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The Air Force Tactics, Techniques, and Procedures (AFTTP) 3-42 series of publications is the primary reference for combat support capability. This document, AFTTP 3- 42.51, provides tactics, techniques, and procedures (TTP) for air transport of critically ill or injured patients across the range of military operations, from steady state/peacetime engagements through war-winning operations. This guidance is designed to assist commanders and planners in the successful integration of CCATT into Aeromedical Evacuation (AE) operations, and interface successfully with Air Force Expeditionary Medical Support or equivalent component service medical support and AE ground medical operations. This publication applies to all military and civilian personnel of the Regular Air Force, Air Force Reserve and Air National Guard. This publication does not apply to the United States Space Force. This publication requires the collection and or maintenance of information protected by the Privacy Act of 1974 authorized by Title 10 United States Code Section (U.S.C.) 9013, Secretary of the Air Force, and Executive Order 9397 (SSN), as amended. The applicable System of Records Notice, F036 AF PC C, Military Personnel Records System, is available at: **https://dpcld.defense.gov/privacy/SORNS.aspx**. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, Records Management and Information Governance Program, and are disposed in accordance with the Air Force Records Disposition Schedule, located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using DAF Form 847, Recommendation for Change of Publication; route the DAF Form 847 through the appropriate chain of command and parent major command (MAJCOM). The doctrine in this document is authoritative but not directive. 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.

SUMMARY OF CHANGES

Information included in DAFI 48-107V2, *En Route Critical Care* has been removed with subsequent substantial revisions. Tactical execution information has been broadened.

SCOPE

Critical care medicine focuses on the provision of life or organ support in patients who are critically injured or ill and who require extensive monitoring, continuous care and treatment, as well as 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 procedures to enable a patient to tolerate transport to the next level of care. In this document, "critical care" encompasses all aspects of resuscitative and critical care such as provided in medical treatment facilities (MTF) equipped with intensive care units and/or emergency departments. This document focuses on tactical doctrine for CCATT. DAFI 48-107V2 is the governing instruction on En Route Critical Care and provides critical information on CCATT Roles and Responsibilities, Unit Type Code (UTC) assignment, Operations, the Operational Support Flying (OSF) program, Training, Logistics and Equipment.

Chapter 1

CRITICAL CARE AIR TRANSPORT TEAM (CCATT)

1.1. CCATT Mission. CCATTs are a limited, rapidly deployable resource available in selected situations to supplement patient movement capabilities. CCATTs expand the scope of medical care provided to critically ill/injured patients who require Damage Control Resuscitation (DCR), life-saving interventions, or ongoing stabilization and Intensive Care Unit (ICU) capability during transport in either an intra or inter-theater mission support role. One or more CCATTs may be employed with AE or En Route Care (ERC) units based on operational requirements.

1.2. CCATT Concept and Assumptions.

1.2.1. The addition of a critical care capability on aircraft has revolutionized theater en route care capabilities. These specially-trained medical personnel care for critically injured/ill patients while in-transit by air to another MTF – usually a higher level of medical care than the patient's originating facility. This capability ensures the level of life-sustaining medical care for critically ill and injured patients during transport does not diminish. The CCATT UTC is a unique, capabilities-based mission platform.

1.2.2. The CCATT capability is platform agnostic, capable of employment on any air transport platform. Command and Control (C2) and/or the team lead can pare and tailor the team based on mission requirements as outlined in DAFI 48-107V2, paragraph 4.7 and 4.9.

1.3. Doctrine and Range of Operations.

1.3.1. CCATTs are designed to be flexible in response and are employed across the spectrum of operations. This includes Aerospace Expeditionary Force operations ranging from in-garrison care to homeland security, Defense Support to Civil Authorities (DSCA) to worldwide Humanitarian Assistance/Disaster Relief (HA/DR), small-scale contingencies through major theater war and any other operational tasking where their unique patient care skill set is required.

1.3.2. CCATTs may be employed on multiple transport platforms with the approval of the C2. This could be any Service platform, rotary or fixed wing.

1.3.3. CCATTs deploy with either a unit operational Allowance Standard (AS) or War Reserve Materiel (WRM) AS. The AS is packed out in accordance with the current version of the pack out guide.

1.3.4. The purpose of an en route care capability is the continuation of care during patient movement within the military health service support (HSS) continuum of care without clinically compromising the patient's condition. Patient movement involves transitory medical care, patient holding and staging capabilities during transport, through successive capabilities of medical care, to an MTF meeting the needs of the patient. Each Service component has an organic patient movement capability for evacuation from point of injury to initial treatment at a health care facility (reference Joint Publication 4-02, *Joint Health Services*).

1.3.5. Patient movement while in the En route care system can take three forms: Casualty Evacuation (CASEVAC), Medical Evacuation (MEDEVAC) and Aeromedical Evacuation (AE). CASEVAC involves the unregulated movement of casualties aboard opportune ships, land vehicles, or aircraft. MEDEVAC is the timely, efficient movement and ERC by medical

personnel of the wounded, injured, or ill persons from the battlefield and/or other locations to and between MTFs. MEDEVAC is conducted with dedicated ground and air ambulances, properly marked, and employed in accordance with the Geneva Conventions and the law of war. MEDEVAC involves the movement of both unregulated and regulated patients. AE refers to patient movement to and between MTFs. Air Mobility Command (AMC) is the lead command for United States Air Force (USAF) AE as tasked by United States Transportation Command (USTRANSCOM). USTRANSCOM is the single manager for global patient movement. CCATT may be employed in both MEDEVAC and AE patient movements and is unlikely to be employed for CASEVAC.

1.4. CCATT Scope of Care.

1.4.1. CCATTs provide advanced specialty medical capability to patients requiring ongoing resuscitation, continuous physiologic support (i.e., mechanical ventilation), continuous physiologic monitoring, frequent and unpredictable therapeutic interventions, intensive nursing support, or other medical interventions to sustain life, limb, or eyesight during movement. A wide variety of adult and pediatric patients with serious medical and surgical conditions may potentially require transport by CCATT teams.

1.4.2. Critical care patients are usually in a state of hemodynamic, physiological flux, including patients whose resuscitation may still be in evolution. A wide spectrum of mission profiles exists when providing care to include regulated and unregulated missions with the primary difference being whether patients have been validated and processed through TRANSCOM Patient Movement Requirement Centers (TPMRCs).

1.4.2.1. Regulated patient movement involves a notification to the CCATT with a brief description of the patients needing to be moved. Prior to transport, the role of the CCATT is to assess the patient's ability to tolerate air transport and prepare the critically ill/injured patient for movement. Ideally, if feasible, tasked CCATT personnel should visit the patient the night before transport and/or contact the current care team for an accurate update of the current clinical condition of the patient. This allows time for the sending facility to prepare the patient for flight, and obtain medications, blood products, etc.

