *Medical Recommendation for Flying or Special Operational Duty*, in order to participate in and receive initial physiological (altitude chamber) training during the course. Recurrent physiological training must be accomplished as required (reference AFI 11-403).
  - 5.1.2. Host Aviation Resource Management (HARM) Office and Flight Record. Upon successfully completing the CCAT Initial Course and meeting the qualifications for OSF status, ERCC UTC members report to their home-station HARM or Squadron Aviation Resource Management (SARM) office with a copy of their certificate for the CCAT Initial Course, a copy of their current DD Form 2992 and their AF Form 1274, *Physiological Training* (previously, AF Form 702, *Physiological Training Record* AF Form 702 has been eliminated). The HARM office will establish a flight record folder for the member. (T-1). Upon completing the CCAT Advanced Course, members bring a current copy of the course certificate to the HARM office to be added to the flight record folder.
- **5.2. Flight Operations Protective Clothing and Equipment.** ERCC UTC members will be properly equipped to perform duties in the flying environment to include issue of aircrewspecific personal protective clothing items. ERCC team members will have the same flight personal protective clothing, equipment, and IPE as the organic crews for the particular airframe or mission which ERCC UTC personnel are assigned/tasked. Each ERCC UTC member will be provided the required protective clothing and equipment for flight operations to perform patient transport missions according to threat, mission and environmental conditions. **(T-1).** It is the responsibility of the home station unit commander to ensure members assigned to the MTF and identified to fill ERCC position requirements are properly equipped for flight operations.
  - 5.2.1. A list of initial-issue minimum-required protective clothing/equipment items for ERCC flight operations is shown in Attachment 3. Commanders may approve these items for issue as organizational clothing and cite Attachment 3 in their required written

- justification for the expenditure (reference AFI 65-601V1, *Budget Guidance and Procedures*, paragraph 10.58). Charge the cost of the distinctive uniforms, functional clothing and authorized alterations to the unit of assignment's O&M-type funds. If the member is assigned to the MTF, Defense Health Program (DHP) O&M may be used for their purchase.
- 5.2.2. A list of minimum-required protective clothing/equipment items for ERCC flight operations in support of combat/hostile actions is shown in Attachment 4. Items required for deployment or contingency operations cannot be funded from MTF DHP O&M funds. Per AFI 65-601V1, Section 10C, paragraph 10.26, "Any expenses attributed to the contingency pre-deployment, employment, and redeployment of medical combat support personnel, equipment, and supplies requested by the combatant commander and approved by proper authority, as well as medical BW/CW items supporting deploying personnel, will be paid by Line (3400) funds. Bases should establish a line Project Funds Management Record (PFMR) and RC/CC for the MTF to use to record these expenses."
- 5.2.3. Individual Body Armor (IBA) vs. Aircrew Body Armor (ABA). During combat/hostile action support operations, ERCC teams must deploy with National Institute of Justice (NIJ) Level IV Ballistic Individual Body Armor. Aircrew Flight Equipment does not provide ABA to ERCC teams. Unlike the front-end and AE aircrew members, ERCC teams leave the aircraft and flight line area to retrieve patients, potentially directly exposing themselves to hostile elements, thus requiring a higher level of personal protection. If ballistic IBA is not provided by the supported CCDR prior to or upon entry into the theater, ERCC team must acquire IBA beforehand. IBA for contingency requirements is paid by Line (3400) funds (reference AFI 65-601v1). NIJ Level-IV ballistic IBA should not be confused with flak vest/fragmentation vest flak/fragmentation vests do not provide the required level of protection. Additional information on body armor requirements may be found in **Attachment 4**.
- **5.3.** Aeronautical Orders (AOs). As operational support fliers, members of ERCC UTCs must be on appropriate AOs when on-board rotary or fixed-wing aircraft for training or real-world missions. (T-2). AOs authorize personnel to perform flights on-board aircraft and allow the team members to be listed on the Flight Authorization and perform duties on-board the aircraft.
  - 5.3.1. In order to qualify for AOs to support patient transport missions, members must:
    - 5.3.1.1. Have completed the CCAT Initial Course; one-time attendance (copy of training certificate to be kept in member's flight record folder).
    - 5.3.1.2. Have a current OSF physical with DD Form 2992; annual requirement.
    - 5.3.1.3. Have a current AF Form 1274; after original training, flying personnel complete refresher training once every five years.
    - 5.3.1.4. Have completed, and maintain currency in, the CCAT Advanced Course; required every two years (copy of the current training certificate to be kept in member's flight record folder.
  - 5.3.2. AOs are requested in writing with a letter signed by the ERCC team's home-station unit commander (reference AFI 11-402). If member will perform OSF duties for multiple months, request the HARM office publish multiple AOs in advance sufficient to cover the duration of the deployment. Requests should be presented to the HARM office well in

advance of the date AOs are required in order to allow for proper processing. When requested in advance, the HARM office can ensure the AOs are prepared in time to accompany the member to the deployed location. It is the responsibility of the home-station to ensure ERCC teams deploy with AOs.

- 5.3.2.1. **NOTE**: Air Reserve Component (ARC) ERCC UTC members must be on mobilization orders, extended man-day (MPA) orders, or extended active duty in order to be on AOs in support of flying real-world patient transport missions. **(T-1).** ARC members participating in flying activities while in UTA status, Annual Tour, or any status/condition other than previously stated are not eligible for regular AOs, may not record flight time, or receive incentive pay.
- 5.3.3. Non-interference AOs for Training/Exercises. Active Component (AC) and ARC ERCC teams participating in training flights where they will set up and train on their medical equipment kits must be on non-interference AOs for the duration of the training activity in order to participate in the training flight(s) (reference AFI 11-401, Aviation Management). (T-2). This applies to training flight activities conducted during the CCAT Advanced Course, Joint Readiness Training Center (JRTC), Theater Aeromedical Evacuation System (TAES) exercises, local training flights, or similar training flight activities. Non-interference AOs will allow the ERCC teams to be listed on the Flight Authorization and permits them to set up their medical equipment and perform training during the flight. If an ERCC team member reports to a training flight activity without non-interference AOs, they will not be able to participate in the training activities during flight. ERCC teams may fly on familiarization flights without AOs if approved as per AFI 11-401, but are not listed on the Flight Authorization, nor may they set up equipment and conduct training during the flight. ERCC teams must meet and maintain the qualifications for OSF status in order to be on noninterference AOs - completed CCAT Initial Course, and have current DD Form 2992 and AF Form 702/1274 (completion/currency in the CCAT Advanced Course is not required for noninterference AOs). (T-1). When on non-interference AOs, members will not log time nor be eligible for HDIP; completion of AFTO 781 is not required.
  - 5.3.3.1. The process for requesting non-interference AOs mirrors the process for requesting regular AOs for normal ERCC missions; non-interference AOs are requested in writing with a letter signed by the ERCC team's home station unit commander. (**NOTE:** Check respective MAJCOM supplements for additional guidance on requesting non-interference AOs, as applicable.) The letter must clearly state the request is for non-interference AOs. The AOs should be requested to cover the duration of the course, exercise, or other particular training activity. When flying with non-interference AOs, OSF personnel do not log time and are not eligible for incentive pay.
    - 5.3.3.1.1. Air Reserve Component members may obtain non-interference AOs while in any military duty status in order to participate in training or exercise flights.
  - 5.3.3.2. AF Form 1887, Aeronautical Order (PA) Aviation Service. OSF AOs are only valid for a calendar month at time and expire the last day of each month, unless an earlier termination date is known. New AOs are published monthly for those members who need to be on AOs for extended periods. When ERCC members require AOs for periods greater than one month, the HARM office prepares the AOs on AF Form 1887 and gives

the deploying ERCC members sufficient AOs required for the duration of their deployment.

