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Introduction

Aeromedical Evacuation (AE) is a strategic and complex Department of Defense (DoD) mission that provides a pivotal service to the success of each and every DoD operational endeavor. At its core, the AE system is comprised of two distinct components: Intra-Theater Aeromedical Evacuation (a Secretary of Defense (SECDEF) directed Army mission operating within a given theater of operations) and Inter-Theater Aeromedical Evacuation (a United States Transportation Command (USTRANSCOM) mission accomplished with Air Force assets operating within a given theater of operations and globally). Within this system, the Army remains the sole DoD component with dedicated aircraft and crews to perform Aeromedical Evacuation. The Air Force utilizes multi-use aircraft that are designated and then configured with specifically trained personnel and equipment to perform Aeromedical Evacuation. Together, these components provide a critical service that is unmatched anywhere else in the world.

The scope of this Aeromedical Evacuation Campaign Plan 2020 will be limited to the Army’s Intra-Theater Aeromedical Evacuation roles and responsibilities.

As directed by the Vice Chief of Staff of the Army’s (VCSA) Charter, Army Aeromedical Evacuation is a shared responsibility between the Army Medical Department (AMEDD) and Army Aviation. This uniquely directed partnership requires a campaign strategy that supports the DoD Defense Planning Guidance, the Army Strategic Planning Guidance (ASPG), the Army Campaign Plan (ACP), the Army Medicine 2020 Campaign Plan, and the Army Aviation Campaign Plan.

The AE 2020 Campaign Plan (CP) focuses on the operational initiatives of each hierarchical plan and provides a focal map for Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel and Facilities (DOTMLPF) planners, capability developers, materiel developers, and funding strategies (AMEDD and Aviation) through FY20.

The AE 2020 CP emulates, nests, and aligns with the ASPG, AMEDD and Aviation Visions, as well as the ACP end state which is to prevent, shape, and win. The AE 2020 CP also incorporates the major components of Army Medicine 2020 and the Aviation Campaign Plan.

Joint Concept

In the Capstone Concept for Joint Operations 2020, the Joint Force elements are globally postured, combine quickly with each other, and are mission partners to integrate capabilities fluidly across domains, echelons, geographic boundaries, and organizational affiliations. It aims to leverage the distinct advantages our military holds over adversaries so that U.S. Joint Forces, in concert with the other elements of national power, keep America immune from coercion. The Joint Force will protect U.S. national interests, deter and defeat aggression, project power despite anti-access/area denial challenges, defend the homeland, provide support to civil authorities, provide a stabilizing presence, conduct stability operations, and conduct humanitarian, disaster relief, and other operations. The assertion is that through globally integrated operations, the Joint Force will remain able to protect U.S. national interests despite constrained resources. The Military Health System (MHS) strategic plan has as one of its mission elements casualty care, aeromedical evacuation, and humanitarian assistance which calls for maintaining an agile, fully deployable medical force and health care delivery system that can provide state of the art health services anytime, anywhere. In response to this guidance, Army AE must develop and maintain economical but robust and flexible capabilities to ensure health readiness of the force in these challenging Joint conditions and environments.
Army Vision

The Army is globally responsive and regionally engaged; it is an indispensable partner and provider of a full range of capabilities to combatant commanders in a Joint, interagency, intergovernmental, and multinational environment. As part of the Joint Force and as America’s Army, in all that we offer, we guarantee the agility, versatility, and depth to prevent, shape, and win.

The Army Strategic Planning Guidance for 2013 is intended to balance long-term planning with near-term decision making to build the Army of the future. As the Army adapts for the future, it will retain its ability to dominate on land across the range of military operations to prevent and deter aggression and shape the security environment. This will include the use of combined arms, campaign-quality forces, power projection capabilities, and regionally aligned mission-tailored forces.

Army Imperatives

A globally responsive and regionally engaged Army — one building toward a regionally aligned, mission tailored force that can prevent, shape, and win now and in the future — has four imperatives that form the basis of the Army Campaign Plan:

- Provide modernized and ready, tailored land force capabilities to meet combatant commanders’ requirements across the range of military operations.
- Develop leaders to meet the challenges of the 21st century.
- Adapt the Army to more effectively provide land power.
- Enhance the all-volunteer Army.