1.4.2.2. Transfer to Patient Movement Items (PMI) equipment may occur whenever it is clinically and operationally safe for the patient. The CCATT UTC normally originates with a patient from a nearby/co-located MTF located at a theater ERC hub. The team lead is responsible for ensuring the team is aware of and complies with the mission timeline (show times, take-off, etc.), operational requirements and other expectations. CCATTs may be transported from an ERC hub to forward locations to pick up patients for transport to higher levels of care. The operational environment, C2 of the airfield operations, and the tactical level of warning will dictate the movement capabilities of the CCATT and patients. There may be times when the CCATT patients will be delivered to the flight line and the team will take possession of the patient on the delivering ambulance, or aircraft.

1.4.2.3. Aircraft, airfield ground crew operations, AE crew and CCATT safety are paramount in any operational environment, however in a tactical environment, limited ground times, or other C2 directed minimal operations, CCATTs may be required to stay with the aircraft and receive or deliver their patients at the flight line.

1.4.3. Unregulated patient movement involves a notification to the CCATT with limited or no information and a compressed time frame from alert to arrival at the patient's facility. Patient information varies from no clinical information, other than there are casualties to move, to a 9-line or abbreviated patient movement request.

1.4.3.1. The CCATT will plan and prepare for care delivery needs during their transport to the facility. Often these movements are time compressed and/or in contested environments creating a sense of urgency to receive patients from the facility and rapidly evacuate. The CCATT lead will determine the capabilities and resources available to care for the patients requested to move in a rapid timeframe.

1.4.3.2. When operationally feasible, the team accompanies the patient from the originating facility to the aircraft and continue to monitor and intervene during in-flight operations as required. Operations may dictate delivery of the patient to the aircraft. At the end of the mission, the team accompanies the patient from the aircraft to turn the patient over to the appropriate level of care, when operationally feasible.

1.4.4. Deviations from maximum CCATT patient loads, or a combination of high-acuity and lower-acuity patients, will be at the discretion of the CCATT physician. The decision is based on patient acuity, resources required/available, mission requirements and any other factors affecting the team's ability to provide patient care without degrading capability. Deviations from tasked patient loads for regulated missions will be coordinated with the Validating Flight Surgeon (VFS) and communicated to the Medical Crew Director (MCD) prior to loading. Deviations for unregulated missions will be at the discretion of the CCATT team lead and mission commander.

1.5. CCATT UTC Capabilities and Compositions.

1.5.1. Grade and skill level substitutions are authorized in accordance with Mission Capability Statement (MISCAP) and the War Mobilization Plan, AFMS Supplement. Exceptions must be approved by the Manpower and Equipment Force Packaging (MEFPAK), Air Mobility Command (AMC) Command Surgeon's Office (SG). CCATTs provide advanced specialty medical capability to patients requiring ongoing resuscitation, continuous physiologic support (i.e., mechanical ventilation), continuous physiologic monitoring, frequent and unpredictable therapeutic interventions, intensive nursing support, or other medical interventions to sustain life, limb, or eyesight during movement. CCATT team members are designated "enablers", to include those also considered "joint service enablers" when working at a joint service MTF while carrying out CCATT duties. A single CCATT team may care for up to 3 severely injured/ill/high acuity patients, 6 lower acuity patients, or a mixture of both severe and lower acuity depending on requirements. The team physician will make the decision on the number of patients the team can safely transport at any given time. The team may move regulated or unregulated patients on any air modality and may operate as a 3-person team or as a tailored team, dependent upon patient needs and the assessment of the team physician or higher medical authority. CCATTs are normally staged at AE crew bed-down locations and fall under AE C2. CCATTs may medically operate independently or along with AE crews in accordance with C2 as detailed in DAFI 48-107V2, paragraph 4.7 and 4.9.

1.5.2. In accordance with the CCATT MISCAP, authorized substitutions for the 44Y3 (physician) are as follows: 45A3 (anesthesia), 44E3A (emergency medicine), 45S3 (surgeon), 45S3A thoracic surgeon), 44Y3A (pediatric critical care), 44M3G (pulmonology) and 44M3B

(cardiology). Authorized substitutions for the 46N3E (critical care nurse) are 46N3J (emergency trauma nurse), 46Y3C (acute care nurse practitioner) and 46Y3M (certified registered nurse anesthetist) and authorized substitutions for the 4H071 (respiratory care practitioner {RCP}) are 46Y3M. The 46N3E, 46N3J and 4H071 are not intended to be deployed independently.

1.5.3. CCATT equipment sets include:

1.5.3.1. FFCC4, CCATT Equipment. This UTC provides advanced specialty medical equipment to support FFCCT teams, providing single mission support for up to 3 high-acuity or up to 6 lower-acuity patients.

1.5.3.2. FFCCB, CCATT Equipment Resupply. This UTC provides the re-supply package to support FFCC4; it provides 15 days support for up to 3 basic FFCC4 packages.

1.5.3.3. FFCC2, CCATT Equipment Pediatric Augmentation Kit. This UTC provides advanced specialty medical equipment/supply augmentation support to the FFCC4 equipment UTC, specifically for transport of pediatric patients. 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, for a total of 4 patients. Re-supply is provided within USAF AE at staging locations or supported elements.

1.5.3.4. FFEC1, Expeditionary Support Package. This UTC provides basic shelter to CCATT members and AE crewmembers positioned at far-forward, secured airfields. Package is deployed with FFCCT or AE crewmembers (UTC FFQDE) when required to support a maximum of 24 personnel.

Chapter 2

ROLES OF TEAM MEMBERS

2.1. CCATT Capabilities. CCATT members work as both a team and as individuals executing team and individual specialty capabilities.

2.2. CCATT Shared Responsibilities.

2.2.1. Maintain current medical knowledge for appropriate delivery of care in the en route care environment in accordance with the CMRP for assigned team members. All team members should have working knowledge of the Joint Trauma System (JTS) Clinical Practice Guidelines (CPGs). JTS CPGs should be reviewed in accordance with DAFI 48-107, Vol 4; En Route Care Clinical Simulation Training and can be found at the website: jts.amedd.army.mil.

2.2.2. CCATT, employed/deployed for the ERC mission, should participate in the weekly JTS Worldwide Video Teleconference (VTC) to review patient care throughout the continuum of care. Contact the JTS Theater point of contact for more information.

2.2.3. Maintain clinical currency to effectively deliver en route critical care. Critical care skillsets are a perishable skill, and every effort should be made to maintain clinical currency in both the home station and deployed setting. Team members will pursue opportunities to remain engaged in clinical care wherever available. Deployed CCATTs are allowed to augment collocated MTFs to maintain currency. While providing augmented support to MTFs is possible, the team lead will ensure support does not compromise the team's ability to perform its primary patient movement mission. Augmentation of collocated MTFs will be done in accordance with DAFI 48-107V2, paragraph 4.10.2.

2.2.4. Teams should conduct table-top discussions and planning on potential patients. Exercising patient care scenarios with co-deployed AE crews and other patient movement teams (i.e., pararescue) is strongly encouraged.

2.2.5. Logistics Management. The CCATT is collectively responsible for ensuring the AS is appropriately inventoried and stocked, perishable items are within expiration dates and PMI have been function checked and are operational.

2.2.6. Mutual performance monitoring. CCATT members will perform a debrief at the completion of each mission. Debriefs should review clinical decision making, execution of the medical plan, effectiveness of communication, instances impacted individual and/or team situational awareness, operational issues impacting the mission or patient and any human factor issues.