- 5.3.3.2.1. EXCEPTION: The CCAT-OSF Program is funded on a fiscal year basis. When a member's deployment stretches from one fiscal year into the next, the HARM office supplies AOs effective through the last day of the fiscal year. As the central manager for the CCAT-OSF Program, AMC/SGK requests program allocations each fiscal year through AMC/A3 NLT 15 June. AMC/A3 consolidates man-month requirements into two categories, officer and enlisted, and sends the request to AF/A3XM NLT 15 July. In turn, AMC/SGK provides new fiscal year program allocations to each HARM office supporting ERCC teams. Excess allocations from the prior fiscal year may not be carried into the following fiscal year; HARM offices will turn in excess/unused CCAT-OSF program allocations to AMC/SGK and that office will turn in the excess/unused allocations to AMC/A3 at the end of each fiscal year.
- 5.3.3.3. AFTO Form 781, ARMS Aircrew/Mission Flight Data Document. As OSF, ERCC members are authorized to log flight time on AFTO Form 781. AFTO Form 781 is the source document for recording and reporting operational flight information for each individual authorized to take part in a mission. This form is the primary record of both personnel and aerospace vehicle flying hours. It is also the official record to validate pay eligibility for qualified members required to fly.
  - 5.3.3.1. Logging Flight Time. In order to qualify for HDIP for any particular month, ERCC members log a minimum of four hours of "Primary" flight time within that month, or the appropriate fractional time required to qualify for partial HDIP if member is on orders for less than 30/31 days (DoD 7000.14R, Financial Management Regulations (FMRs), Volume 7A, Military Pay Policy and Procedures – Active Duty Only "Primary" time logged counts toward credit for HDIP; and Reserve Pay). ERCC teams only log "Primary" time when actually performing patient care duties on-board the aircraft. ERCC members may not "bank" flying time or carry time over from one month to another in order to meet the minimum required to qualify for HDIP. En-route missions to pick up patients requiring medical care will be logged as "Other" time when patients are not on board the aircraft (Ref: AFI 11-402). (For example: An ERCC team is tasked to fly to pick up a patient downrange. On the enroute mission to pick up the patient, the ERCC team logs "Other" time. Primary time will then be logged on the leg when the patient is on board the aircraft and the ERCC team provides medical assistance in-flight.) Complete AFTO Form 781 (reference AFI 11-401). Member(s) will list duties performed on the back of AFTO Form 781 in the remarks section. The completed AFTO Form 781 must be submitted to the supporting SARM member at the deployed location or to the ERCC team's home station HARM office in a timely manner, preferably at the end of each mission, but not later than the fifth day of the month following the month in which a mission was AFTO Form 781's not turned in on time, may result in a member not receiving flight time credit or HDIP for the month during which the corresponding mission was flown. Under no circumstances are AFTO Form 781's to be held until the end of an extended deployment before being turned in to the HARM office. On

- AE missions, ERCC teams may coordinate with the MCD to ensure proper documentation on the AFTO Form 781.
  - 5.3.3.3.1.1. Logging Flight Time on Non-AE Missions on Other Than USAF Aircraft. When transporting patients on non-AE missions on non-USAF aircraft, ERCC team members carry their own AFTO Form 781. After the mission, complete the AFTO Form 781 and turn it in to the supporting SARM at the deployed location or to the ERCC team member's home station HARM, whichever is appropriate. The Remarks section of the form should include a statement such as, "TCCET transported "#" patient(s) via US Army UH-60; I certify this is a true and verifiable statement." [Signed]; or similar wording as appropriate.
  - 5.3.3.3.1.2. Partial Team. On occasion, a patient may not require a full ERCC team complement, or there may be other operational constraints where less than a complete ERCC team complement may be tasked to transport a patient. It is not necessary for the whole team to be tasked for the mission to be considered an ERCC mission. Individuals flying without the full team complement fly with active aeronautical orders, log time and may qualify for HDIP.
- 5.3.3.3.2. Signature on AFTO Form 781. The aircraft commander, senior OSF member of the team, and MCD (when on AE missions) ensure OSF personnel fly only on missions that require performance of valid in-flight duties and confirm Primary flying time is logged only during portions of the mission when valid in-flight duties are performed. Aircraft commanders or senior OSF member ensure actual duties performed are documented in the remarks section of the AFTO Form 781, and certify by signing under the remark (reference AFI 11-402). ERCC members should include their home station HARM/SARM base, DSN phone number, and fax number, if known, in the remarks section on the back of the (original and extract) AFTO Form 781. **NOTE**: AOs alone do not authorize a member to fly and log time for entitlement to incentive pay. Time spent in observation, familiarization, or point-to-point travel (except for pre-positioning legs) is not logged on the AFTO Form 781.
- **5.4. Aviation Service Code (ASC)/Flying Activity Code (FAC).** The assigned ASC for ERCC members performing duties as operational support fliers is "ASC 9C." The flying activity code for ERCC teams on OSF is "FZ" per AFI 11-401, *Aviation Management*.
  - 5.4.1. Active Flight Surgeon on ERCC UTC (Ref: AFI 11-401). Active Flight Surgeons in an API 5 position may be employed as ERCC UTC members provided they also hold one of the qualifying AFSCs required for ERCC duty as outlined in the UTC MISCAP statement and Manpower Force (MANFOR) packaging document. Active flight surgeons log "FS" crew position and primary-time duty credit, record "ASC 8A", and may qualify for aviation career incentive pay (ACIP).
  - 5.4.2. Inactive Flight Surgeon on ERCC (Ref: AFI 11-401). Inactive flight surgeons those in an API 0 position may also be employed as ERCC UTC members provided they hold one of the qualifying AFSCs as outlined in the UTC MISCAP. Because they are rated officers, their ASC remains "8J" (based on no API 5/no ACIP authorized), their AOs reflect a "FAC 8" (rated officer performing non-crew duty), and they log flight authorization duty code "FZ" time on ERCC missions (reference AFI 11-401). Following this guidance,

inactive flight surgeons employed on ERCC UTCs are authorized HDIP, if otherwise qualified.

**5.5. Flight Authorization.** The unit providing the AE or ERC crew originating with a live mission or an ERCC training mission is responsible for adding the ERCC team members on the flight to the manifest of the aircrew flight authorization after validating members have current aeronautical orders. For an ERCC team joining the mission en route, the MCD or equivalent validates members have current aeronautical orders, ensures the members' names are handwritten onto the flight authorization and ensures flight time is logged (reference AFI 11-401).

### Chapter 6

#### **TRAINING**

- **6.1. Introduction.** Initial, advanced, and recurrent training are required in order to maintain the operational and clinical proficiency of ERCC UTC-assigned personnel. All ERCC UTCs share CCAT Initial and CCAT Advanced Courses as the foundation-level qualifying courses. ERCC UTC members will not be employed or deployed in an ERCC UTC capacity unless they meet all initial and recurrent training requirements.
- **6.2.** Unit ERCC Coordinator. An ERCC Team Coordinator should be established at each home-station medical unit with an ERCC UTC assigned. This person should be appointed in writing by the medical unit commander. Examples of the unit ERCC coordinator's responsibilities are as follows: (1) central point of contact within the unit for all matters pertaining to ERCC teams' interface with the unit, parent MAJCOM, Pilot Unit, MEFPAK and higher headquarters for ERCC issues; (2) establishing and maintaining training folders for each ERCC UTC member assigned and ensuring that all requirements are appropriately listed/tracked in the Medical Readiness Decision Support System (MRDSS); (3) ensuring all initial and sustainment training requirements are scheduled to be met/current; (4) initiating all required forms and documentation for all new ERCC UTC members; (5) ensuring ERCC teams are properly equipped for patient movement missions; (6) identifying and scheduling personnel to meet initial training and sustainment training requirements in coordination with the training office and the medical readiness office; (7) coordinating with the medical readiness office to ensure members are ready to deploy; (8) other responsibilities that may be assigned and necessary for unit-level ERCC administration. When an ERCC coordinator is appointed, notify AMC/SGK and AMC/SGX of the member's name and contact information to ensure appropriate distribution of information; e-mail: amc.sgk@us.af.mil . (Key information distributed by AMC/SGK and SGX offices should include owning MAJCOM SGX offices for situational awareness.) Note: This does not apply to ERC units when ERCC teams are temporarily assigned/attached. During deployments, when ERCC teams are assigned to an ERC element, a director is designated for local management of ERCC teams.
- **6.3. Entry into ERCC Training.** Personnel are selected at the unit level for nomination/appointment to an ERCC UTC. Validation of critical care skills for eligibility for assignment to an ERCC UTC will be performed by the Clinical Validation Committee administered by AFEMSI, under the authority/direction of AMC/SG (reference **Chapter 3**, this document).
- **6.4.** Training (see Attachment 5, Table A6.1).
  - 6.4.1. Training Pipeline. Training attendance priority should be given to those tasked in the AEF Tempo Band Construct to meet deployment requirements.
    - 6.4.1.1. CCAT Initial Course. All ERCC UTC personnel (Active Component, AFRC, and ANG) complete the CCAT Initial Course IAW AFI 41-106.
    - 6.4.1.2. CCAT Advanced Course. All ERCC UTC personnel (Active Component, AFRC, and ANG) complete the CCAT Advanced Course IAW AFI 41-106. (EXCEPTION: UTC FFTCT see paragraph 6.4.2 below)