These imperatives require emphasis of near-term (FY13-15) actions while planning for assumptions within the FY16-20 (and beyond) timeframe. The Army AE CP 2020 incorporates these four imperatives into its five lines of effort to ensure globally responsive and regionally engaged continuity in the continuum of care during intra-theater rotary wing evacuation of critical care patients from point of injury to definitive care at the appropriate medical treatment facility. This strategy supports the Combatant Commander in achieving maximum survival rates of the Joint Force in order to prevent, shape, and win while supporting the CSAs strategic priorities of:

- Develop adaptive leaders for a complex world.
- Build a globally responsive and regionally engaged Army.
- Provide a scalable and ready modern force.
- Strengthen our commitment to our Army profession.
- Maintain our premier all volunteer Army.

The Army Medicine 2020 Campaign Plan (AM 2020 CP) operationalizes the vision of the Army Surgeon General for 2020. It establishes the framework through which the Army Medical Department (AMEDD) will achieve its 2020 end state and ensure its forces remain ready to meet current and emerging Medical Support requirements to Combatant Commanders and Continental United States (CONUS) Sustaining Bases. The AM 2020 CP provides the Commanding General’s broad communication guidance and the context necessary to progress toward the 2020 end state. Campaign Plan End State: A System for Health that enables Ready and Resilient Soldiers, Families, and Communities in order to allow the Army to prevent, shape, and win. The AM 2020 CP is focused on three Lines of Effort (LOE):

- LOE1: Create Capacity: Capabilities and core competencies that optimize healthcare and health
- LOE2: Enhance Diplomacy: Lead the conversation on health and health care delivery
- LOE3: (Main Effort) Improve Stamina: Increase organizational depth and individual resiliency
- LOE4: Improve Organizational and Leader Development: Leaders and Organizations trained and developed to meet future needs

Under LOE1, Create Capacity, the Army AE CP 2020 is aligned with program 1-1.1 “Globally Ready Medical Force” and incorporates LOE4, Improve Organizational and Leader Development, as one of its five LOEs. Under a Globally
Ready Medical Force, Army AE provides medical forces across the range of military operations via five components to ensure a trained and ready force. These five components are force management, manning, training, equipping, and mobilization. In addition, Army AE leverages its best talent, develops high performing organizations, and prepares AE leaders to serve in command and strategic positions to ensure success of the AE mission during decisive operations.

The Army Aviation Campaign Plan encompasses multiple objectives designed to ensure success within the anticipated future operational environment and the broad capabilities the Army will require to successfully accomplish its enduring missions in the 2018-2030 timeframe. The Army Aviation Campaign Plan objectives are:

- Support Army Force Generation (ARFORGEN) with trained and ready Aviation Formations.
- Train and develop professional Aviation Soldiers and leaders.
- Sustain the Aviation Force.
- Develop integrated DOTMLPF solutions for Aviation as part of the Combined Arms Team.
- Resource the Aviation Force.

The Army AE 2020 CP is congruently nested with the Army Aviation CP to ensure effective development, integration, and full spectrum relevance of aeromedical evacuation across Aviation and the Army IAW the VSCA’s Aeromedical Charter dated 14 May 2004. Synchronization between the AE Enterprise and the Aviation Enterprise will be accomplished by:

- Assessing and updating concepts/doctrine, training, leader development, and material development to reflect Aviation Restructure Initiative (ARI) decisions and their effects.
- Both CPs must provide an effective and interdependent roadmap to achieving the Aviation Force of 2020.
- Maintain our collaborative and ‘content management’ processes to achieve concerted action between the AMEDDC&S and United States Army Aviation Center of Excellence (USAACE).
**Vision:** Provide the most technologically advanced Army AE platforms and equipment with highly proficient AE Officers, CC-NRP flight medics, and critical care nurses providing world class advanced trauma patient care and evacuation from POI through Role III while achieving a 95% patient survival rate during combat operations, Defense Support of Civil Authorities (DSCA), and Installation Support.

