# BY ORDER OF THE SECRETARY OF THE AIR FORCE

#### AIR FORCE MANUAL 10-2909

### 13 MARCH 2019



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Operations

AEROMEDICAL EVACUATION

AEROMEDICAL EVACUATION (AE) EQUIPMENT STANDARDS

### COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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#### **PURPOSE**

This manual implements Air Force Policy Directive 10-29, *Worldwide Aeromedical Evacuation Operations*. This is a specialized publication intended for use by Airmen who have graduated from technical training and work in aeromedical evacuation. It applies to Regular Air Force (RegAF) and Air Force Reserve Component (ARC) personnel who work within the AE En Route Care (ERC) systems that are working with AE Patient Movement Items (PMI) and Non-PMI equipment. This publication does not apply to the United States Space Force (USSF). Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. The authorities to waive wing/unit level requirements in this manual are identified with a Tier ("T-0, T-1, T-2, and T-3") number following the compliance statement. See DAFI 33-360, *Publications and Forms Management*, 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.

This manual requires the collection and or maintenance of information protected by the Privacy Act (PA) of 1974. The authorities to collect and or maintain the records prescribed in this publication are Title 10 *United States Code*, Chapter 857 and Executive Order 9397, *Numbering System for Federal Accounts Relating to Individual Persons*, 30 Nov 1943. Forms affected by the

PA have an appropriate PA statement. This manual is to be used in conjunction with Air Force Manual (AFMAN) 41-209, *Medical Logistics Support*, AFMAN 48-107 V1, *En Route Care and Aeromedical Evacuation Medical Operations*, AFMAN 48-107 V2, *En Route Critical Care*, AFMAN 11-2AE V1, *Aeromedical Evacuation Aircrew Training*, AFMAN 11-2AE V2 *Aeromedical Evacuation Aircrew Evaluation Criteria*, AFMAN 11-2AE V3, *Aeromedical Evacuation Operations Procedures*, and Air Force Research Laboratory; *Safe to Fly Matrix, Status Report On Medical Materiel Items Tested* and *Evaluated For Use In The USAF Aeromedical Evacuation (AE) System*, and *AE Medical Equipment Compendium* and *Combined Initial Capability Documents (ICDs)*. Refer recommended changes and questions about this publication to the OPR using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847 from the field through the appropriate functional chain of command through 847 Central website: https://cs2.eis.af.mil/sites/12797/SitePages/847%20Central.aspx.

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**

This interim changes revises AFMAN 10-2909 by: (1) clarifying existing guidance information; (2) updating directive publication and referenced web link locations; (3) updating tiering as required.

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### Chapter 1

#### **GENERAL**

- **1.1. Overview.** This manual provides guidance on medical equipment that has completed airworthiness testing through the Aeromedical Test Lab and have Safe-to-Fly (StF) certification on both fixed and rotary wing aircraft. Use this manual with the *AE Medical Equipment Compendium and Combined (ICDs)*, which provides a comprehensive listing of medical equipment and standardized methods for accomplishing preflight, function checks, and safe operations of equipment.
  - 1.1.1. All medical equipment will be tested, deemed airworthy and approved for use prior to use. A specific test protocol establishing test and evaluation methods is developed for each piece of equipment. Tests include altitude/rapid decompression, vibration, electromagnetic interference and in-flight performance. In addition, explosive vapor testing has been added to all applicable equipment to ensure safety of operation in a Fuel Vapor Area (i.e. any refueling aircraft such as the KC-135). (T-1)
  - 1.1.2. Medical equipment and supplies are vital to the AE mission. AE equipment must operate under constantly changing and hazardous flight conditions not encountered in fixed facilities. It is essential Aeromedical Crewmembers (AECMs) know the capability and performance limitations of each specific equipment item. (T-2)
    - 1.1.2.1. Air Mobility Command (AMC), Surgeon General (SG) Medical Logistics Readiness Branch (AMC/SGXM) is the AF AE medical equipment program manager and the gatekeeper for all AE items to be StF tested by Air Force Life Cycle Management Center Aeromedical Test Lab (AFLCMC/WNU).
  - 1.1.3. Newly fielded AE medical equipment will be implemented for use upon delivery from AMC/SGXM, receipt of the ICD from AMC Aircrew Standardization/Evaluation, Aeromedical Evacuation Branch, (AMC/A3VM), and the equipment training plan document from AMC Aeromedical Operations and Training Branch (AMC/A3TM). Upon receipt of all three items, RegAF and deployed units have **90** days and ARC units have **180** days to implement use of the equipment. **(T-2)**

## 1.2. Key Words Explained.

- 1.2.1. "Will" and "Shall" indicate a mandatory requirement.
- 1.2.2. "Should" indicates a preferred, but not mandatory, method of accomplishment.
- 1.2.3. "May" indicates an acceptable or suggested means of accomplishment.
- 1.2.4. "NOTE" indicates operating procedures, techniques, etc., that are considered essential to emphasize.