- 6.4.1.2.1. ERCC UTC members who are identified for deployment during the year in which they complete the CCAT Initial Course also complete the CCAT Advanced Course prior to deployment.
- 6.4.1.2.2. Every effort should be made to schedule all ERCC personnel to attend this UTC training *in advance* of their potential AEF Block assignment to ensure they are successful in course completion. Do not wait to schedule this course. Attendees who do not successfully complete the CCAT Advanced Course require remediation and re-attendance at the CCAT Advanced Course prior to deployment as an ERCC member. The remediation training plan will be issued to the individual and his/her commander by the course director, through AFEMSI.
- 6.4.1.2.3. The course curriculum culminates in a field exercise involving static training and a flying training mission. ERCC members attending the CCAT Advanced Course must be current in OSF requirements and have non-interference aeronautical orders on-hand to participate in flying training activities during the course.
- 6.4.2. TCCET Course. All UTC FFTCT members will complete the TCCE Course. UTC FFTCT members complete CCAT Initial and CCAT Advanced Courses prior to attending the TCCET Course. In lieu of completing the CCAT Advanced Course for triennial revalidation of clinical skills, UTC FFTCT members complete the TCCET Course every 36 months.
  - 6.4.2.1. Rotary Wing Operations Orientation. All UTC FFTCT members complete a MRA-approved rotary wing operations orientation course as well as underwater egress training. These courses may be scheduled at any time during the training pipeline the CCAT Initial Course, the CCAT Advanced Course, or the TCCET Course are not prerequisites to completing this requirement.
- 6.4.3. ERCC Flight Training. The primary objective of ERCC flight training is to develop and maintain the skills necessary for the effective employment of ERCC teams within the flight environment during all manner of contingencies and missions. The secondary objective is to ensure the successful integration of ERCC teams into ERC operations, primarily working alongside AECMs/organic crewmembers to transport patients. Initial and subsequent flight training requirements for ERCC teams will normally be met through formal course attendance. All ERCC teams are encouraged to seek additional flight training opportunities through participation in activities such as exercises or local unit training.
  - 6.4.3.1. An AE crew must be on-board the aircraft during flight training activities involving UTC FFCCT teams (except on rotary wing aircraft). (T-1). ERCC teams must be on non-interference aeronautical orders to participate in any flight training activities. Reference Chapter 5, this publication, for non-interference aeronautical order requirements/guidance.
    - 6.4.3.1.1. ERCC Training Mission (ETM). ERCC flight training missions should be structured to achieve maximum training effectiveness. ETM sessions should include at least one enplaning or deplaning event with occupied or weighted litter(s); transport, loading, exercising of the complete assigned UTC equipment kit to include set-up of medical equipment and appropriate patient treatment/transport scenario(s).

- Sessions should also include one aircraft emergency scenario under the direction of the MCD/Medical Crew Coordinator (MCC) or organic crewmember equivalent.
- 6.4.4. Operational Support Flier Training. All ERCC UTC personnel must complete the requirements for OSF status (reference AFI 11-402). ERCC UTC personnel must maintain currency in OSF requirements as long as they are assigned to an ERCC UTC. Personnel may not be employed or deployed as ERCC members if they have not completed or are not current in OSF requirements. ERCC UTC members must be on OSF AOs in order to participate in flight activities on-board U.S. and coalition aircraft.
- 6.4.5. Operational Exercises. Some sustainment training and RSVs may be completed during operational exercises. To receive credit, exercises have a written training plan outlining day-to-day objectives for the ERCC teams. Training plan must follow ERCC UTC METL. ERCC teams participating in exercises/evaluations must participate with their associated equipment UTC. The ERCC teams perform relevant tasks associated with the ERCC UTC METL, e.g., mission planning, patient preparation, setting up and exercising their medical equipment, transport and treatment of simulated casualties or mannequins, etc. ERCC UTC members participating in exercises must be current in OSF requirements and have non-interference aeronautical orders on-hand to participate in training missions involving flying activities during the exercise.
  - 6.4.5.1. ERCC Team Observer Controller/Standards Evaluator. A qualified ERCC Observer Controller (OC)/Standards Evaluator (SE) should be present for exercises (qualified ERCC Team OC/SE is defined as any ERCC UTC member who has completed the CCAT Initial and Advanced Courses, and is current in all required training; JRTC/deployment/mission experience is preferred but not required). Standards and responsibilities of ERCC OC/SE are outlined in the ERCC Observer Controller/Standards Evaluator Pamphlet available from AMC/SGK. Requesting unit pays travel and expenses for individual(s) to participate in exercise as OC/SE. Availability of personnel to support OC/SE requests shall be at the discretion of the supporting unit. If OC/SE personnel are utilized, there should be at least one OC/SE per two ERCC teams, availability permitting. The exercise organizer(s) should develop a written training plan with relevant objectives for the ERCC team(s), following the ERCC UTC METLs. A reasonable effort should be made to secure qualified ERCC OC/SE personnel for the exercise(s).
- 6.4.6. Readiness Training. IAW AFI 41-106, all personnel are required to complete all readiness training.
- 6.4.7. High Risk of Isolation (HRI) Training. HRI training may be mandated for fliers involved in air operations over specific areas within or flying into a combatant command AOR during contingency operations. When so designated, the training requirement is identified by a combatant command in the AOR OPORD for the contingency. HRI training may be accomplished via briefer-led training or Secure Internet Protocol Router (SIPR) webbased training (WBT) when available. It is to be conducted by a certified Survival, Evasion, Resistance and Escape (SERE) specialist. Each ERCC UTC member tasked for deployment to a combat zone where a requirement for HRI is identified attends HRI training prior to deployment as per respective theater reporting instructions. HRI training is good for three years (consult applicable AFI for current training reset guidance). To schedule an HRI briefing, contact your local SERE specialist. If a local SERE specialist is not

assigned/available, schedule training as per CCMD reporting instruction or contact MAJCOM SERE Functional Manager (FM) for additional information/direction. After the training is complete, a copy of the training certificate, AF Form 1522, or other documentation record should be retained in the individual's ERCC training. Training is also recorded on the Isolated Personnel Report (ISOPREP), block 24. Prior to training, all personnel must have their security clearance (Secret) verified by their unit ERCC coordinator or readiness office.

6.4.7.1. DD Form 1833, *Isolated Personnel Report* (ISOPREP). ISOPREPs are prepared for all HRI personnel. The ISOPREP contains information designed to identify and authenticate an evader by a recovery force. An ISOPREP is prepared by home-station intelligence personnel for deploying members prior to departure to an AOR where ISOPREP and HRI training is required. It contains personal data known only to the isolated individual and is used by recovery forces to positively authenticate the survivor. An initial form is completed and then reviewed at least every 6 months. Once completed, the ISOPREP is classified Confidential and is maintained by the appropriate unit intelligence, SERE, or operations personnel.

6.4.8. N95 Mask Fit Testing/Training. ERCC personnel are potentially exposed to highly communicable diseases during patient care and transport. N95 respirators are Occupational Safety and Health Administration (OSHA) approved for PPE and provided in the allowance standard. Personnel should be medically cleared, fit-tested, and trained for wear of an N95 respirator prior to first use. Personnel receive subsequent fit-testing and training annually. Reference Air Force Occupational Safety and Health Standard (AFOSHSTD) 48-137, Respiratory Protection Program, for specific requirements and contact the supporting occupational health staff for support.