**Scope:** In addition to providing long-term guidance beyond calendar year 2020, this campaign strategy describes LOEs and programs necessary to guide and synchronize both near and midterm efforts and will be periodically updated for relevance. This strategy pertains to all members of the AE Enterprise and is provided to appropriate commands and agencies with programs and projects pertaining to Army AE. The AMEDD must remain engaged to ensure Aviation efforts are aligned with AMEDD priorities.

**Introduction:** As America enters a period of reduced defense spending, it is imperative that the AMEDD retain its ability to respond quickly to global threats. It is our mission to adapt and continue to provide the right mix of trained, ready AE personnel and state of the art equipment to sustain this effort. The AE 2020 CP supports the operational LOEs and objectives of each aforementioned strategic plan and provides a road map for the AE Enterprise through FY20. The campaign plan includes five primary lines of effort, each with multiple programs and projects.

**LOE1:** Posture AE Formations In Support of Combat Operations, DSCA, and Installation Support

**LOE2:** Improve Strategic Communication, Oversight, and Management of the Shared AE Mission

**LOE3:** Provide a Capable, Modernized, Standardized, Ready, and Tailorable AE Platform

**LOE4:** Access, Develop, and Train Aeromedical Officers to Meet the Challenges of the 21st Century

**LOE5:** Professionalize and Improve Enroute Care for Medical Providers on AE Platforms
**Strategy:** The AE Enterprise synchronizes the efforts of working groups and Integrated Process Action Teams (IPAT) within the AE Integrated Capabilities Development Team (ICDT), Aviation Enterprise, Council of Aeromedical Logistics, Acquisition, and Budget (CALAB), Capabilities Based Assessment (CBA), Capabilities Needs Assessment (CNA), et al. to ensure focused synergy toward resolution of each of the campaign objectives. The strategy ties the efforts of many entities of the AE enterprise into inter-related logical LOEs in order to synchronize all activities to achieve the listed outcomes/objectives in an effective and efficient manner.

Currently, patients who are aeromedically evacuated to a Medical Treatment Facility (MTF) in theater stand a 91% chance of survival. Our challenge remains to professionalize and improve enroute care to achieve at least a 95% survival rate by 2020. Within the Medical Command (MEDCOM), multiple groups are working specific projects to increase survivability rates by addressing pre-hospital patient challenges. However, these efforts are not synchronized to bring their disparate efforts to achieve the goal. Fundamentally, the strategy shifts the point of hospitalization from the MTF to the patient’s point of injury. This can only be accomplished through collective efforts that include the AE platform and aircrew as a vital component of the health support system (HSS). The management and progression of that system must be coherent, synchronized, and prioritized for this strategy to be effective.

The AE mission is a shared responsibility between the AMEDD and Army Aviation. Our goal is to sustain and enable the complete systems integration between the AMEDD and Aviation communities to enhance Soldier survivability on the battlefield. It is critical that these enterprises, as outlined in the 2004 VCSA Charter, meet on a recurring basis to identify and mitigate any capability gaps as they relate to the AE mission. This strategy requires governance from both the Medical and Aviation communities in the form of similar managerial systems across the Army, namely a regularly scheduled Council of Colonels, a General Officer Steering Committee (GOSC), and ultimately the Army Surgeon General. The structure and capability of AE in the Army today is shaped and defended largely through the efforts of our Aviation Branch brethren based upon the analyses provided by the AMEDD.

**MEPD Director’s Intent**

**Purpose:** To provide state of the art AE mission capabilities from point of injury through Role III in order to increase survival rates.

**Key Tasks:**
- Balance force structure to meet DoD demands
- Improve AE strategic oversight
- AE systems integration and life-cycle management
- AE Officer and Leader development
- Professionalization of pre-hospital medicine

**End State:** Army AE maintains America’s trust as an adaptable, capable, expeditionary, and ready force multiplier that enables the combatant commander the ability to respond, prevent, shape, and win while maintaining a 95% patient survival rate.

**LOE1 Posture AE Formations In Support of Combat Operations, DSCA, and Installation Support**

**Campaign Objective Supported:** Balance Force Structure to Meet DoD Demands

**Goal:** Required AE Force Structure exists and is resourced to complete DoD patient evacuation requirements during Combat, DSCA, and Installation Support environments.