### Chapter 2

#### **ROLES AND RESPONSIBILITIES**

- 2.1. Aeromedical Evacuation Squadron (AES) Commanders and En Route Patient Staging System (ERPSS) Commander (CC) and/or Equivalent Level CC at Deployed Locations. (T-3)
  - 2.1.1. Ensures each assigned member supporting AE elements receives training on the applicable equipment contained in the AE Medical Equipment Compendium and Combined ICDs.
  - 2.1.2. Ensures a copy of this publication and *AE Medical Equipment Compendium and Combined ICDs* is available on each individual AE mission, staging location, each individual supporting medical Unit Type Code (UTC) and determine further distribution, as necessary.
  - 2.1.3. Appoint property custodian to support Medical Logistics in the requisition, management, accountability and maintenance of supplies and equipment in using activities.

### 2.2. Property Custodian. (T-3)

- 2.2.1. Maintain and monitor equipment using activity cost center with the host medical treatment facility (MTF).
- 2.2.2. Be the responsible property officer for the unit as designated by the organization commander.
- 2.2.3. Maintain equipment inventory records and ensure current authorized and in-use assets are recorded on the Custody Receipt/Locator List.
- 2.2.4. Ensure RegAF units submit operational AE In-Flight Kit (IFK) re-supply and equipment requests to the host MTF or base supply, depending on item type. ARC units will submit and coordinate re-supply requests for operational kit supplies to AMC/SGXM per the AMC/SG Operational Kit Support Program Concept of Operations located on the following links for UTC/FFQDM -IFK https://cs2.eis.af.mil/sites/12956/AFKN Docs/Forms/AE%20FFQDM%20TTP.aspx and UTC FFCC4-Critical Air **Transport** (CCATT) Care Team https://cs2.eis.af.mil/sites/12956/AFKN Docs/Forms/CCATT%20FFCC4%20TTP.aspx NOTE: AMC/SGXM does not support refrigerated or narcotics item requests IAW the AMC/SG Operational Kit Support Program. These items must be obtained from the host MTF.
- 2.2.5. Accomplish necessary coordination with appropriate base activities such as Medical Logistics, Medical Maintenance, Accounting and Finance, Base Contracting, and Base Supply as appropriate.
- 2.2.6. Submit all materiel complaints through the base MTF, according to AFMAN 41-209 if the item is part of an operational AE IFK, notify the UTC/FFQDM Pilot Unit organizational e-mail: 375 AE pilot Program <a href="mailto:aepilotprogram@us.af.mi">aepilotprogram@us.af.mi</a> and the Manpower and Equipment Force Packages (MEFPAK) Responsible Agency AMC/SGXM organizational e-mail: <a href="mailto:AMC.SGXM@US.AF.MIL">AMC.SGXM@US.AF.MIL</a>. IAW AFI 10-401, Air Force Operations Planning and Execution. NOTE: Request assistance from the MTF prior to forwarding request for assistance to the MAJCOM.