### Chapter 7

# **LOGISTICS & EQUIPMENT**

# 7.1. Aircraft Medical Equipment Operations.

- 7.1.1. Medical equipment and supplies are vital to the ERCC mission. There are many hazards associated with dynamic in-flight environmental conditions that are not encountered in fixed medical treatment facilities. Equipment used onboard aircraft must continue to operate properly under flight conditions. It is essential that ERCC members know the capability and performance limitations of equipment items in the ERCC equipment UTCs.
- 7.1.2. All medical equipment intended for use during aircraft operations is tested, deemed airworthy and approved prior to use in the aircraft environment. Every effort should be made to utilize the medical equipment provided in the allowance standard.
- 7.1.3. Some medical equipment is incompatible with the airborne environment. Medical equipment approved for use during aircraft operations is identified in AFI 10-2909, *Aeromedical Evacuation Equipment Standards*, and/or the AE Equipment Compendium. AMC ensures standardization for medical equipment used system-wide.
- 7.2. Medical Equipment Waiver Protocol. At times, patient medical requirements may necessitate the use of non-standard medical equipment that is not provided in the allowance standard and has not been approved for flight. AMC/A3VM is the waiver authority for non-certified/non-standard medical equipment required for patient moves. Waiver requests should be routed as follows: hospital/MTF notifies the appropriate PMRC; PMRC contacts appropriate C2 agency; C2 agency contacts 618 AOC AE Cell; AE Cell contacts AMC/A3VM. A3VM consults with the AE Equipment Lab during their hours of operation. Further consultation on aircraft impact of non-certified/non-standard equipment occurs with the Global Patient Movement Requirements Center (GPMRC) Validating Flight Surgeon on duty.
  - 7.2.1. Waiver will be obtained prior to use of non-certified/non-standard equipment onboard the aircraft and will apply only to that specific mission. **(T-1).** In order to prevent mission delays, verbal waivers may be obtained from AMC/A3VM (reference AFI 11-2AEV3).
- **7.3. Medical Equipment Malfunction/Failure.** During flight operations on AE missions, ERCC teams will notify the MCD immediately when medical equipment malfunctions or fails during operation on a mission. On return to home station or deployed location, the team will notify local or unit-supported medical maintenance organization of unusual or repeated equipment failure and safety incidents. **(T-1).** 
  - 7.3.1. If equipment malfunction/failure occurs during an AE mission, the ERCC Team Chief, in collaboration with the MCD, ensures the following documentation/actions are accomplished: 1) complete AF 4449, *En Route Care Equipment Malfunction Report Tag*; if unavailable, complete AFTO 350, *Repairable Item Processing Tag*; 2) complete DD Form 2852. For non-AE missions (no MCD/AECMs on board), the ERCC Team Chief ensures the documentation is accomplished.
    - 7.3.1.1. Completion of AF 4449 (If unavailable, complete AFTO 350.).

- 7.3.1.1.1. When medical equipment is found to be non-operational or operating outside of acceptable parameters, and troubleshooting attempts have failed to rectify the situation, disconnect the device and fill out AF 4449. Any ERCC team member or AECM may complete the form. Give a detailed description of the equipment problem and circumstances leading to the discovery of the problem. Include statement listing any attachment(s) to the device, and any effect on attachment(s) to the device. Attach the AF 4449 to the piece of equipment for turn-in. (Example description: "During pre-flight of 326M suction unit, tried to adjust suction to 100mmHg but only able to obtain 75mmHg w/knob turned to max; normal should be 0 to 550mmHg.") It is important that all settings, dials, etc. be left as they were during the incident. Do not turn the knobs or change settings, if possible.
- 7.3.1.1.2. Upon arrival to home station/deployed location, immediately sequester and send tagged equipment and all accessories (cords, supplies, etc.) attached to the equipment to home station/deployed location medical maintenance organization. Medical maintenance will impound the equipment and conduct an investigation of the malfunction.
- 7.3.1.2. Completion of DD Form 2852.
  - 7.3.1.2.1. If an equipment malfunction occurs, the ERCC Team Chief and the MCD collaborate to complete, or direct completion of, DD Form 2852 and document the issue immediately after the occurrence. (For non-AE missions no MCD/AECMs on board the ERCC Team Chief ensures the documentation is accomplished.) Upon return to home station or deployed location, the DD Form 2852 is turned in to the AE element Patient Safety Monitor who then enters the event into the AE Patient Safety Database tool. (NOTE: Anyone with knowledge of the incident may complete a DD Form 2852.)
  - 7.3.1.2.2. Provide as complete a description of the malfunction as possible and the operating conditions when the malfunction occurred; identify make, model, serial number, AF Form 4368, Scheduled Maintenance and Certification Label, or DD Form 2163, Medical Equipment Verification Certification, information, and what other equipment/power was involved. Provide circumstances leading to the event and include any pertinent information such as: O<sub>2</sub> source, patient activity, turbulence, cabin altitude, trouble-shooting attempted, etc., as may be applicable. Also, provide names of individuals involved and contact information.
  - 7.3.1.2.3. When equipment malfunction affects the aircraft, the MCD notifies the Pilot In Command and provides details of the incident to facilitate mishap reporting (to be forwarded to wing safety). On non-AE missions, the ERCC Team Chief will notify the PIC and provide details of the incident.
- **7.4. ERCC Allowance Standards (AS).** ERCC UTC equipment packages are to be used in conjunction with the standard AE or ERC in-flight kit to provide focused critical care capability.
  - 7.4.1. ERCC UTC Sets. When ERCC UTCs deploy into a theater of operations each personnel UTC is paired with an ERCC equipment kit to support patient transport missions. ERCC equipment UTCs are positioned at a location for each ERCC personnel UTC deployed there. Each team at a deployed location is assigned a kit, and it is be that team's primary

responsibility to inventory, maintain, and restock bag sets; and, ensure equipment is recharged between missions. Patient Movement Item (PMI) bar codes are attached to the ERCC equipment once in theater to facilitate tracking of those assets.

- 7.4.1.1. During continuous contingency support operations, ERCC teams may be deployed for limited time periods with subsequent, follow-on ERCC teams deployed in "rotations" in place of a previous team. In such cases, ERCC kits should be inventoried, re-stocked, and re-packaged as per the UTC pack-out guide, then handed over to the newly deployed ERCC team for use during their rotation period. Unless otherwise directed, ERCC kits should remain at the deployed location until the end of the operation.
- 7.4.2. Standard Operations. While performing patient care duties, ERCC teams should utilize equipment from their ERCC kits to the fullest extent. When an ERCC team has exhausted equipment items from their assigned ERCC kit, the team should utilize equipment to the extent possible from the PMI system, if a PMI pool of equipment has been tasked and deployed to support an ongoing and sustained contingency operation. **Note:** This is only applicable at present to the CENTCOM AOR and any future contingency operations that may be established and ongoing. There is no PMI pool of equipment established for "peacetime" operations. Sending MTFs identify patient movement equipment requirements in the PMR.
  - 7.4.2.1. When picking up multiple patients at a facility in a theater that is a PMI node, the sending facility will provide additional PMI equipment in cases where the ERCC UTC allowance standard is exhausted. The sending facility will also provide non-standard theater-specific PMI-traced items not on the ERCC UTC allowance standard as may be required for patient care (some examples include: negative pressure wound vacuum pumps, sequential compression devices, pain control pumps, etc.) with enough supplies to support the patient during flight.
  - 7.4.2.2. When transporting multiple patients from a facility that is not a theater PMI node and the ERCC team anticipates its allowance standard will be exhausted or that PMI equipment not on the ERCC UTC allowance standard will be required to perform a safe transport, the ERCC team must bring the additional PMI from their originating location (PMI node).
  - 7.4.2.3. For situations in which ground time is limited due to the tactical situation, the ERCC team may trade equipment items from its allowance standard for like PMI items from the sending facility. This practice will expedite patient assessment and packaging prior to transport, but it will not result in a net gain or loss of PMI for either the ERCC team or the sending facility. The return exchange of this equipment must be coordinated by the sending facility and the ERCC team as it is on different Defense Medical Logistic Support System (DMLSS) accountable records to ensure local equipment accountability and integrity is maintained.
- 7.4.3. ERCC UTC Allowance Standards have defined capability to support specific types and numbers of patients.
  - 7.4.3.1. FFCC4, Adult CCATT Kit. This UTC provides advanced specialty medical equipment to support personnel UTC FFCCT. Each UTC FFCC4 has the capability to support up to three high-acuity, ventilated patients or up to six lower-acuity, non-