2.2.7. Ensure all team members have mission essential items. These items are outlined in DAFI 48-107V2 and include: identification card; appropriate aeronautical orders; North Atlantic Treaty Organization, Air Tasking Order, Temporary Duty, and/or deployment orders, as applicable and Government Travel Card.

2.3. Physician Responsibilities.

2.3.1. Team lead with operational oversight of the CCATT.

2.3.2. Communicates with the VFS regarding patients as needed. Concerns about the appropriateness of a patient for transport should be communicated by the CCATT physician to the VFS and the attending physician responsible for the patient on the ground. This ensures the risk assessment for flight includes the relevant decision makers to weigh operational and clinical concerns before a final decision to proceed with transport is determined.

2.3.3. Medical decision making. Responsible for the overall clinical management of all CCATT patients. Provides orders to include frequency of vitals, clinical assessments, labs as well as medications and ventilator settings. Interprets laboratory results and directs appropriate interventions. Team lead when working through any medical critical incident to identify and treat the underlying pathology. Leads team in executing critical interventions such as intubation, chest tube placement, central venous or arterial access and delivery of blood products.

2.3.4. Documentation. The CCATT physician will ensure appropriate completion of AF Form 3899L, *Patient Movement Record En Route Critical Care*. AF Form 3899L will be used during transport of critically ill or injured patients 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.

2.3.5. Primary liaison with AE MCD on AE designated missions to communicate any significant clinical changes with CCATT patients and to support AE management of patients if clinically indicated. Significant clinical changes on a CCATT patient must be reported to the MCD who will then update the VFS and C2. This ensures appropriate resources are available at the receiving facility and whether rerouting of the mission is required to meet the clinical needs of the patient. The MCD can facilitate communication (phone patch) between the CCATT physician and VFS as needed to directly discuss changes in clinical status and options if emergent therapies are needed, i.e., cardiac catheterization lab.

2.3.6. Augment other team members as needed should they become task saturated to complete medical tasks in a timely manner.

2.3.7. Securely copy and scan the AF Form 3899L and supporting documentation for each patient. The copy should be forwarded to the Pilot Unit via fax (Defense Switched Network (DSN) 554-5053 or CML 210-292-5053) or via encrypted email to: **ccattpilotunit.59mdw@us.af.mil**.

2.3.8. Ensure AFTO Form 781, *Arms Aircrew/Mission Flight Data Document*, includes CCATT members and obtain a signed copy of the completed AFTO Form 781 prior to leaving the aircraft. As OSF personnel, primary flying time is logged only during portions of the mission when valid in-flight duties are performed, i.e., providing patient care. A copy of the completed AFTO Form 781 should be sent to CCATT member's Host Aviation Resource Management (HARM) or Squadron Aviation Resource Management (SARM) office. Refer to DAFI 48-107V2 paragraph 5.3.4.

2.3.9. Handoff. The CCATT physician should make every attempt to receive a direct patient handoff from the attending physician they are assuming care from and to deliver a direct handoff (using a standardized tool) to the receiving facility attending at completion of the transport mission. When operationally feasible, during high operations tempo or reduced

ground times the CCATT may need to pass the patient to the transport personnel from the ambulance service there to pick up the patient.

2.3.10. Patient Safety. The physician is responsible for reporting any patient safety events or equipment failures occurring during transport. In collaboration with the MCD, a DD Form 2852, *Patient Movement Event/Near Miss Report* at: **https://www.esd.whs.mil/DD/** or Joint Patient Safety Reporting (JPSR) worksheet should be completed and submitted to the AE element Patient Safety Monitor.

2.3.11. Crew Integrity. As the team lead, the physician is responsible for ensuring the CCATT is operationally ready to deliver optimal patient care. This includes ensuring the team follows on-call and alert requirements and complies with work/rest cycles as outlined in DAFI 48-107V2 paragraph 4.8. Ensuring team dynamics conducive to optimal delivery of care requires constant attention by the physician. The physician will lead the debriefing session after missions and be sensitive to addressing any inter-personal dynamics negatively impacting the ability to optimally conduct missions in a timely manner. If at any time the physician feels the CCATT is not safe to perform en route care duties, they should coordinate with the Theater ERCC director (if established) and the AE site leadership to remove the team from clinical duties until the team is returned to an operationally ready state.

2.4. Critical Care Nurse Responsibilities.

2.4.1. The nurse is the critical interface between medical decisions and delivery of hands-on medical care. Within the team, most of the task execution falls on the nurse. The nurse is responsible for medication delivery and ensuring appropriate dosing of all active drips and scheduled medications, vital signs monitoring and physical exam assessments.

2.4.2. The nurse has primary responsibility of the medication kit and narcotics kit (i.e., controlled medications). They ensure medications are appropriately stocked and within expiration dates. They ensure all local and Food and Drug Administration (FDA) rules regarding management of controlled medications are followed. During missions, nurses will ensure the narcotics kit is in their possession. Any controlled medications wasted will be co-verified and documented on the AF Form 3899, **Patient Movement Record**.

2.4.3. The nurse serves an expert on all drugs administered. They are responsible for ensuring safe and correct dosing of all ongoing medication drips and any scheduled delivered medications. Any medications mixed by the team, especially vasoactive, should be co-verified and referenced with a suitable drug guide.

2.4.4. The nurse is the subject matter expert on patient monitoring devices and infusion pumps. The nurse should ensure all equipment is charged and in operating condition prior to patient pick-up.

2.4.5. The nurse executes physician orders to include vital sign monitoring and exam assessments as required, delivery of ordered medications, and delivery of blood products.

2.4.6. The nurse notifies the physician of critical changes in patient status and assists in working through medical critical incidents to identify and treat the underlying pathology.

2.4.7. As the team member with the most tasks to execute, it is critical for the nurse to utilize the other team members as needed to avoid task saturation. Delegation of tasks to the CCATT

physician or respiratory therapist should be clearly communicated and closed loop communication utilized to ensure appropriate completion of tasks.

2.4.8. The nurse should obtain direct handoff at the bedside from the ground care nurse when operationally feasible. They should provide direct bedside handoff to the receiving nurse upon arrival to the destination MTF. When receiving/turning over controlled medications, the nurse will ensure accountability in accordance with the sending/receiving facility and document on the AF3899L, Box 37. Use of a hand-off format, like the Identity-Situation, Background, Action, and Recommendation (I-SBAR) is recommended.

2.5. Respiratory Care Practitioner (RCP) Responsibilities.

2.5.1. The RCP serves as the subject matter expert in the transport ventilator, supplemental oxygen systems, respiratory treatments, and oxygen delivery systems in the transport environment.

2.5.2. The RCP executes physician orders on ventilator settings and assists physician to ensure optimal ventilator settings at all times throughout transport.

2.5.3. The RCP performs oxygen calculations pre-mission and works with the AE crew to ensure adequate oxygen supply via the Next Generation Patient Therapeutic Liquid Oxygen System (NPTLOX) and oxygen tanks throughout transport. This includes factoring in ground transport segments from the originating hospital to the aircraft and from aircraft to the destination hospital, which is typically supported with oxygen tanks, as well as in-flight needs which are typically with aircraft oxygen or NPTLOX systems.