**Key Metrics:**
- Adequately address AE force structure utilizing Total Army Analysis (TAA) and Rule of Allocation (ROA).
- Army AE support to other services is addressed in ROA.
- Installation AE support requirements identified and resourced.
- Retain the most operationally capable AE structure.
- Provide the greatest AE combat regeneration capability in Table of Distribution and Allowance (TDA).
LOE1 Programs and Projects:

1.1 TAA & RoA: The Total Army Analysis (TAA) is a phased force structure analysis process that examines the projected Army force from both qualitative and quantitative perspectives, and produces the Army’s Program Objective Memorandum (POM) force. TAA ensures an appropriate balance of ‘type’ forces (all COMPOs) to meet future demands (see AR 71-11 for a complete description of TAA). Air Ambulance Companies are resourced independently within major combat operations or provide Army Support to Other Services (ASOS), and normally would have an independent Rule of Allocation (RoA). Prior to Transformation, MEDEVAC units had a separate and independent RoA. As a subordinate element under the General Support Aviation Battalion (GSAB), a separate RoA for Air Ambulance Companies no longer exists. MEDEVAC demand is still managed to the company level, predicated on workload and demand. Current operational demand is calculated on a geographical basis utilizing the SECDEF’s one hour evacuation mandate. For example, for a two division, land-based fight:

- Pre-Transformation Rules would have allocated 4 x 15-ship units / 60 aircraft
- Post-Transformation Rules allocated 2-3 x 15-ship units / 30-45 aircraft
- Actual peak demand for OEF was 97 aircraft / 6.5 units

This data justifies a separate rule of allocation for MEDEVAC. The AMEDD, via Army Aviation, continues to defend MEDEVAC force structure based upon shared analyses and modeling because a separate RoA does not exist. As resources become scarce and budgets continue to decrease, fiscal uncertainty may require revisiting a separate RoA. The Medical Evacuation Proponency Directorate (MEPD) will continue annual TAA analysis in cooperation with both USAACE & AMEDDC&S to ensure expected demand is identified and resourced.

**Doctrine vs. Reality on Employment**

**DOCTRINAL LAYDOWN:**
- 4 x FSMPs (3 a/c each) in DS role for 24hr operations
- HQ/ASMP (3 a/c) co-locates with one FSMP; provides GS role

**REALITY:**
- Location and number of aircraft required are primarily dependent upon: (1) Population at Risk; (2) Geography IOT support 1-hr requirement

The above scenario requires **20 aircraft** operating from **7 locations** to meet mission requirements

**DOCTRINAL LAYDOWN:**
- 15 a/c total

Graphics are to scale / Locations are representative (not accurate)
1.2 Installation Support: ALARACT 019/2014 – UTILIZATION OF ARMY MEDICAL EVACUATION AIRCRAFT IN SUPPORT OF INSTALLATION TRAINING AREAS was issued on 22JAN14. Reductions in AE operational requirements have resulted in increased availability of Army AE assets available for installation MEDEVAC support. Beginning 01OCT14, Army Commands (ACOM), Army Service Component Commands (ASCC), and Direct Reporting Units (DRU) are authorized to utilize their Army AE aircraft in support of installation training areas to ensure rapid evacuation of injured personnel. The intent is to maximize the utilization of Army AE assets to support installation training requirements while preserving the readiness of Army Air Ambulance Companies. Contract MEDEVAC is authorized to replace Army AE assets as needed or when deemed the most fiscally prudent option for a particular training area. Installation Senior Commanders, in coordination with Installation Management Command (IMCOM) Garrison Leadership, will determine evacuation support requirements and Army AE availability at their respective installations. Senior commanders will develop a comprehensive plan that makes the best use of either Army or contract AE assets. Army AE is the preferred asset to provide MEDEVAC support. ACOMS, ASCC, and DRU shall develop policies to standardize evacuation procedures and reporting. AE support to Military Assistance to Safety and Traffic (MAST) remains suspended.