- ventilated patients per intra- or inter-theater mission depending on patient acuity. A basic adult mission would require the adult kit with initial 72-hour capability. Each kit is only good for one mission support and will require replenishment at mission end.
- 7.4.3.2. FFCCB, CCATT Equipment Resupply. This UTC provides the re-supply package to support FFCC4; it provides 15 days support for up to three basic FFCC4 packages.
- 7.4.3.3. FFCC2, ERCC Pediatric Equipment Augmentation. This UTC provides advanced specialty medical equipment/supply augmentation support to the FFCC4 equipment UTC specifically for transport of pediatric patients, except for a transport incubator. This kit provides single mission support for a maximum of 2 pediatric patients weighing < 15 kg, and, a maximum of 2 pediatric patients weighing between 15 40 kg. Re-supply is provided within the AE system at staging locations or supported element.
  - 7.4.3.3.1. Pediatric Support Operations. During operations where ERCC teams are deployed in support of critical care patient movements, there may be occasions when it is necessary to transport pediatric patients. UTC FFCC4 does not provide equipment to support pediatric patients. UTC FFCC2 was developed to provide additional equipment/supplies to UTC FFCC4 to support FFCCT when a team is required to transport pediatric patients. Close coordination between the PMRC, the tasking authority, and the ERCC team considering such factors as patient acuity, transport care requirements, age, weight, and size of child is necessary in determining which team may be most appropriate for a pediatric transport mission.
- 7.4.3.4. FFEC1, Expeditionary Support Package. This UTC provides basic shelter to ERCC teams and AE crewmembers positioned at far-forward, secured airfields. Package is deployed with FFCCT and/or AE crewmembers (UTC FFQDE) when required to support a maximum of 30 personnel for 96 hours. Base operating support (BOS) is required for food service, bio-environmental engineering, security, logistics, fuel, and civil engineering.
- 7.4.3.5. FFTC1, Medical Tactical Critical Care Augmentation (equipment only). UTC FFTC1 provides advanced specialty medical equipment to UTC FFTCT (TCCET) to transport critical, post-surgical, polytrauma casualties on tactical intra-theater airlift. Each equipment kit provides single mission support for up to three patients. Resupply is provided by staging base/MTF.
- 7.4.4. Allowance standards, including packing lists and pharmaceutical lists for kits, can be found on the Air Force Medical Logistics website. The allowance standard designation for the various equipment UTCs are as follows:
  - 7.4.4.1. FFCC4 Adult Basic Kit: 887N
  - 7.4.4.2. FFCCB Adult Basic Kit Re-supply: 887H
  - 7.4.4.3. FFCC2 Pediatric Augmentation to Adult Basic Kit: 8870
  - 7.4.4.4. FFEC1 Expeditionary Support Package: 903N
  - 7.4.4.5. FFTC1 Medical Tactical Critical Care Augmentation: 887C

- **7.5. Pre-flight of Equipment.** Pre-flight medical equipment prior to each mission as per process defined in AFI 10-2909, *Aeromedical Evacuation Equipment Standards*). **Note**: ERCC equipment with non-current calibration and servicing dates will not be used. Equipment assets found to be out of service date will be immediately turned over to the host biomedical maintenance activity for service. When deployed, teams are responsible to frequently assess assigned equipment operational capability and ensure adequate battery life. ERCC teams shall ensure appropriate charging capabilities are available for equipment prior to declaring full operational capability. **(T-1).** Any item not listed in AFI 10-2909 or listed in the *Aeromedical Evacuation Non-PMI (Non-Standard) Medical Equipment Compendium* will require a waiver prior to flight.
- **7.6.** Narcotics Accountability. ERCC personnel will ensure accountability of narcotics (reference AFI 48-307, Volume 1, and local guidance/policy). (T-1).
- **7.7. Base Operating Support.** Integration of deployed ERCC teams is critical to successful ERC operations. ERCC teams are not stand-alone units. The gaining AE or ERC unit shall be responsible for providing all required support to the ERCC teams, including billeting, food, water, shelter, power, transportation, medical oxygen support, computer support, and communications. During missions away from home base, ERCC teams shall receive base ops support from the appropriate en-route element. **(T-1).** UTC FFEC1 should be deployed when ERCC teams are engaged in a bare-base deployment with early-entry ERC forces without full logistical support from the gaining base.
- **7.8.** Resupply and Patient Movement Items (PMI). Teams coordinate with MTF/ERC medical logistics personnel for repair/maintenance/replacement of PMI. PMI maintenance issues should be coordinated with the Medical Equipment Repair element associated with the closest MTF. (T-1). PMI is tracked by utilizing the PMI Tracking System (PMITS) when and where available. Accountability is maintained on a Custodian Receipt Locator List (CRLL) at the host MTF DMLSS under RCCC XX5881. All members are required to scan PMI assets each time a piece of PMI changes status (i.e. PMITS codes: QA for maintenance, OUT, and RDY, etc.). ERCC team members are responsible for scanning all PMI in their allowance standard prior to and after each mission. (T-2). Sending MTFs identify patient movement equipment requirements in the PMR and are responsible for providing these items and a one-day minimum of medical supplies.
  - 7.8.1. Patient Movement Item In-transit Visibility Tracking. Supported units actively scan equipment assets using PMITS. These assets should be clearly labeled with PMI bar codes and scanned no less than monthly for in-garrison activities and at least every two to three days in a deployed area. All assets should be scanned each time they move in or out of the unit and/or change from RDY to QA status to provide in-transit visibility. Assets without labels (not bar coded) or needing additional labels must be identified/reported to: <a href="https://dx.needing.org/needing-needin
- **7.9. Operational CCATT Kit Program.** AMC/SG MEFPAK Branch (AMC/SGXM) Support and Sustainment Guidelines for Regular Air Force & ARC Operational CCATT Kits:
  - 7.9.1. General. AMC/SG provides initial outfitting of approved/validated operational UTC FFCC4 kit to support local, home-station CCATT training. These operational kits may be tasked to support live, real-world mission requirements. AMC/SG may also provide initial

outfitting of a limited number of operational kits for other ERCC capabilities, such as formal training organizations. AMC/SG also provides supply replenishment and sustainment of those kits at no expense to the supported unit, with the following exceptions: narcotics and refrigerated items. Equipment maintenance support and repair or replacement of kit items is a local unit funded responsibility. This operational kit support program may be continued by AMC/SG as long as funding is available. **NOTE**: ARC units requesting assignment of a CCATT Operational Kit should have a minimum of two UTC FFCCT members assigned. Assigned members will have completed, at a minimum, the CCAT Initial Course to be eligible for assignment of a CCATT Operational Kit to their unit.

- 7.9.1.1. Operational kits shall be maintained by the units to which they are assigned in a "Mission Ready" state. Units will report the readiness status of these assets quarterly to AMC/SGXM. Contact AMC/SGXM for guidance and report format. The daily maintenance, repair, and asset accountability is the responsibility of the assigned organization. Tracking and use of these additional operational kits will follow the same guidance as provided for FFCC4 WRM kits. Each supported organization must provide adequate storage, oversight, protection, management attention, and periodic inventory support to ensure proper maintenance of the kit. (T-2). The operational kits are not WRM assets. It is understood, after periodic training activities, items in the kits may be expended or damaged during training, rendering the kit "Not Mission Ready" for a brief period. In such cases, expended or damaged items should be ordered, repaired and/or replaced, as per the guidance herein, as soon as possible after the training event. This is to ensure operational kits are returned to "Mission Ready" status expeditiously.
- 7.9.1.2. Operational kits are intended for frequent, active use to support local team training and exercise support, as well as operational mission use. On occasion, CCATTs may be tasked to deploy with an Operational CCATT Kit that is assigned to their homestation unit. Most likely, such occurrences would be in support of DSCA, disaster relief, or humanitarian operations. When deploying with an Operational CCATT Kit, CCATTs are responsible for inventory, maintenance, re-stocking and utilization of Operational Kits, just the same as during combat operations. However, Operational CCATT Kits do not remain during an event for use by any subsequent, deployed CCATT. When a CCATT is tasked to deploy with an Operational CCATT Kit from its home-station unit, the team should ensure the Operational CCATT Kit returns with the team upon redeployment back to home-station.
- 7.9.2. Operational Kit Re-Supply/Sustainment. UTC FFCC4 consists of a series of bag/containers packed-out in accordance with Allowance Standard 887N. Allowance standards can be found on the Air Force Medical Operations Agency (AFMOA) SGALX Readiness UTC website. Contact AMC/SGXM for supply replenishment for operational kits. Supply replenishment for CCATT Operational Kits will be furnished in the lowest unit-of-measure quantities. (Exception: AMC/SGXM does not furnish narcotics or refrigerated items in the operational kit. It is the unit's responsibility to establish appropriate supply support from their host unit for these items.) A request for supplies that are not on the FFCC4 AS is the responsibility of the local organization and will not be accepted or supported by AMC/SGXM. Supply replenishment orders should be placed as needed/supplies are consumed, but not more frequently than once every week. Orders may be submitted via furnished shopping guide electronically via e-mail to the AMC/SGXM

Operational Kit Support Program organizational account: SG/SGXM.Opkits@us.af.mil. Telephone orders may be submitted (commercial 618-229-6952 or DSN 312-779-6952), but will be limited to 10 items or less due to the total number of items in the kit. Shipments to the requesting units will be within 10 duty days after receipt of order and will usually be via the most economical method. Premium transportation (such as Federal Express overnight) will require a commercial carrier account number, i.e. FEDEX or USPS, from the requesting activity. During contingencies, resupply will be through the designated Theater Lead Agent for Medical Materiel. Contact AMC/SGXM for additional information on unit procedures and responsibilities.