2.5.4. The RCP, in coordination with the AE crew, validates the electrical requirements for each CCATT patient to ensure adequate electrical support for each patient stanchion.

2.5.5. Performs pre-flight, post-ascent and post-descent assessments to prevent hypoxia and avoid complications from the hypoxic, hypobaric environment of flight. This includes monitoring of pulse oximetry to assess needed changes in oxygen support and assessment of endotracheal tube cuff pressure for intubated patients.

2.5.6. Serves as the team PMI expert ensuring all PMI devices are appropriately serviced and performs function checks prior to missions.

2.5.7. Serves as the subject matter expert in equipment securing devices. Begins configuration of equipment for transport and assists the CCATT nurse in packaging patient from inpatient hospital setting to litter for transport.

2.5.8. Assists CCATT nurse in ensuring monitors and invasive lines are appropriately functioning (leveled). Obtains labs and arterial blood gases as indicated or ordered.

2.5.9. Serves as the team expert for point of care blood analyzer device. Ensures the device is operational and performs a function check before missions and/or ensures appropriate cartridges are available for each mission. In flight, the RCP ensures the point of care blood analyzer and cartridges are in a temperature-controlled area or are readily available to guarantee prompt use.

2.5.10. Ensures all PMI recovered from patient at mission completion is cleaned and entered back into PMI system as local protocols dictate.

2.5.11. The RCP is responsible for the operational AS. Leads the team in maintaining AS inventory and ensuring the CCATT kit is fully inventoried and within expiration dates. The RCP is the primary liaison between the team and the AE logistics element.

Chapter 3

OPERATIONS

3.1. CCATTs. CCATTs will be involved in the full spectrum of operations to move critically injured and/or ill patients to the next level of care. DAFI 48-107V2 outlines in **Chapter 4**, En Route Critical Care Operations all aspects of CCATT operations and should be thoroughly reviewed.

3.2. Assumption: It is assumed medical personnel may potentially operate in a biological or chemical environment. CCATTs must be deployed with appropriate training and Individual Protective Equipment (IPE) to counter threats. As an AE component, CCATTs will be exposed to the same conditions as AE aircrews and AE ground element personnel.

3.3. CCATT Relationship to AE and AE Crew Member (AECM).

3.3.1. CCATT 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 the effective communication, coordination and integrity and will ensure CCATT teams are supported.

3.3.2. During AE missions with an AE crew onboard, the MCD has operational control over all aspects of the AE mission. The CCATT physician is the team lead and has clinical authority over CCATT patients during the mission. The CCATT physician updates the MCD on any changes in patient's clinical status and directs requests for changes in any aspect of the flight (i.e., cabin altitude or flight plan) to the MCD.

3.3.3. During non-AE missions utilizing CCATT, the senior aircraft crewmember has operational control over the mission. The CCATT physician has clinical authority over CCATT patients during the mission. The CCATT physician updates the senior aircraft crewmember on any changes in the patient's clinical status and directs requests for changes in any aspect of the flight (i.e., cabin altitude or flight plan) to the senior aircraft crewmember.

3.4. Support. CCATTs receive all base support from the unit of attachment. During deployment operations, the gaining unit is responsible for providing all required support to the CCATT including billeting, food, water, shelter, transportation, medical oxygen support, communication, and coordination of resupply of medical equipment and supplies and any other items determined essential for the CCATTs to accomplish their mission.

3.5. CCATT Work or Rest Cycle.

3.5.1. CCATTs are not aircrew and the work rest cycle for CCATT does not equate to crew rest. DAFI 48-107V2 paragraph 4.8 outlines ERCC rest cycles and waiver authority.

3.5.2. The CCATT physician should work to optimize team endurance and employ fatigue countermeasures. This includes appropriate rest time before missions and utilizing rotating breaks of team members during missions when the clinical status of patients allows.

3.5.3. Duty policy should define no more than 16 hours of duty in a 24-hour period. The team lead can extend the duty day to 24 hours based on operational need. Extending beyond 24 hours requires coordination with the governing C2 agency.

3.5.4. CCATT members will not consume alcoholic beverages within 12 hours of beginning the work period.

3.5.5. If the CCATT lead feels the team is mentally or physically unable to complete a transport mission, the team lead will contact the Theater ERCC Director and the AE Operations Team (AEOT) and AE Control Team (AECT) to coordinate tasking for another CCATT.

3.6. Protective Equipment. CCATT members will be issued aircrew specific personal protective clothing items as outlined in DAFI 48-107V2, paragraph 5.2. It is the responsibility of the home station unit to ensure CCATT members are properly equipped for flight operations.

3.6.1. Theater Combatant Commanders identify Individual Body Armor (IBA) requirements.

3.6.2. IBA vs Aircrew Body Armor. During combat or hostile action support operations, ERCC teams must deploy with Level IV Ballistic IBA. Aircrew Flight Equipment does not provide aircrew body armor to CCATT. Ballistic IBA is either provided by the supported Combatant Commander prior to or upon entry into theater or must be obtained by the CCATT prior to mission start. The CCATT lead should work with their AEOT leadership to ensure IBA is available for CCATT members.

3.7. Security. CCATT members, as medical personnel, are non-combatant assets. CCATT personnel may be armed as dictated by theater instructions. CCATT members are issued and qualified on the assigned weapon for their UTC or position and equipment is the responsibility of the host unit.

3.8. Chemical, Biological, Radiological, Nuclear Defense (CBRNE) equipment. Equipment items in defense of CBRNE will be directed by the Combatant Commander of the theater the team is deploying to. Additional items may be required if teams are transiting several theaters during mission execution. Potential items include gas mask with 1 set of filters, web belt, canteen with cup and cover, M50 canteen cap, C-Bag, ground crew ensemble (Chem Gear).

3.9. Deployment. CCATT is a high demand, low density asset with a high operational tempo. CCATT members should anticipate regular deployments and work with their home station readiness office to ensure they are prepared for taskings. When required, outside of the normal Global Force Management (GFM) and the AFFORGEN process, the CCATT Consultant to the Surgeon General works to balance deployment requirements across MAJCOMs to evenly distribute taskings throughout the CCATT enterprise. CCATT unit coordinators work with their local commanders to ensure CCATT deployment taskings are filled with clinically current and operationally ready CCATT members.

3.9.1. Upon notification of a deployment tasking, CCATT members work through their home station Unit Deployment Manager (UDM) to complete all pre-deployment requirements and ensure completion of their pre-deployment checklist.

3.9.2. Deployment orders and the area of responsibility operational order specify any additional training may be required including courses like High Risk of Isolation Training or Field Craft Hostile Training. DD Form 1833, *Isolated Personnel Report (ISOPREP).* ISOPREP forms are found at: **https://www.esd.whs.mil/DD/** and are prepared for all high risk of isolation personnel and are maintained by the appropriate unit intelligence, Survival, Evasion, Resistance and Escape (SERE), or operations personnel.