2.2.7. Receive initial training and follow-on training in accordance with AFMAN 41-209.

# 2.3. Equipment Responsibility.

- 2.3.1. The host base medical equipment maintenance activity provides organizational maintenance for all AE medical equipment as outlined in AFI 41-201, *Managing Clinical Engineering Programs*. This includes initial inspections, preventive maintenance inspections, calibrations, repairs, modifications, incident investigations, equipment defect reporting, and disposal. (T-3)
  - 2.3.1.1. All AE certified and PMI equipment will have the AF Form 4033, *PMI/AE Certification Label*, and the DD Form 2163, *Medical Equipment Verification/Certification*. Equipment that has potential to be used in a Tri-Service environment including AE, PMI, and WRM will have DD Form 2163 affixed after completing scheduled maintenance.
- 2.3.2. Initial issue and refresh (modernization) of medical equipment for the operational AE IFK will be furnished by the PMI Program Office, AMC/SGXM, and will be maintained on accountable records at the host base Medical Equipment Management Office (MEMO)/MTF on an account with designation XX5881. (T-3) Biomedical equipment maintenance services support will be provided by the supporting activity and/or regional Medical Equipment Repair Center (MERC). (T-3) The unit of the aircrew with custody of the aeromedical evacuation equipment is responsible for establishing an appropriate Memorandum of Understanding and/or Memorandum of Agreement (MOA) with the host MTF in accordance with DoD Instruction 4000.19, *Support Agreements*. An expense for normal repair and/or replacement due to loss/damage is the responsibility of the unit. AMC/SGXM will provide the initial outfitting quantities of the equipment, program for replacement when a change in the make and or model is designated, and manage system-wide modifications to equipment. (T-3) For re-supply process see para 2.2.4.
- 2.3.3. The unit AE medical equipment section at home station is responsible for user maintenance of assigned AE operational inflight kits. This includes establishing procedures to ensure monitor/defibrillator batteries are properly conditioned and annotated, ensuring proper operation and use of equipment, cleaning, minor operational adjustments, and replacement of consumable accessories. They also ensure that all mission-assigned equipment is within standards and: (T-3)
  - 2.3.3.1. Maintain equipment in accordance with this guidance, AFMAN 41-209, and AE Medical Equipment Compendium and Combined ICDs.
  - 2.3.3.2. Ensure all medical equipment is properly scanned into PMI-ATS. Follow guidelines established in the PMI-ATS User guide at the following link: <a href="https://usaf.dps.mil/sites/amcsg/sgx/sgxl/SitePages/Home.aspx">https://usaf.dps.mil/sites/amcsg/sgx/sgxl/SitePages/Home.aspx</a>.
  - 2.3.3.3. Within calibration requirement dates and that this date will not be exceeded during the planned mission scenarios. These dates are recorded on the DD Form 2163, or equivalent, affixed to the equipment.
  - 2.3.3.4. Made available for preventive maintenance inspections and calibration verification as required by the local Biomedical Maintenance Equipment Technician (BMET).

- 2.3.3.5. Maintained in mission-ready status, to include: calibrated, charged, cleaned, and having required equipment accessories.
- 2.3.3.6. Meets the precautions and guidance of the infection control program, outlined in AFI 44-108, *Infection Prevention and Control Program*.
- 2.3.3.7. Identified with an AMC/SGXM PMI-ATS bar code label and passive Radio Frequency Identification tag in accordance with AFMAN 41-209.
- 2.3.3.8. AE units and other medical elements handling PMI (except in-garrison Critical Care Air Transport Team (CCATT) crews) will track PMI assets leaving and entering their facilities in PMI-ATS in accordance with AFMAN 41-209.
- 2.3.4. The AE crew and/or qualified AE personnel is responsible for performing an operational preflight of medical equipment within 24 hours prior to mission launch or assuming alert posture. An operational preflight is a complete and thorough check of the condition and status of medical equipment. (**T-3**) *NOTE:* An Operational Preflight on aircraft power is performed on medical equipment that left home station and/or 24 hours has passed since last Operational Preflight (i.e. off-station trainers, typhoon evacuations). A functional check is not required (if a preflight was accomplished on aircraft power).
- 2.3.5. Mission assigned AECMs must complete a function check, of the medical equipment, on the mission's aircraft prior to boarding patients. A function check is an abbreviated assessment of the medical equipment on aircraft power and verifying presence of each piece of equipment, IAW AE Medical Equipment Compendium and Combined ICDs, and/or AE Checklist Insert B. (T-3). NOTE: If ground support has completed the full equipment preflight check prior to aircrew arrival then the mission assigned crew must, at a minimum, perform a function check at the aircraft.
  - 2.3.5.1. AECMs must ensure all medical equipment is scanned using the applicable status RDY/OUT/QA/DRMO into PMI-ATS to identify location and personnel assuming accountability. (**T-3**) Follow guidelines established in the PMI-ATS user's guide for user/aircrew operations. See link in paragraph 2.3.3.2.
  - 2.3.5.2. The mission assigned AE crew is responsible for the actual infection control cleaning, maintaining and inventorying of the medical equipment. At location away from home station the AE crew is responsible for storing their medical equipment.
- 2.3.6. The mission assigned Critical Care Air Transport Team (CCATT) crew is responsible for the actual infection control cleaning, maintaining, inventorying, and storing their medical equipment. (T-3)
  - 2.3.6.1. CCATT crew performs an Operational Preflight on all medical equipment that accompanies patients to the aircraft and prior to mission launch. (**T-3**)

# 2.4. Equipment Accountability.

2.4.1. Per Department of Defense Instruction 6000.11 (DoDI 6000.11), *Patient Movement*, the Commander United States Transportation Command (USTRANSCOM), serves as the DoD single manager for Patient Movement and PMI. Per Joint Publication (JP) 4-02, *Joint Health Service*, AMC/SG, SGX executes the PMI program and functions as the PMI Program Management Office.