- 7.9.3. Medical Equipment/PMI. Medical equipment furnished for this program belongs to the AF PMI Program and will be maintained on host medical treatment facility Medical Equipment Management Office (MEMO) accountable records on account XX5881 for global visibility. Biomedical equipment maintenance services support will continue to be from the supporting activity and/or regional Medical Equipment Repair Center (MERC). ARC units with an operational kit assigned must establish an appropriate Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA) with their host medical treatment facility for maintenance of the PMI within the kit. (T-2). Expenses for normal repair and/or replacement due to loss/damage are the responsibility of the local unit. Equipment accessories not maintained on the AS, or above the AS authorized quantity, will be the unit's responsibility to replace. AMC/SG will provide the initial outfitting quantities of the equipment, program for replacements when a change in make/model is designated, and manage system-wide modifications to equipment based on the AS.
- 7.9.4. Quality Assurance (QA) Program. Scott PMI Center will help ensure all supporting units receive quality assurance action messages. This includes recall notices and quality assurance messages from AFMOA. This does not relieve the unit from responsibility of managing their own quality assurance program.
- 7.9.5. Return Goods Program. ARC units with operational kits assigned will process outdated/recalled drugs through their host medical treatment facility as per procedures defined in AFI 41-209, *Medical Logistics Support*) and local policies/regulations. (T-2).
- 7.9.6. Annual Inventory and Test. Inventory and test assigned Operational CCATT Kit equipment annually. (T-2). Operational testing will involve team members and is defined as full set-up, turning equipment on, performing function checks, validated all necessary pieces and accessories are available and in fully operational condition, and re-packing the assemblage for future training or potential operational use.

MARK A. EDIGER Lieutenant General, USAF, MC, CFS Surgeon General

#### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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AFDD 4-02, Health Services, 21 June 2012

AFPD 10-29, Worldwide Aeromedical Evacuation Operations, 6 November 2012

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AFPD 48-1, Aerospace Medicine Enterprise, 23 August 2011

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AFI 11-202V3, General Flight Rules, 22 October 2010

AFI 11-301V1, Aircrew Flight Equipment (AFE) Program, 25 Feb 2009

AFI 11-401, Aviation Management, 10 December 2010

AFI 11-402, Aviation and Parachutist Service, Aeronautical Ratings and Aviation Badges, 13 December 2010

AFI 11-403, Aerospace Physiological Training Program, 30 November 2012

AFI 36-2903, Dress and Personal Appearance of Air Force Personnel, 18 July 2011

AFI 41-106, Medical Readiness Program Management, 22 April 2014

AFI 41-209, Medical Logistics Support, 6 October 2014

AFI 41-307, Aeromedical Evacuation Patient Considerations and Standards of Care, 20 August 2003