3.9.3. Members should receive all flight protective uniform requirements from the home unit.

3.9.4. Members should complete weapons qualification and clarify with their UDM if weapons are to be obtained from home station before deployment or if weapons will be assigned at their receiving location.

3.9.5. The UDM will provide the deploying member with all travel plans for movement to the deployed location.

3.9.6. Upon arrival to the deployed location, CCATT members will undergo in-processing at the gaining AEOT. This typically includes an in-processing checklist specific to the AEOT and local base. The AEOT is the local command structure for the deployed CCATT, and teams should meet with the AEOT Commander, Chief Nurse and Director of Operations.

3.9.7. When rotating to an established location and relieving a previous CCATT, direct handoff between teams should be performed. The out-going CCATT works to ensure the new team has been briefed on local command structure, call posture, AS and logistics support, mission activation and local processes for mission mobilization and completion.

3.9.8. When arriving to a new CCATT location, the team should identify a CCATT Director (where one or more teams are assigned) to be the primary liaison with the AEOT leadership. The CCATT Director should establish call coverage, communication with the VFS of the applicable TPMRC and communication with the Theater ERCC Director (if one has been identified).

3.9.9. The local CCATT Director should work to establish relationships at the nearest MTF to provide blood capability when needed for CCATT missions.

3.10. Mission Execution.

3.10.1. Mission Preparation. There are two primary ways a CCATT arrives to pick up a patient and mission preparation can be significantly different between these two scenarios. They may be assigned near the originating MTF and thus leave from the same location as the patient. Alternatively, they may fly into the originating MTF location to pick up the patient.

3.10.2. Regulated missions should provide the CCATT with a Patient Movement Requirement (PMR) providing basic medical information on the patient (s) validated for movement. This includes a summary of the patient's clinical condition, current medications, and any specific medical devices the patient requires. The team should review the available information and formulate a plan for initial assessment and packaging, patient load plan and a care delivery plan for the mission.

3.10.3. The plan of care should consider potential complications occurring due to the transport environment and identify any potential procedures to be performed prior to transport to prepare the patient for the transport environment. If additional procedures are requested or additional information is needed, the CCATT physician should contact the VFS to address these issues with the originating facility.

3.10.4. The CCATT must understand the capabilities of the originating facility. This determines if additional items like blood supply must be obtained prior to mission launch or if these items can be obtained from the originating MTF.

3.10.5. The CCATT should take all PMI needed for monitoring and caring for the patient to the MTF.

3.10.6. All medical items required to continue providing critical care while in transport from the MTF to the aircraft must be provided by the CCATT. The full AS is typically in the aircraft while the CCATT is assessing and packaging their patient so needed items from the AS must be collected and taken to the MTF with the CCATT.

3.10.7. Consultation will be required prior to mission execution to determine the ideal provider mix to transport neonatal and pediatric critical patients.

3.10.8. During wartime/contingency or reduced ground time operations, the CCATTs may receive or deliver the CCATT patients while on the flight line. CCATTs may not be allowed to depart the flight line for security, ground time, or other operational requirements outside the control of the MCD or CCATT. The mission crew brief will include planning for these scenarios to ensure the CCATT members are prepared.

3.11. "Go-Bags". CCATT members have found "go-bags" to be a useful tool in keeping critical items more easily accessible. Often each AFSC maintains a "go-bag" with items applicable to the physician, nurse, and RCP role.   Examples include basic emergency airway supplies and emergency drugs for the physician; emergency drugs, intravenous (IV) supplies and flush for the nurse; wrench, adaptors, and mini regulator for RCPs. For unregulated missions the "go-bag" or a tactical vest can be even more critical. Often, members include tourniquets and decompression needles to ensure accessibility. All supplies in the "go bag" are taken from the CCAT allowance standard.

3.12. Narcotics Handling. The CCATT nurse is responsible for narcotics control when operationalized or deployed. The nurse documents dispensing the medication to the physician or nurse dispensing the medication. Administration of the medication is documented on the patient's ERC record by the individual administering the medication. Commercial travel with narcotics must be designated on the individuals travel orders to ensure Customs regulations are followed.

3.13. Ground Operations. Travel arrangements from the AEOT to the MTF (when not in walking distance) should be pre-coordinated with a show-time allowing adequate time at the MTF for patient assessment and packaging.

3.13.1. The CCATT must ensure they have adequate PMI and AS items for each patient to safely move from the MTF to the aircraft by ground transportation. This includes conducting oxygen calculations to ensure adequate oxygen is available.

3.13.2. Upon arrival at an MTF or staging location, the CCATT will assess the patient's clinical status for flight, perform required interventions and determine continuing in-flight care requirements.

3.13.3. Upon arrival, the team should immediately request necessary medications and blood supply from the originating facility to allow adequate time for completion of orders.

3.13.4. Intubated patients should be placed on the transport ventilator as soon as possible to ensure patient will tolerate the change.

3.13.5. The transporting CCATT physician will complete the patient assessment and determine whether a patient will be transported. This assessment will include the patient's ability to tolerate transport, the medical capabilities of the current site treating the patient, and operational requirements. If the physician determines a patient may not be stable for flight, the

CCATT physician will discuss with the VFS and on-site care team if the patient should stay at the current location and be removed from the flight (if operationally feasible).

3.13.6. Prior to leaving the MTF for the aircraft the team will review the following items to ensure they are ready to leave the hospital:

3.13.6.1. Patient identification and medical records for each patient has been obtained.

3.13.6.2. Needed medications from pharmacy for each patient has been obtained.

3.13.6.3. Needed blood product from blood bank for each patient has been obtained.

3.13.6.4. Imaging and lab data has been reviewed for each patient.

3.13.6.5. Note endotracheal tube depth and cuff pressure prior to leaving MTF.

3.13.6.6. Any items brought into the MTF for use during packaging (e.g., bags, cases, iSTAT).

3.14. Flight Operations. Upon arrival to the aircraft, patients will be on-loaded and secured in place. Oxygen supply should be changed over to aircraft medical oxygen or NPTLOX by the AECM as applicable. PMI devices should be connected to appropriate electrical supply by an Aeromedical Evacuation Crew Member (AECM). The CCATT physician should identify the MCD and discuss any patients concerning to AE and/or CCATT.

3.14.1. A pre-takeoff assessment on each patient should be performed ensuring drips are running appropriately, adequate sedation and analgesia are available, and lines and tubes are all appropriately positioned.

3.14.2. CCATT members should be secured in seats during takeoff. If bedside care must be provided during takeoff, the MCD should be notified and a CCATT member will be secured to the stanchion.

3.14.3. Once at altitude, all patients should be re-assessed. All intubated patients should have cuff pressures measured with a manometer at this time.

3.14.4. During the mission, the CCATT physician will coordinate with the MCD and notify the MCD of any major changes in their patients' status after which the MCD will notify the TPMRC as patient/mission requirements dictate.

3.14.5. All patients should undergo reassessment upon descent and landing. All intubated patients should have cuff pressures measured with a manometer at this time.

3.14.6. The CCATT must prepare for movement from the aircraft to the receiving MTF prior to or upon landing. Like the originating MTF to aircraft move, the team must ensure adequate medical supplies are available to continue providing critical care during ground transport to the MTF.