- 2.4.2. All assigned medical equipment will be kept in a mission ready status and will be maintained on host base Defense Medical Logistics Standard Support (DMLSS) records IAW AFMAN 41-209 to ensure proper asset accountability, quality assurance and maintenance histories. (T-3) All AE IFK operational PMI equipment will be assigned to a DMLSS account number identified as XX5881 in accordance with AFMAN 41-209. (T-3) All other medical or non-medical equipment and maintenance significant assets, to include training assets, will be maintained on a separate equipment account. (T-3)
- 2.4.3. All supplies and equipment assigned to a War Reserve Material (WRM) project are owned by the Medical Dental Division until deployed, and will be maintained on DMLSS WRM records IAW AFMAN 41-209. (T-2)
- 2.4.4. When a UTC is required to support training, follow procedures in AFMAN 41-209 and contact AMC/SGXM to request loan of WRM and complete a MOA. While this equipment may be temporarily loaned and used for training, it is a deployable asset; therefore, it will not be marked "For Training Use Only" or other similar wording. If an item is not serviceable when received, it will be turned in for evaluation to the host medical equipment maintenance activity for investigation, and AMC/SGXM. (T-3)

### Chapter 3

#### **OPERATIONS**

**3.1. Safety.** Safety is paramount to ensure that crew, equipment and patients are not injured or damaged. See AFI 11-2AE V3 and AFI 48-307 V1.

### 3.2. Equipment Waiver Process.

- 3.2.1. At times, patient medical requirements may necessitate the use of non-certified/non-allowance standard medical equipment that is not provided in the allowance standard (AS) and has not been approved for flight.
  - 3.2.1.1. The AE Medical Equipment Compendium and Combined ICDs and respective equipment user's manual provides general guidance to safely secure and monitor frequently used/approved PMI and non-certified/non-allowance standard medical equipment and can be located in the Electronic Flight Bag (EFB) and/or Aircrew Publication

    Library:

    https://cs2.eis.af.mil/sites/12679/Aircrew%20Pubs%20Library/Forms/Better.aspx?

https://cs2.eis.af.mil/sites/126/9/Aircrew%20Pubs%20Library/Forms/Better.aspx?

RootFolder=%2fsites%2f12679%2fAircrew%20Pubs%20Library%2fMaster%5fLibrary%5fVerified&FolderCTID=0x01200021370D19BF5D9F459D8FD907C237955

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- 3.2.1.2. For a listing of approved medical equipment, refer to Air Force Research (this Laboratory's StF matrix link is only updated periodically): http://www.wpafb.af.mil/stf/ documents StF or for https://cs2.eis.af.mil/sites/10567/Approved%20Items/Forms/AllItems.aspx. *NOTE:* In order to prevent mission delays, verbal waivers from HO AMC/A3VM are authorized with written documentation completed as soon as practicable.
- 3.2.2. HQ AMC/A3VM is the waiver authority for non-certified/non-allowance standard medical equipment during operational and contingency patient moves. Waiver requests are routed as follows:
  - 3.2.2.1. Hospital/MTF notifies the appropriate Patient Movement Requirements Center (PMRC).
  - 3.2.2.2. Validating flight surgeon (VFS) makes the medical recommendation for use of non-certified equipment and PMRC contacts appropriate Command and Control (C2) agency.
  - 3.2.2.3. C2 agency contacts 618 AOC (TACC) AE Cell and AE Cell contacts HQ AMC/A3VM.
  - 3.2.2.4. HQ AMC/A3VM consults with the AE Equipment Lab during their hours of operation.
  - 3.2.2.5. HQ AMC/A3VM approval/disapproval waiver is sent back to the AE C2 through the TACC AE Cell. The AE C2 then makes the following notifications to PMRC and Aeromedical Evacuation Control Team (AECT).