AFI 44-102, Medical Care Management, 17 March 2015

AFI 44-119, Medical Quality Operations, 16 Aug 2011

AFI 46-101, Nursing Services and Operations, 30 January 2015

AFI 48-123, Medical Examinations and Standards, 5 November 2013

AFI 65-601V1, Budget Guidance and Procedures, 16 August 2012

AFMAN 33-363, Management of Records, 1 March 2008

AFOSHSTD 48-137, Respiratory Protection Program, 16 April 2010

# Adopted Forms

AF Form 847, Recommendation for Change of Publication

AF Form 1274, Physiological Training

AF Form 1522, ARMS Additional Training Accomplishment Report

AF Form 1887, Aeronautical Order (PA) Aviation Service

AF Form 3899A, Patient Movement Record Progress Note

AF Form 3899B, Patient Movement Physician Orders

AF Form 3899C, Patient Movement Physical Assessment

AF Form 3899D, Patient Movement Hemodynamic/Respiratory Flowsheet

AF Form 3899E, Patient Movement Intake/Output

**AF Form 3899F,** Patient Movement Physician Orders for Behavior Management and Restraints

AF Form 3899G, Patient Movement Restraint Observation Flowsheet

AF Form 3899H, Patient Movement Neurological Assessment

AF Form 3899I, Patient Movement Medication Record

AF Form 3899J, Patient Movement Rhythm/Hemodynamic Strip

AF Form 3899K, Patient Movement/In-Flight Resuscitation Flowsheet

AF Form 3899L, Patient Movement Record En Route Critical Care

**AF Form, 4368,** Scheduled Maintenance and Certification Label

AFTO 350, Repairable Item Processing Tag

AFTO 781, ARMS Aircrew/Mission Flight Data Document

**DD Form 1833,** Isolated Personnel Report

**DD Form 2163,** Medical Equipment Verification Certification

**DD Form 2852,** Patient Movement Event/Near Miss Report

DD Form 2992, Medical Recommendation for Flying or Special Operational Duty

### Abbreviations and Acronyms

A2/AD—Anti-Access/Area Denial

**ABA**—Aircrew Body Armor

**AC**—Active Component

ACIP—Aviation Career Incentive Pay

**ACLS**—Advanced Cardiac Life Support

**AD**—Active Duty

**ADCON**—Administrative Control

**AE**—Aeromedical Evacuation

**AECM**—Aeromedical Evacuation Crew Member

**AECT**—Aeromedical Evacuation Control Team

**AEF**—Aerospace Expeditionary Force

**AEOT**—Aeromedical Evacuation Operations Team

AES—Aeromedical Evacuation System/Squadron

**AETF**—Air and Space Expeditionary Task Force

**AFDD**—Air Force Doctrine Document

AFEMSI—Air Force Expeditionary Medical Skills Institute

**AFFOR**—Air Force Forces

**AFMAN**—Air Force Manual

**AFMOA**—Air Force Medical Operations Agency

**AFMS**—Air Force Medical Service

AFOSH—Air Force Occupational Safety and Health

**AFPD**—Air Force Policy Directive

**AFRC**—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

**AFSC**—Air Force Specialty Code

**AFTTP**—Air Force Tactics, Techniques, and Procedures

**AMC**—Air Mobility Command

AMD—Air Mobility Division

ANG—Air National Guard

**API**—Aircrew Position Indicator

APOD—Aerial Port of Debarkation

**APOE**—Aerial Port of Embarkation

**AO**—Aeronautical Order

**AOC**—Air Operations Center

**AOR**—Area of Responsibility

**ARC**—Air Reserve Component

**ARMS**—Aviation Resource Management System

**AS**—Allowance Standard

**ASC**—Aviation Service Code

ASOC—Air and Space Operations Center

ATCN—Advanced Trauma Care for Nurses

ATLS—Advanced Trauma Life Support

**BLS**—Basic Life Support

**BOS**—Base Operating Support

C2—Command and Control

CASEVAC—Casualty Evacuation

**CC**—Commander

**CCAT**—Critical Care Air Transport

**CCATT**—Critical Care Air Transport Team

**CCDR**—Combatant Commander

**CCMD**—Combatant Command

**CCRN**—Critical Care Registered Nurse

**CFETP**—Career Field Education and Training Plan

**CFS**—Clearing Flight Surgeon

**COMAFFOR**—Commander Air Force Forces

**CONUS**—Continental/Contiguous United States

**CRT**—Certified Respiratory Therapist

CSAR—Combat Search and Rescue

**CSTARS**—Center for Sustainment of Trauma and Readiness Skills

**CVC**—Clinical Validation Committee

**DCR**—Damage Control Resuscitation

**DIRMOBFOR-AIR**—Director of Mobility Forces-Air Forces

**DMLSS**—Defense Medical Logistic Support System

**DO**—Director of Operations

**DSCA**—Defense Support of Civil Authorities

**DSN**—Defense Switched Network

**ECMO**—Extracorporeal Membrane Oxygenation

**ED**—Emergency Department

**EMT-P**—Emergency Medical Technician-Paramedic

**ERC**—En Route Care

**ERCC**—En Route Critical Care

**ERPSS**—En Route Patient Staging System

**ETM**—ERCC Training Mission

**EUCOM**—European Command

**FAC**—Flight Authorization Code

**FAM**—Familiarization

FM—Functional Manager

GCC—Geographic Combatant Commander

**GPMRC**—Global Patient Movement Requirements Center

HARM—Host Aviation Resource Management

**HDIP**—Hazardous Duty Incentive Pay

HIPAA—Health Information Portability and Accountability Act of 1996

HRI—High Risk of Isolation

**HSS**—Health Service Support

IAW—In Accordance With

**IBA**—Individual Body Armor

**ICU**—Intensive Care Unit

**ID**—Identification

**IPE**—Individual Protective Equipment

**ISOPREP**—Isolated Personnel Report

JFACC—Joint Forces Air Component Commander

JFC—Joint Force Commander

JMAT—Joint Medical Attendant Team

JMATT—Joint Medical Attendant Team

JRTC—Joint Readiness Training Center

JTTR—Joint Theater Trauma Registry

**MA**—Medical Attendant(s)

**MAF**—Mobility Air Forces

**MAJCOM**—Major Command

**MANFOR**—Manpower Force Packaging System

**MASCAL**—Mass Casualty

**MCC**—Medical Crew Coordinator

MCD—Medical Crew Director

**MD**—Medical Doctor/Physician

**MDG**—Medical Group

**MDS**—Medical Squadron

MDW—Medical Wing

**MEDEVAC**—Medical Evacuation

**MEFPAK**—Manpower and Equipment Force Packaging

MEMO—Medical Equipment Management Office

**MERC**—Medical Equipment Repair Center

METL—Mission Essential Task List

MISCAP—Mission Capability

MOA/MOU—Memorandum of Agreement/Understanding

**MPA**—Military Personnel Appropriation ("Man-Day")

**MRA**—MEFPAK Responsible Agent

MRDSS—Medical Readiness Decision Support System

MTF—Medical Treatment Facility

MTW—Major Theater War

**NAF**—Numbered Air Force

**NATO**—North Atlantic Treaty Organization

NGB—National Guard Bureau

**NICU**—Neonatal Intensive Care Unit

**NIJ**—National Institute of Justice

**OCONUS**—Outside the Continental/Contiguous United States

**OC/SE**—Observer Controller/Standards Evaluator

**O&M**—Operations and Maintenance

**OPCON**—Operational Control

**OPORD**—Operations Order

**OPR**—Office of Primary Responsibility

**OSF**—Operational Support Flier

**OSHA**—Occupational Safety and Health Administration

OT&E—Organize, Train, and Equip

PACOM—Pacific Command

**PALS**—Pediatric Advanced Life Support

**PECC**—Patient Evacuation Coordination Center

PI—Process Improvement

PJ—Pararescue Jumper

PM—Patient Movement

**PMI**—Patient Movement Item(s)

**POI**—Point of Injury

**PPE**—Personal Protective Equipment

**PMR**—Patient Movement Request

PMRC—Patient Movement Requirements Center

**POTUS**—President of the United States

**QA**—Quality Assurance

**QI**—Quality Improvement

**RDS**—Records Disposition Schedule

**RN**—Registered Nurse

**RON**—Remain Overnight

**RSV**—Readiness Skills Verification

**RT**—Respiratory Therapist

**SAMMC**—San Antonio Military Medical Center

**SARM**—Squadron Aviation Resource Management

**SERE**—Survival, Evasion, Resistance, Escape

SG—Command Surgeon/Surgeon General

**SIPR**—Secure Internet Protocol Router

SSC—Small Scale Contingency

TACON—Tactical Control

**TAES**—Theater Aeromedical Evacuation System

TCCET—Tactical Critical Care Evacuation Team

TCCET-E—Tactical Critical Care Evacuation Team - Enhanced

**TDY**—Temporary Duty

TNCC—Trauma Nursing Core Course

**TOC**—Tactical Operations Center

TTP—Tactics, Techniques, and Procedures

TVFS—Theater Validating Flight Surgeon

URL—Universal Resource Locator

USAFSAM—US Air Force School of Aerospace Medicine

USAISR—US Army Institute of Surgical Research

**UTA**—Unit Training Assembly

**UTC**—Unit Type Code

VFS—Validating Flight Surgeon

**WBT**—Web-based Training

**WRM**—War Reserve Materiel

# ERCC UTC CANDIDATE APPLICATION PACKAGE – CLINICAL VALIDATION COMMITTEE CHECKLIST COVERSHEET

# Table A2.1. ERCC UTC CANDIDATE APPLICATION PACKAGE – CLINICAL VALIDATION COMMITTEE CHECKLIST COVERSHEET

	DIVICIONAL CANDIDATE BACKACE			
Thirty C. 1.1	PHYSICIAN CANDIDATE PACKAGE  Member Rank/Name:			
Initial Items Completed				
	Coversheet			
	Current Curriculum Vitae/Resume			
	Self-Assessment			
	Hospital Privilege List (AF Form 1562 or equivalent)			
	Medical License(s)			
	BLS (current through 6 months from application)			
	ACLS (current through 6 months from application)			
	ATLS (one-time)			
	Additional Certification Recommendations (if completed/as applicable)			
	Completed RSV Checklist for Primary UTC AFSC per MISCAP + RSV			
	checklist for AFSC currently held			
	NURSE CANDIDATE PACKAGE			
Initial Items Completed	Member Rank/Name:			
	Coversheet			
	Current Curriculum Vitae/Resume			
	Self-Assessment			
	Current Nursing Job Description			
	BLS (current through 6 months from application)			
	ACLS (current through 6 months from application)			
	ATCN (or TNCC)			
	Additional Certification Recommendations (if completed/as applicable)			
	Completed RSV Checklist for Primary UTC AFSC per MISCAP + RSV			
	checklist for AFSC currently held			
	•			
C	ARDIOPULMONARY TECHNICIAN CANDIDATE PACKAGE			
Initial Items Completed	Member Rank/Name:			
	Coversheet			
	Documentation of 5-Skill Level or Higher			
	Current Curriculum Vitae/Resume			
	Self-Assessment			
	CRT/RRT Certification/Registry/License; or, Phase II Certificate; or, AF			
	Training Record AF Form 623 Part II Formal Training; or, SURF indicating			
	proof of training			

	BLS (current through 6 months from application) ACLS (current through 6 months from application)					
	Trees (content anough o monais from approaction)					
Date AFEMSI received complete application:						

# INITIAL ISSUE -- ERCC MINIMUM INDIVIDUAL PROTECTIVE CLOTHING & EQUIPMENT FOR FLIGHT OPERATIONS

Table A3.1.  $^1$ INITIAL ISSUE -- ERCC MINIMUM INDIVIDUAL PROTECTIVE CLOTHING & EQUIPMENT FOR FLIGHT OPERATIONS

ITEM DESCRIPTION	U/I	QTY
Coveralls, Flying, Nomex (flight suit)	EA	2
Boots, Flying	PR	1
Gloves, Flight, Nomex	PR	1
Gloves, insert, 8415-00-269	PR	1
Gloves, shell, 8415-00-261	PR	1
Jacket, Flight, CWU-36/P Summer	EA	1
Jacket, Flight, CWU-45/P Winter	EA	1
Drawers, Flyer's, heat resistant	PR	2
Undershirt, Flyer's, heat resistant	EA	2
Watch Cap, black/dark blue/sage green	EA	1
Reflective Belt, Safety	EA	1
Bag, Flyer's (helmet)	EA	1
Kit Bag, Flyer's (aka: "A/B/C" bag)	EA	1
Pants, Gortex	PR	1
Jacket, Gortex	EA	1

<sup>&</sup>lt;sup>1</sup>Not intended to be an all-inclusive list of required clothing/equipment. This list addresses minimum required items for flight training and flight operations. Verify respective UTC MISCAP, TTP, or other applicable guidance for additional required items.