3.14.7. CCATT patients are deplaned to an AMBUS/ambulance for transport to the receiving MTF. Rarely, the patients will require transport to different locations. When this occurs, the CCATT physician must determine the appropriate CCATT crew complement to safely move the patients by paring the team as needed.

3.14.8. The CCATT must ensure there is adequate oxygen available for the ground transport to the receiving facility.

3.14.9. CCATT members accompany the patients to admission at the MTF and provide direct hand-off to the receiving clinical care team when operationally feasible.

3.15. Mission Completion. Once the team has delivered their patients to the receiving MTF, the local AEOT provides transportation back to the AEOT or staging area. The team reconstitutes their AS and PMI and prepares it for movement back to the deployed location. The CCATT Director works with the local AE command structure to ensure team integrity with AE for return to point of origin. This should be done after rest and replenishment in accordance with DAFI 38-107V2 paragraph 4.8.

3.16. Commercial Travel.

3.16.1. Use of commercial air travel may be necessary to preposition ahead of a tasked AE transport to mitigate the restrictions of an aircrew's duty day. Commercial air may also be necessary to recover a team after completion of a mission, when the aircraft is not destined to return to the CCATTs place of origin, and no other mil-air options are available within a reasonable amount of time.

3.16.2. Some U.S. airlines offer up to 5 bags, weighing up to 100 lbs. without charge (e.g., United, American Airlines, Delta). Other U.S. airlines may allow up to 100 pounds with a fee for exceeding weight and/or baggage limit.

3.16.3. Many major international carriers will allow up to 32 kg (70.4 lbs.), charging for exceeding baggage limits of 2-3. Often, the 32 kg limit is an absolute and cannot be circumvented by simply paying. It is recommended to pare down and redistribute the weight of AS to meet the weight limits prior to arriving at a commercial airport. Adding additional luggage/hard cases may be helpful or necessary, as excessive baggage costs can be added to individual travel vouchers. It may be possible to circumvent an international carrier's weight restriction, if it has a code share agreement with a U.S. based carrier AND the ticket was purchased through the U.S. carrier.

3.16.4. Transportation Security Administration (TSA) or their foreign equivalents may require inspection of the PMI, especially items containing lithium batteries. Arrive early to the airport in anticipation of this additional delay and respectfully provide as much information as possible to expedite the process.

3.16.5. Uniform of the day (UOD) while on official business is discrete, business casual (e.g., khaki pants/collared shirt). CCATT members should attempt to de-identify, foregoing camouflage patterned bags/apparel, military patches, etc.

3.17. Documentation.

3.17.1. AF Form 3899L will be used during transport of critically ill or injured patients to direct and record care. Additional AF Form 3899 Attachments (e.g., A-N) may be needed for additional documentation but are not used in place of the 3899L. **Note:** Utilize an electronic health record if and/or when one is designated, directed, and provided by AMC/SG.

3.17.1.1. All pages of the completed AF Form 3899 are sent to the CCATT Process Improvement manager for entry into the CCATT registry and for process improvement review.

3.17.1.2. Securely copy and scan the AF Form 3899L and supporting documentation for each patient. The copy should be forwarded to the Pilot Unit via fax (Defense Switched

Network (DSN) 554-5053 or CML 210-292-5053) or via encrypted email to: **ccattpilotunit.59mdw@us.af.mil**.

3.17.2. AFTO Form 781. CCATT members are authorized to log flight time on AFTO Form 781 in accordance with DAFI 48-107V2 paragraph 5.3.4.

  3.17.2.1. The aircraft commander, senior OSF member of the team and MCD (when on AE mission) ensure OSF personnel log primary flying time during portions of the mission when valid in-flight duties are performed.

  3.17.2.2. The CCATT lead will obtain a signed copy of the AFTO Form 781 for all team members at completion of the flight.

3.17.3. Patient Safety DD Form 2852 and JPSR worksheet. A culture of patient safety is the responsibility of all members of the ERC system. When a patient safety event occurs, the CCATT lead is responsible to ensure a DD Form 2852 or JPSR worksheet is completed and submitted to AMC AE Safety Office.

3.17.4. All operational safety events are reported into the Aviation Safety Action Program (ASAP) program. Any aircrew personnel will assist with ASAP reporting.

3.18. Infection Control. In accordance with DAFI 48-107V1, *En Route Care and Aeromedical Evacuation Medical Operations*, paragraph 8.25..

3.18.1. Infection control can be difficult in the dynamic physical environment of AE. Therefore, originating physicians must be vigilant of the presence of communicable diseases that could spread to other patients, the crew, or the destination MTF community.

3.18.2. General principles of infection control. The guidelines for personnel and recommended standards of patient care are contained in the most current Centers for Disease Control and Prevention (CDC) guidelines and in local cleaning directives. Each aircraft and mission is unique. Environmental lighting in most cases is poor, making the visualization of blood and body fluids highly uncertain. Infection control concerns will be addressed with assignment and placement of patients (reference DAFI 48-107V1, 8.25). Note: The airflow of each aircraft governs litter and seat assignments for high-risk immune compromised patients or patients on airborne or droplet precautions (reference DAFI 48-107V1, Attachment 14).

3.18.3. High-risk patients (e.g., those particularly susceptible to infection: leukemia, cancer, and post-op patients) are located as far as possible from infectious patients. All efforts are made to limit the number of care givers to either highly infectious or neutrophilic patient populations. Consider the direction of airflow in the aircraft and having the high-risk patient wear the surgical or procedural mask when available or an N-95 mask while en route.

3.18.4. In austere ground operational settings with limited airflow (e.g., AMBUS, Humvee, tentage), the infectious patient wears a surgical mask or N95 mask. The patient is placed downwind, to the greatest extent possible, near the airflow exit and away from other patients. When in confined areas and/or in areas with poor air circulation, both the patient and the health care worker (HCW) will wear a N95 mask.

3.18.5. All CCATT members will be fit tested for the N-95 mask.

3.19. Crew Resource Management (Team Dynamics). Used by all members of the ERC team.

3.20. Clinical Profiles. The patients are treated in accordance with CCATT or JTS CPGs.

Chapter 4

TRAINING

4.1. CCATT Initial Training. Provided by the United States Air Force School of Aerospace Medicine (USAFSAM) at Wright-Patterson AFB, Ohio. CCATT Advanced is provided by Center for Sustainment Training and Readiness (C-STARS) at University of Cincinnati Medical Center. Formal CCATT Training is governed by AFI 41-106, Air Force Medical Readiness Program and DAFI 48-107V2, En Route Critical Care.

4.2. CCATT Clinical Sustainment Training. Governed by DAFI 48-107V4, *En Route Care Clinical Simulation Training.*

4.3. Tabletop Planning. Are very helpful and may be executed in conjunction with other CCATT teams.

4.4. Operational Training Flight. Opportunities should be sought out and coordinated with co-located AE crews.

4.5. MAJCOM Exercises. Several large patient movement exercises per year are supported by MAJCOMs. Contact your MAJCOM/SGX for exercise participation details.