- 3.2.2.6. PMRC and/or AECT advises the flight crew and specialty team of the known operational limitations of the equipment and the possible effect this equipment may have on the patient's/aircraft status in-flight. Notify ground support teams, if applicable.
- 3.2.2.7. PMRC will input waiver information into the USTRANSCOM Transportation Command Regulating and Command & Control Evacuation System (TRAC2ES).
- 3.2.2.8. Medical Crew Director (MCD) obtains waiver, for specific mission, prior to use of non-certified/non-allowance standard equipment onboard the aircraft. The MCD must inform the flight crew when waived medical equipment is used and any characteristics that may affect aircraft systems. (T-3)
- 3.2.3. <u>Patient Movement Clinical Coordinators (PMCCs)</u> and AECMs must ensure that equipment brought to the aircraft from originating hospitals is either StF or approved with an A3VM waiver. (**T-1**)
- 3.2.4. Long-term (permanent) waivers to carry non-certified equipment will be initiated by the requester with coordination between HQ AMC/A3V and AMC/SGX. HQ AMC/A3 is the approval authority for long-term waivers. (**T-1**)

# 3.3. Minimum Equipment and Supplies.

- 3.3.1. AECMs are responsible for all AE medical supplies and equipment. AE IFK, Packaging Guide/AS establishes a standardized packaging guide for all medications, supplies, and equipment carried in the AE IFK. Each unit is provided a minimum of two operational IFKs. Each AE IFK is comprised of two increments. Increment one supports 1-25 patients. Increment two is added to support 26-50 patients.
  - 3.3.1.1. The Chief Nurse (CN) and/or Squadron CC is the final authority to determine which increment best meets patient care requirements and can increase or decrease medication and supply quantities to meet mission requirements, however notification to theater C2 must be communicated. Written justification to AMC Surgeon General Operations Branch (SGK) and HQ AMC/A3VM within 60 days of the change must be provided. (T-3)
- 3.3.2. AECMs will use the AE IFK 887A AS/pack-out guide to inventory the kit and when completed, turn in the completed form to the AE equipment management section. Units will not deviate from the medical equipment standard without concurrence from HQ AMC/A3VM. Unit procedures will be established to replenish medications, equipment, supplies and ensure proper equipment maintenance at home and remain overnight stations. Units download the most current AE IFK 887A AS/pack-out guide on the first day of each quarter (Jan, Apr, Jul and Oct) from the following link. (T-1)
  - 3.3.2.1. Personnel can download and review pack-out guides, packaging guides and allowance standard at: <a href="https://medlog.us.af.mil/apps/asms/">https://medlog.us.af.mil/apps/asms/</a>
- 3.3.3. When the IFK is formally tasked for deployment, both increments will be deployed. (**T-2**)

# 3.4. Minimum Equipment List For Flight:

- 3.4.1. Each mission has unique equipment requirements based on aircraft type, available aircraft systems, distances/times and the types of patients being airlifted and the frequency of urgent patient movement requests. In order to ensure a minimum level of equipment on all patient flights, **Table 3.1** list the required items that will be carried.
  - 3.4.1.1. Waiver authority for minimum equipment to be carried during Aeromedical Readiness Missions (ARMs) and Contingency Exercise Training Missions (CETMs) can be referenced in AFMAN 11-2AEV1.
- 3.4.2. Minimum equipment waivers are not required for AE patient movement on opportune aircraft if utilizing AS 887A, 887C or 887F and notification to theater C2.

Table 3.1. Minimum Medical Equipment for All Patient Flights.

AE Minimum Equipment	C-17	C-130	KC-135	C-21
Electrical Cable Assembly Set (ECAS)				
Cardiac Monitor/Defibrillator	X	X	X	X
Continuous/Portable Suction Unit	X	X	X	
In-Flight Kit 1	X	X	X	X1
IV Infusion Pump	X	X	X	X
Oxygen	75L	X3	X3	X2
Vital Signs Monitor	X	X	X	
Frequency Converter	X	X	X	
Spectrum ®				X4

#### NOTES:

- 1. Units will use AE IFK AS 887F (small aircraft IFK)
- 2. Alternate O2 and suction source must be brought on without Spectrum ®.
- 3. Utilize NPTLOX/PTLOX. Determine amount. (Minimum oxygen calculations, add 1L for anything under 5Ls.
- 4. Only necessary on missions with a litter patient requirement.
  - 3.4.3. The Squadron CC/Director of Operations (DO)/CN shall be kept appraised of unit's ability to meet minimum equipment requirements by the medical equipment section. (T-3)
  - 3.4.4. Authorized controlled medications list is established by HQ AMC/SGK. See AFI 11-2AEV3.