# CONTINGENCY SUPPORT ERCC MINIMUM INDIVIDUAL PROTECTIVE CLOTHING & EQUIPMENT FOR FLIGHT OPERATIONS

# Table A4.1. <sup>1</sup>CONTINGENCY SUPPORT ERCC MINIMUM INDIVIDUAL PROTECTIVE CLOTHING & EQUIPMENT FOR FLIGHT OPERATIONS

ITEM DESCRIPTION	U/I	QTY		
<sup>2,3</sup> Coveralls, Flying, Nomex, "flight suit" (see notes)	EA	3		
<sup>2,3</sup> Boots, Flying, Desert (see notes)	PR	1		
<sup>2,3</sup> Gloves, Flight, Nomex (see notes)	PR	1		
<sup>3</sup> Gloves, insert, 8415-00-269	PR	1		
<sup>3</sup> Gloves, shell, 8415-00-261	PR	1		
<sup>2,3</sup> Jacket, Flight, CWU-36/P Summer or CWU-45/P Winter (see notes)	EA	1		
<sup>3</sup> Drawers, Flyer's, heat resistant	PR	3		
<sup>3</sup> Undershirt, Flyer's, heat resistant	EA	3		
<sup>3</sup> Watch Cap, knit, black/dark blue/sage green	EA	1		
Neckerchief, cotton, brown/tan/sage green	EA	1		
<sup>3</sup> Reflective Belt, Safety	EA	1		
<sup>3</sup> Bag, Flyer's (helmet)	EA	1		
<sup>3</sup> Kit Bag, Flyer's (aka: "A/B/C" bag)	EA	1		
<sup>2, 3</sup> Pants, Gortex, (see note)	PR	1		
<sup>2, 3</sup> Jacket, Gortex (see note)	EA	1		
Flashlight, blk finish, (e.g., Inova <sup>TM</sup> X5MT LED or equivalent)	EA	1		
Multi-tool (e.g., Leatherman, Gerber, SOG, Schrade, or equivalent)	EA	1		
Goggles, sun/sand/dust (e.g., Wiley X <sup>TM</sup> SG-1 or equivalent)	EA	2		
Holster, for M-9 handgun (shoulder or hip)	EA	1		
Backpack (e.g., "bug-out bag," rucksack-type, or equivalent)	EA	1		
<sup>4</sup> Ballistic Individual Body Armor (IBA), Type-IV, IAW NIJ Standard				
0101.06	EA	1		
Vest: minimum type III-A protection; Type III-A full side ballistic protection; front & back 10" X 12" plates, type IV protection; w/appropriate outer shell; groin protector preferred option				
ADDITIONAL REQUIRED ITEMS				
Official Government Passport (no-fee)				
NATO orders				
OSF Aeronautical Orders, DD 2992, AF 1274				
Physician Only: Transfer Brief				
All other UTC-specific deployment/mobility and theater-required clothing and				
equipment				
of intended to be an all inclusive list of required deployment/mobility clothing/equipment. This list of	ddraggag m	inimum		

<sup>&</sup>lt;sup>1</sup>Not intended to be an all-inclusive list of required deployment/mobility clothing/equipment. This list addresses minimum required items for deployed flight operations. Verify theater reporting instructions, line remarks, respective UTC MISCAP, TTP, or other applicable guidance for additional required items.

<sup>&</sup>lt;sup>2</sup>Desert tan flight clothing is strongly preferred for deployed team members conducting missions within/into the Middle-East and/or Central Asia AORs. However, if desert tan flight suits are not available, green flight suits "may" be substituted, or current theater-specific color/pattern. Verify theater reporting instructions for color/pattern requirements. Flight suits and jackets should be of the same color. One additional flight suit to the initial issue is required for deployed operations.

<sup>&</sup>lt;sup>3</sup>Do not issue if item was included in member's/team's initial clothing/equipment issue (Attachment 3). (**Note:** One additional flight suit to the initial issue is required for deployed operations.) Consider color requirements. No nylon undergarments.

<sup>4</sup>Type IV ballistic individual body armor (IBA) is required for ERCC operations. Aircrew Flight Equipment does not issue aircrew body armor (ABA) to ERCC, as for front-end and back-end aircrew members. Do not substitute ABA/flak vest/fragmentation vest as the protection level is not sufficient for ERCC operations. Units must supply ERCC personnel their own IBA for deployed operations, if not supplied in-theater.

# ERCC UTC CORE REQUIREMENTS MATRIX

# Table A5.1. ERCC UTC CORE REQUIREMENTS MATRIX.

CORE REQUIREMENTS (Additional UTC-specific requirements may be identified in other guidance, i.e. AFI, AFTTP, etc.)

Requirement	Frequency	Duration (may vary)	Definition	Remarks
Candidate Clinical Skill Validation/Application	One-time	N/A	Candidates for ERCC UTC assignment must possess the requisite skills and experience in critical care patient management in order to fill a position on an ERCC UTC. The validation process assists MTF commanders in finding and assigning only those individuals with the appropriate clinical expertise for ERCC duty.	All members selected for ERCC duty will undergo a position-specific skill validation process administered by AFEMSI (Ref AFI 41-106)
CCAT Initial Course	One-time	12 days	The CCAT Initial Course is designed to orient Total Force personnel assigned to ERCC UTCs to the unique capabilities of the ERCC mission.	All ERCC UTC personnel attend the initial course.
CCAT Advanced Course	UTC FFCCT: Every 36 months; UTC FFTCT: one- time	14 days	The CCAT Advanced Course is designed specifically for personnel assigned to ERCC UTCs. This UTC training focuses on management and transport of critically injured or ill patients; there will also be didactics on the aeromedical evacuation system culminating in a flight training exercise.	All ERCC UTC members complete the CCAT Advanced Course.
TCCET Course	UTC FFTCT: Every 36	7 days	The TCCET course is designed specifically for personnel assigned to UTC FFTCT.	All UTC FFTCT members complete the TCCET course.

Basic Life Support (BLS)  Advanced Cardiac Life	months  As applicable  As applicable	As applicable	Training focuses on management and transport of critically injured or ill patients in the rotary wing tactical environment.  Mandatory for all personnel assigned to ERCC UTC.  Mandatory for all personnel assigned to	All personnel assigned to an ERCC UTC will maintain current BLS. All personnel assigned to an
Support (ACLS)	11	applicable	ERCC UTC.	ERCC UTC will maintain current ACLS.
Flight Training	See Remarks	Variable	The objective of flight training is to develop and maintain skills necessary for the effective employment of ERCC teams within the operational flight environment.	Completion of CCAT Initial Course and currency in OSF requirements is required prior to participating in flight training (outside of the CCAT Advanced Course). Must be on non-interference AOs to participate in flight training. Initial and subsequent flight training requirements for AD and ARC ERCC teams will normally be met through attendance at the CCAT Advanced Course. All ERCC teams are encouraged to seek additional flight training opportunities through participation in activities such as exercises or local unit training.

**Operational Support Flier Requirements** 

Requirement	Frequency	Duration (may vary)	Definition	Remarks
OSF Physical – DD Form 2992, Medical Recommendation for Flying or Special Operational Duty Log	Annual	As applicable	Conveys medical qualification for flying or special operational duty.	Physiologic training standards (AFI 48-123), qualifies individuals for non-rated duties in ASC 9C (operational support flier).
Current AF Form 1274, Physiological Training	IAW AFI 11- 403	2-day initial; 1-day refresher	Documents altitude chamber qualification and training.	Required for operational support fliers assigned ASC 9C. (AFI 11-403, Aerospace Physiological Training Program)

# Other Requirements

Requirement	Frequency	Duration	Definition	Remarks
Official Government	5 yrs	N/A	Mandatory for all personnel assigned to	ERCC UTC personnel must
Passport			ERCC UTC.	have an Official Passport on
(aka: no-fee				hand at all times. Passport
government passport)				applications must be
				submitted immediately upon
				assignment to an ERCC
				UTC. Members must have
				Official Passports prior to
				employment/deployment on
				an ERCC UTC.
High Risk of Isolation	As applicable	As	HRI training may be mandated for fliers	Ref: AFI 16-1301. HRI
		applicable	involved in air operations over specific areas	training is conducted by a
			within or flying into a combatant command	certified Survival, Evasion,
			AOR during contingency operations. When	Resistance, Escape (SERE)
			so designated, the training requirement is	instructor. HRI may be
			identified by a combatant command in the	accomplished via briefer-led

			AOR OPORD for the contingency.	training or Secure Internet Protocol Router (SIPR) web- based training (WBT) when available. Training is documented on AF Form 1522, AFORMS Additional Training Accomplishment Input, and in block 24 of the Isolated Personnel Report (ISOPREP).
Isolated Personnel Report (ISOPREP)	As applicable	As applicable	Department of Defense form (DD 1833) containing information designed to facilitate the identification and authentication of an evader by a recovery force. The ISOPREP is maintained on all HRI personnel.	ISOPREP is prepared by home-station Intelligence (A2) personnel prior to departure to an AOR where ISOPREP and HRI training is required.
N95 Mask Fit Testing/Training	Annual	As applicable	ERCC personnel are potentially exposed to highly communicable diseases during patient care and transport. IAW Occupational Safety and Health Act (OSHA), Air Force Occupational Safety and Health Program (AFOSH), and AFI 48-307, requirements, personnel must be medically cleared, fittested, and trained for wear of an N95 respirator prior to first use.	Contact Occupational Health staff for support. (AFOSH48-137, Respiratory Protection Program)