Chapter 5

LOGISTICS

5.1. Base Operating Support (BOS). BOS includes suitable real estate (approx. 1440 square feet) required to sustain operations for the duration of the employment period. This UTC is dependent upon the host location for BOS to include subsistence (food and water), fuel, communications, transportation, civil engineering and site security. Support requirements are to be arranged for and provided by the host component service and should include space to adequately unpack, inventory, store, re-supply and access to electrical for charging medical equipment. Refrigeration for medications and narcotics storage may be arranged with co-located medical support or AE assets.

5.2. Medical Equipment Maintenance and Service. Provided by the host MTF and coordinated through the medical logistics flight.

ROBERT MILLER
Lieutenant General, USAF, MC
Surgeon General

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

10 U.S.C. § 9013, *Secretary of the Air Force*

JP 4-02, *Joint Health Services*, 11 December 2017, Appendix A; Patient Movement, 28 September 2018

DAFI 48-107V1, *En Route Care and Aeromedical Evacuation Medical Operations*, 15 December 2020

DAFI 48-107V2, *En Route Critical Care*, 24 November 2020

DAFI 48-107V3, *En Route Care Documentation*, 17 December 2020

DAFI 48-107V4, *En Route Care Clinical Simulation Training*, 25 May 2022

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AFI 41-106, *Air Force Medical Readiness Program*, 29 July 2020

AFMAN 10-2909, *Aeromedical Evacuation (AE) Equipment Standards*, 13 March 2019

Aeromedical Evacuation Medical Equipment Compendium, 12 January 2022

AFMAN 11-2AEV3, *Aeromedical Evacuation (AE) Operations Procedures*, 19 October 2020

USAF War Mobilization Plan-1, *Air Force Medical Service Supplement,* current version

Abbreviations and Acronym

AE—Aeromedical Evacuation

AEC—AE Crew

AECM—Aeromedical Evacuation Crew Member

AECT—Aeromedical Evacuation Control Team

AEOT—Aeromedical Evacuation Operations Team

AET—AE Technician

AFI—Air Force Instruction

AFTO—Air Force Technical Order

AFMAN—Air Force Manual

AFTTP—Air Force Tactics, Techniques, and Procedures

AMC—Air Mobility Command

AS—Allowance Standard

ASAP—Aviation Safety Action Program

C2—Command and Control

CASEVAC—Casualty Evacuation

CBRNE—Chemical, Biological, Radiation, Nuclear, Explosive

CCATT—Critical Care Air Transport Team

CDC—Center for Disease Control

CPGs—Clinical Practice Guidelines

CSTARS—Center for Sustainment Training and Readiness

DCR—Damage Control Resuscitation

DSCA—Defense Support of Civil Authorities

ERC—En Route Care

ERCC—En Route Critical Care

FDA—Food and Drug Administration

HARM—Host Aviation Resource Management

HSS—Health Service Support

IBA—Individual Body Armor

ICU—Intensive Care Unit

IPE—Individual Protective Equipment

ISOPREP—Personnel Recovery Preparation

JTS—Joint Trauma System

MAJCOM—Major Command

MCD—Medical Crew Director

MD—Medical Doctor/Physician

MISCAP—Mission Capability

MEDEVAC—Medical Evacuation

MEFPAK—Manpower and Equipment Force Packaging

MTF—Medical Treatment Facility

NPTLOX—Next Generation Patient Therapeutic Liquid Oxygen

OPR—Office of Primary Responsibility

OSF—Operational Support Flying

PM—Patient Movement

PMI—Patient Movement Items

PMR—Patient Movement Request

RCP—Respiratory Care Practitioner

SARM—Squadron Aviation Resource Management

SG—Surgeon

TPMRC—TRANSCOM Patient Movement Requirements Center

TSA—Transportation Security Administration

TTP—Tactics, Techniques and Procedures

UDM—Unit Deployment Manager

UOD—Uniform of the Day

USAF—United States Air Force

USTRANSCOM—United States Transportation Command

USAFSAM—United States Air Force School of Aerospace Medicine

USC—United States Code

UTC—Unit Type Code

VFS—Validating Flight Surgeon

Attachment 2

EN ROUTE CRITICAL CARE MISSION CHECKLIST

Figure A2.1. EN ROUTE Critical Care Mission Checklist.

a. Verify mission itinerary, threats, flight profile, altitude restriction, etc. (AEC)
b. Verify/Introduce ERCC Team and Team lead (ERCC)
c. Identify potential AE patients who may need ERCC assistance, i.e., mental health, respiratory, pain etc. (AEC)
d. Number of patients and orientation (AEC/ERCC).
e. For ventilated patients only: 2AET will configure a dedicated oxygen line for the ventilator. CCATT will coordinate with the AECMs to ensure a secondary line is readily available for BVM usage. (AEC).
f. For a non-ventilated patient: one oxygen line with a flow meter at the head of the patient. (AEC and ERCC)
g. Verify ERCC oxygen requirements (ERCC). Combine with AE (AEC).
h. Verify total Oxygen requirement for CCATT / AE. Inform ERCC team of oxygen source (PT LOX or aircraft). (AEC)
i. Electrical is 2 ECAS for each patient at the foot of the patient (ERCC). Verify ERCC electrical requirement (i.e., # of Ventilators, # of IV pumps, # of monitors, # of suctions, # of wound vacs, # of specialty equipment. (AEC and ERCC)
j. Verify specialty equipment and appropriate waivers (as needed) (ERCC)
k. Coordinate the placement of the ERCC bags on the aircraft. (ERCC/AEC)
l. Order of the Pt load into the plane (ERCC).
m. Seat location for ERCC team. (AEC).
n. Verify total ERCC patient requirement with MCD; O2, electrical, PMI, space etc.
o. Order of patient of offload from the plane. (ERCC)
p. Complete post-mission AEC/ERCC De-brief.
q. AEC/ERCC Debrief. ID any patient safety concerns and fill out DD2852/JPSR when appropriate. (AEC/ERCC)
r. Obtains copy of completed 781 from MCD and verified CCATT members information for accuracy. (ERCC)
s. Recover CCATT from destination MTF. (MTF/ERPSS/AE Liaison) TPMRC will facilitate this plan in the patient movement-planning phase. (TPMRC)
t. Outline billeting plan for both AEC and ERCC. (ERCC/AEOT/Det)
u. Disseminate return mission information or plan to establish return mission. (AEC)
v. Rest/Posture ERCC equipment for return or next mission. (ERCC)

Attachment 3

CONFIGURATIONS

A3.1. CCATT Patient Configuration for C-17 AE Missions.

A3.1.1. During critical phases of flight, the CCATT and AEC will be on the same channel. If possible, at least one CCATT member will sit with CMT and/or MCD to ensure communication.

A3.1.2. 2AET is responsible for interfacing with the CCATT to verify electrical and 02 requirements and the capability is interfaced correctly.

A3.1.3. 2AET will configure two oxygen lines for each CCATT patient, one with a flowmeter at the head of the patient and one 50 psi hose at the foot of the patient.