### 3.5. Equipment Malfunction/Failure.

- 3.5.1. Notify local or unit MAJCOM/A3 supported Biomedical Equipment Maintenance services support as soon as possible of unusual or repeated equipment failure and safety incidents.
- 3.5.2. Equipment Malfunction Procedures: The first responsibility is the safety of the aircrew and patients. Once the emergency caused by the equipment failure is under control the following actions need to be taken: **(T-1)** 
  - 3.5.2.1. Sequester all equipment and supplies that interfaced with the malfunctioning piece of equipment. For example, if a ventilator malfunctions, sequester the ventilator, Electrical Cable Assembly System cord, frequency converter, oxygen/air hose, and Next-generation Portable Therapeutic Liquid Oxygen (NPTLOX) unit. *NOTE:* Do not change any settings on the equipment or disconnect any equipment adjuncts/power supplies, unless required to make it safe. This is important for the BMET to try to replicate the issue.
  - 3.5.2.2. Complete AF Form 4449, *En Route Care Equipment Malfunction Report Tag*, (or only if unavailable complete AFTO Form 350, *Repairable Item Processing Tag*), and tag the equipment that malfunctioned (include a statement that the equipment failed while in use on a patient if appropriate).
  - 3.5.2.3. Complete a DD Form 2852, Aeromedical Evacuation Event/Near Miss Report, with a detailed account of the malfunction. Include the name of the equipment's owning unit, Equipment Control Number, serial number and enough details in the report so that the circumstances and situation surrounding the malfunction can be reproduced in a lab, if necessary. Provide circumstances leading to the event and include any pertinent information such as: oxygen source, patient activity, turbulence, cabin altitude, trouble-shooting attempted, etc. Also provide names of the individuals' involved and contact information. Submit the form to the unit's Patient Safety Monitor for entry into the Patient Movement Quality Report (PMQR) in TRAC2ES (if not available then use Joint Patient Safety Reporting) (JPSR). <a href="https://patientsafety.csd.disa.mil/">https://patientsafety.csd.disa.mil/</a>
  - 3.5.2.4. Turn in the malfunctioning piece of equipment and all sequestered interfacing equipment to the same host medical equipment maintenance activity or MTF at the end of the mission. *WARNING:* Verbal communication must be accomplished during the hand off of malfunctioned equipment, interfaced equipment and supplies to prevent items from being cycled back into patient care circulation before an equipment investigation is completed. *NOTE:* BMETs report equipment defects IAW AFI 41-201, *Managing Clinical Engineering Programs. NOTE:* MERC will input data on OF 380 (or equivalent), *Reporting and Processing Medical Materiel Complaints Quality/Improvement Report* and notify the MRA, AMC/SGXM. Entry of OF 380 on-line alerts Air Force Medical Operations Agency (AFMOA) of the incident. AFMOA will provide MERC with disposition action direction. Senior BMET located at MERC, will perform an incident investigation to determine the cause of the malfunction. If additional StF testing is required, AMC/SGXM will forward authorization to AFLCMC/WNU Aeromedical Test Lab for further evaluation and facilitate shipping arrangements. (T-3)

- 3.5.2.5. When equipment malfunction affects the aircraft, notify the Pilot in Command (PIC) and provide details of the incident to facilitate mishap reporting and fill out the Aviation Safety Action Program (ASAP) form via the flight safety link: <a href="https://asap.safety.af.mil">https://asap.safety.af.mil</a> (to be forwarded to wing safety). (T-2)
- **3.6. Resource Protection.** Resource protection is the responsibility of all Air Force personnel; however, medical material specialists, because of the very nature of their job, must be particularly sensitive to the protection of material for which they are responsible, IAW AFMAN 41-209.
  - 3.6.1. Medical materiel is susceptible to theft, vandalism, or unintentional damage; therefore, procedures to prevent such occurrences will be established for all units. (**T-3**)
  - 3.6.2. Medical equipment supplied with protective cases will be kept in its case except when in use or when circumstances or maintenance dictate otherwise. Equipment items will be protected to preclude them from being accidentally damaged or destroyed. (**T-3**)
  - 3.6.3. Equipment items will be permanently bar-coded to identify the unit. This marking should be coordinated with the host MTF and accomplished so as to not deface the equipment. **(T-3)**
- 3.7. Recommended changes to the AS should be emailed to the appropriate Pilot Unit and courtesy copy sent to the AMC/SGXM organizational e-mail: <u>AMC.SGXM@US.AF.MIL</u>.