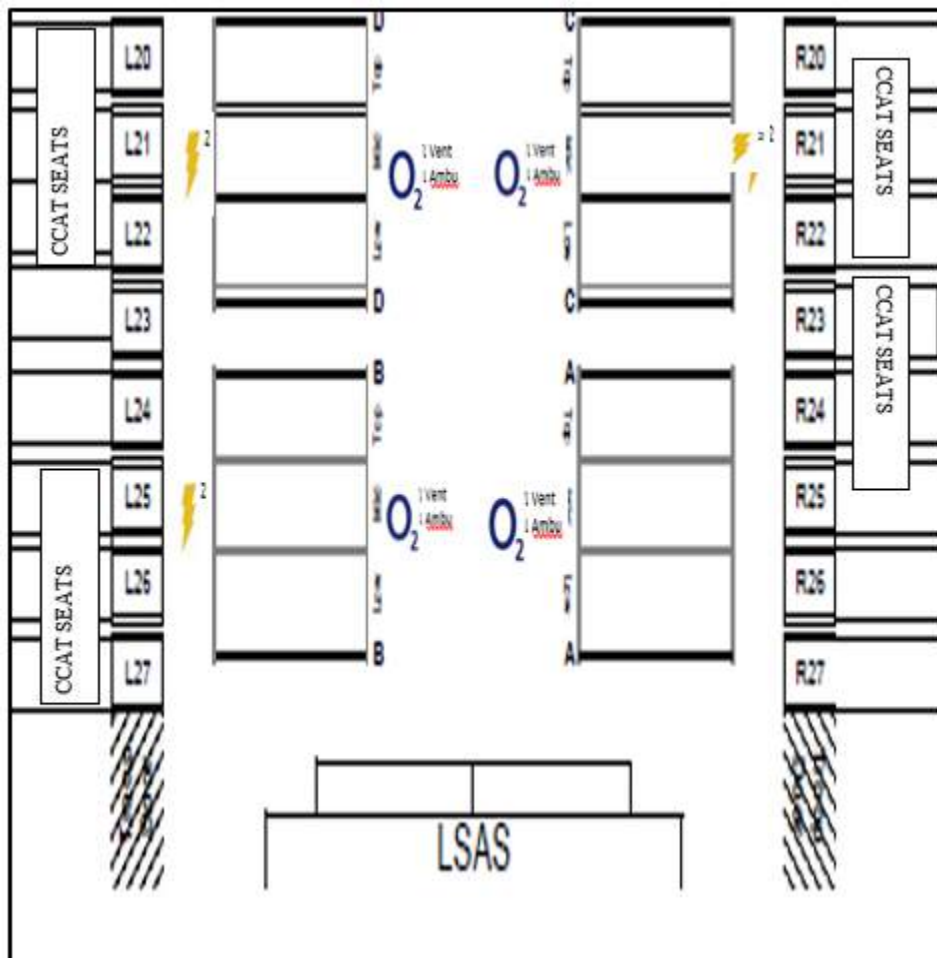**Figure A3.1. CCATT Patient Configuration for C-17 AE Missions.**

A3.2. CCATT Patient Configuration for C-130 AE Missions.

A3.2.1. During critical phases of flight, the CCATT and AEC will be on the same channel. If possible, at least one CCATT member will sit with CMT and/or MCD to ensure communication.

A3.2.2. AFT Litter Stanchions A & B will be configured for four litters.

A3.2.3. The patient will be placed at a height facilitating CPR if it were to be required.

A3.2.4. 2AET is responsible for interfacing with the CCATT to verify electrical and 02 requirements and the capability is interfaced correctly.

A3.2.5. 2AET will configure two oxygen lines for each CCATT patient, one with a flowmeter at the head of the patient and one 50 psi hose at the foot of the patient.

A3.2.6. If floor loading secure CCATT patients closest to the tail and do not pair with non CCATT without CCATT physician approval. No more than two CCATT patients should be floor loaded in a single row.

Figure A3.2. CCATT Patient Configuration for C-130 AE Missions.

Attachment 4

CCATT MISSION EXECUTION CHECKLIST

Figure A4.1. CCATT Mission Execution Checklist.

			DATE:		
SHIFT REPORT SUMMARY				Scheduled/Actual CCATT Alert Time:_____	
MSN TYPE ___Operational Mission ___Aeromedical Readiness Mission (ARM) ___Exercise/Operational Training Mission ___Static Training Mission		Total # Pts: _____ Total # CCATT Pts: _____ Total # on MV_____ Total # of Crew Members: _____ Total Flight Hours for MSN: _____		Scheduled/First CCATT Show Time:_____ MSN #: _____ MDS: _____ Configuration:	
Ensure team members are annotated below by name and rank. Shift OIC/NCOIC are denoted by (*).					
DOC(s):		RN(s):		RCP(s):	
Medical Readiness					
All UTC personnel are current in AFI 41-106 UTC and AFSC Readiness Requirements				YES / NO	

MISSION PREPARATION	N/A	1	2	3
Crew on Time with Required Items				
Duty/Rest Cycle				
PREFLIGHT	N/A	1	2	3
AE Coordination (O2 / Electrical / Load Plan / Allowance Standard / AWIS				
Controlled Substances (NARCs)				
Intel Brief/FCIFs/Sq Read Files				
Allowance Standard (PMI Tracking / Pre-Flight Checks)				
Additional Items (Cartridges / Refrigerator Meds / Special PMI)				
RECEIVING PATIENT(S)	N/A	1	2	3
ERPSS Coordination (Equipment, Comms, O2)				
Hand Off(s)				
Patient Packaging				
Additional Medications / Fluids / Blood				
GRND TRANSPORT / ENPLANING	N/A	1	2	3
Patient Care				
Patient Safety (Team Coordination / CRM)				

	N/A	1	2	3
Operational Risk Management (Aircraft Ground Ops)				
Verify Oxygen and Electrical Configuration				
Tank Transfer / Plug-in Electrical				
Cabin Secured (Patient / Team / Gear)				
Safety (Rings, Gloves, Flightline, etc.)				
ASCENT	N/A	1	2	3
Communication with AE				
Patient Observation				
CRUISE	N/A	1	2	3
Altitude Adjustments (ETT Cuff / IBP / Pressure Bags)				
Patient Care				
Documentation (3899L)				
DESCENT	N/A	1	2	3
Communication with AE				
Coordinate Ground Requirements				
Observation of Patients				
GRND TRANSPORT / DEPLANING	N/A	1	2	3
Patient Care				
Patient Safety (Team Coordination / CRM)				
Operational Risk Management (Aircraft Ground Ops)				
Tank Transfer / Unplug Electrical				
Allowance Standard Recovery				
DELIVER PATIENT(S)	N/A	1	2	3
ERPSS Coordination				
Hand Off(s)				
Submit Documents				
Unpackage Patient and Sanitize PMI				
Medication and Blood Product Return / Disposal				
POST MISSION	N/A	1	2	3
AEOT/AE Coordination				
Allowance Standard / PMI (Secured / Restocked / Charging)/Replace Broken				
Debrief				

AIRCRAFT OPERATIONS	N/A	1	2	3
Emergencies (EPOS Use)				
AE Integration (changes on patient status)				
Engine Running On/Off Load Procedures				
Rotary Wing Ops				
MISSION IRREGULARITIES				