JOSEPH T. GUASTELLA Jr., Lt Gen, USAF Deputy Chief of Staff, Operations

#### **Attachment 1**

### GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

### References

DAFI 33-360, Publications and Forms Management, 21 Jul 21

DoDI 6000.11, *Patient Movement*, 22 June 2018

JP 4-02, Joint Health Services, 11 Dec 2017

AFI 10-401, Air Force Operations Planning and Execution, 7 Dec 2006

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

AFMAN 11-2AE Vol 1, Aeromedical Evacuation Aircrew Training, 4 Jan 2109

AFMAN 11-2AE Vol 2, Aeromedical Evacuation Aircrew Evaluation Criteria, 25 Oct 2018

AFMAN 41-209, Medical Logistics Support, 06 Oct 2014

AFI 11-2AE Vol 3, Aeromedical Evacuation Operations Procedures, 15 Aug 2014

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

AFI 41-201, Managing Clinical Engineering Programs, 10 Oct 2017

AFI 44-108, Infection Prevention and Control Program, 11 Dec 2014

AFI 48-307 Vol 1, En Route Care and Aeromedical Evacuation Medical Operations, 9 Jan 2017

AFI 48-307 Vol 2, En Route Critical Care, 10 Jan 2017

AFPD 10-29, Worldwide Aeromedical Evacuation Operations, 13 Feb 2019

Aeromedical Evacuation In-Flight Kit Packaging Guide

AE Medical Equipment Compendium and Combined Initial Capability Documents

Air Force Research Library Safe to Fly Matrix

Status Report On Medical Materiel Items Tested and Evaluated For Use In The USAF Aeromedical Evacuation (AE) System

### Adopted Forms

AF Form 847, Recommendation for Change of Publication

AF Form 4033, PMI/AE Certification Label

AF Form 4449, En Route Care Equipment Malfunction Report Tag

AFTO Form 350, Repairable Item Processing Tag

DD Form 2163, Medical Equipment Verification/Certification

DD Form 2852, Aeromedical Evacuation Event/Near Miss Report

OF 380, Reporting and Processing Medical Material Complaints Quality Improvement Report

# Abbreviations and Acronyms

**A3**—Director of Operations

**AE**—Aeromedical Evacuation

**AECM**—Aeromedical Evacuation Crewmember

**AES**—Aeromedical Evacuation Squadron

AFLCMC/WNU—Air Force Life Cycle Management Center Aeromedical Test Lab

**AFI**—Air Force Instruction

**AFMOA**—Air Force Medical Operations Agency

**AMC**—Air Mobility Command

**ARC**—Air Reserve Component

**ARM**—Aeromedical Readiness Mission

**AS**—Allowance Standard

**ASAP**—Aviation Safety Action Program

**BMET**—Biomedical Maintenance Equipment Technician

C2—Command and Control

**CCAT**—Critical Care Air Transport Team

**CETM**—Contingency Exercise Training Mission

**DMLSS**—Defense Medical Logistics Standard Support

**DO**—Duty Officer

**ERC**—En Route Care

**ERPSS**—En Route Patient Staging System

**EFB**—Electronic Flight Bag

**ICD**—Initial Capability Document

IFK—In-Flight Kit

JPSR—Joint Patient Safety Report

**MAJCOM**—Major Command

**MEFPAK**—Manpower and Equipment Force Packages

MCD—Medical Crew Director

**MEMO**—Medical Equipment Management Office

**MERC**—Medical Equipment Repair Center

**MOA**—Memorandum of Agreement

MTF—Medical Treatment Facility

**NPTLOX**—Next-generation Portable Therapeutic Oxygen unit

**OG/CC**—Operations Group Commander

**OPR**—Office of Primary Responsibility

**PA**—Privacy Act

PIC—Pilot In Command

**PMI**—Patient Movement Item

**PMI ATS**—Patient Movement Asset Tracking System

**PMQR**—Patient Movement Quality Report

**PMRC**—Patient Movement Requirement Center

**RegAF**—Regular Air Force

**SG**—Surgeon General

**StF**—Safe To Fly

TACC—618 Air Operations Center (Tanker Airlift Control Center)

**TRAC2ES**—Transportation Command Regulating and Command & Control Evacuation System

**UTC**—Unit Type Code

**VFS**—Validating Flight Surgeon

WRM—War Reserve Material

### **Terms**

**Aeromedical Evacuation** (**AE**)—AE provides time-sensitive en route care of regulated casualties to and between medical treatment facilities, using organic and/or contracted aircraft with medical aircrew trained explicitly for this mission. AE forces can operate as far forward as aircraft are able to conduct air operations, across the full range of military operations, and in all operating environments.

**Aeromedical Evacuation Control Team (AECT**—)—A cell within the air operations center and one of the core teams in the air mobility division. Provides command and control for theater aeromedical evacuation elements. It is responsible to the director of mobility forces for current aeromedical evacuation operational planning and mission execution. The aeromedical evacuation control team analyzes patient movement requirements; coordinates airlift to meet aeromedical evacuation requirements; tasks the appropriate aeromedical evacuation elements including special medical requirements, when necessary; and passes mission information to the patient movement requirement center.

**Aeromedical Evacuation Crewmember** (**AECM**—)—Qualified Flight Nurses (FN), Aeromedical Evacuation Technicians (AET), performing AE crew duties.

Air Force Life Cycle Management Center Aeromedical Test Lab (AFLCMC/WNU)—Responsible for testing all medical devices that are used on aeromedical evacuations to ensure they will safely operate on the plane.

**Air Reserve Component (ARC)**—The Components of the USAF that includes Air Force Reserve and Air National Guard.

**Allowance Standard (AS)**—An equipment allowance document that prescribes basic allowances of organizational equipment and provides the control to develop, revise or change Equipment Authorization Inventory Data.

**Aviation Safety Action Program (ASAP)**—Reporting program to enhance aviation safety through the prevention of accidents and incidents. Its focus is to encourage voluntary reporting of safety issues and event that come to the attention of employees of certain certificate holders.

**Command and Control (C2)**—Exercise of direction and authority over assigned forces by a properly designated command echelon in the accomplishment of the mission.

Manpower and Equipment Force Packages (MEFPAK)—A data system designed to support contingency and general war planning with pre-defined and standardized manpower and equipment force packages.)

**Medical Equipment Management Office (MEMO)**—A functional element within each base Medical Logistics activity responsible for managing medical and non-medical in-use equipment at each MTF. The MEMO is a non-numbered account normally managed by the Medical Logistics Flight Commander.

**Memorandum of Agreement (MOA)**—An agreement that defines areas of responsibility and agreement between two or more parties. MOAs normally document the exchange of services and resources and establish parameters from which support agreements may be authorized.

**Memorandum of Understanding (MOU)**—An umbrella agreement that defines broad areas of understanding between two or more parties.

**Patient Movement Clinical Coordinator (PMCC)**—Deals directly with patients and health care providers and is responsible for maintaining patient information.

**Patient Movement Item (PMI**—)—Items that are required to support a patient during aeromedical evacuation. For this program, PMI is generally confined to those items to be exchanged for patient care during transportation that are critical to sustain aeromedical evacuation operations and maintain medical capabilities.

**Patient Movement Requirement Center (PMRC)**—A joint activity that coordinates patient movement. Is the functional merging of joint medical regulating processes, services' medical regulating processes, and coordination with movement components of patient evacuation.

**Property Custodian (PC)**—An officer, enlisted member or civilian designated by the chief of the service, commander of the unit having the property, MTF Commander or the MTF Commander's designated representative, to maintain custody, care and safekeeping of property used by activities in the organization. The property custodian prepares and forwards requests for equipment and supplies.

618th Air and Space Operations Center/Tanker Airlift Control Center (TACC)—Air and Space Operation Center that controls tanker and airlift forces worldwide through a network of computer systems. Responsible for tasking and controlling operational missions for all activities involving forces supporting US Transportation Command's global air mobility mission. 618 AOC (TACC) is organized into geographic cells consisting of East, West, and Emergency Action Cells. The 618 AOC (TACC) contains the following functions: Mobility Management, Global Channel Operations, Operations Management, Current Operations, Global Readiness, Weather, Logistics Readiness Center, Aerial Port Control Center, International Clearances, and Flight Plans.

**Transportation Command Regulating and Command & Control Evacuation System** (**TRAC2ES**—)—Provide automated capabilities to support patient movement Command and Control (C2), including Patient/Asset Visibility (P/AV). P/AV encompasses In-transit Visibility (ITV), as well as management of lift-bed resources and collaborative decision support for Patient Movement Requests and mission execution within (intra) and between (inter) theaters, commander by geographic Commanders.

**Unit Type Code** (UTC)—A Joint Chiefs of Staff developed and assigned code, consisting of 5 characters the uniquely identify a "type unit."

War Reserve Material (WRM)—Materiel which must be on hand at the time a conflict begins. WRM, when added to peacetime operating stocks and mobility resources must be capable of sustaining combat consumption rates until resupply pipelines can become operative. WRM assets are procured with AFWCF/MDD obligation authority (with the exception of investment equipment) and maintained in AFWCF/MDD-funded inventories.