1.3 Aviation Restructure Initiative (ARI): The ARI is predominantly a fiscally driven effort to align Army Aviation force structure to support the significantly decreasing aggregate Army structure. Army force structure, by design, is determined within the TAA process as described in 1.1 above. However, due to the extreme fiscal challenges created as a result of sequestration and continuing budgetary shortfalls, Army structure reductions have become almost entirely fiscally driven (as opposed to requirement driven). Air Ambulance Company force structure is not immune. Impacts will be existence base driven on par with CAB reductions/elimiinations. However, for Air Ambulance Companies, AMEDD requirements analysis will be a major consideration within any MEDEVAC force reduction decisions and every effort will be made to maintain or retain combat capability. Multiple courses of action are being presented to senior leaders and analysis is ongoing. Once final decisions are made, the MEDEVAC Enterprise will be integral in the execution of the decision.

1.4 TDA Concept Plans: In coordination with the CAB Redesign effort, active component USAAAD TDAs may convert from UH-72s to 6-ship H-60s. The intent is to ensure reversibility by retaining combat capable aircraft and capability in lieu of the less capable ‘permissive environment’ UH-72. If approved, this effort requires complete individual concept plans for each USAAAD. Conceptually, the 6-ship H-60 USAAADs will be standardized for personnel with limited equipment excursion. The expectation is that limited contract maintenance support would continue but unit level scheduled maintenance (and support) would be designed into the unit TDA.

1.5 Army Support to Other Services (ASOS): DoDD 5100.01 Functions of the Department of Defense and Its Major Components directs the Army function to ‘Provide intra-theater aeromedical evacuation.’ Although no follow-on Department of Defense Instruction (DoDI) has been published, this directive assigns intra-theater AE to the Army. The Army theater aviation structure includes two Air Ambulance Companies per GSAB, but no structure has been allocated specific to this directive. If it becomes necessary to advocate for a separate rule within TAA, the ASOS requirement will be addressed at that time. In the interim, Objective 4.4 Joint Patient Movement CBA will include the ASOS demand within its overall analysis.

LOE2 Improve Strategic Communication, Oversight, and Management of the Shared AE Mission

Campaign Objective Supported: Improve Strategic Oversight

Goal: The Army AE Mission has the proper oversight, management, communication, and decision making at the strategic and senior leader levels.

Key Metrics:
- The appropriate funding is POMed for aeromedical equipment requirements.
- Publish revision to Army Regulation 40-60 that outlines funding responsibilities between AMEDD and Army Aviation for AE platforms.
- Publish DoDI to outline requirements for accomplishing the Army’s “intra-theater AE mission” as assigned by DoDD 5100.01.
- Improve Joint Theater Patient Evacuation (JTPE) operations.
- Develop and strengthen partnerships in AE missions.
- Increase MEPD manning to adequately manage AE DOTMLPF initiatives.
- Increase participation in both AE and Army Aviation Enterprises.

LOE2 Projects and Programs:

2.1 Council of Aeromedical Logistics, Acquisition, and Budget (CALAB): A semi-annual AMEDD & Aviation Council of Colonels will provide oversight and guidance for AE mission requirements, acquisition, and budgeting. Participation includes representatives from MRMC, OTSG, Army G8, Aviation PM & TCM, the Consultancy, and MEPD. This council will review and develop recommendations for POM submission in order to ensure adequate and appropriate resourcing for current and future AE requirements.

2.2 Update AR 40-60 (Army Medical Materiel Acquisition Policy): Revisions to AR 40-60 clarify funding and budgetary responsibilities between the AMEDD and Army Aviation. In short, Medical Research and Materiel Command (MRMC) are responsible for medical materiel development while Program Executive Office (PEO) Aviation is responsible for integration (as per VCSA Charter). Procurement responsibilities vary but essentially, procurement within a production MEDEVAC aircraft is the responsibility of the AMEDD through PEO Aviation while procurement of Mission Equipment Package (MEP) items for use in non-production MEDEVAC aircraft is the responsibility of MEDCOM through the MRMC.

2.3 DoDD 5100.01 Functions of the Department of Defense and Its Major Components: In FY11 DODD 5100.01 assigned the Army the function to “Provide intra-theater aeromedical evacuation.” Typically, Department of Defense Directives (DoDD) are followed by Department of Defense Instructions (DoDI) defining ‘how’ the directive is to be carried out. No DoDI has been published for this function and ambiguity remains regarding resourcing, funding, rule of allocation, etc. We will leverage the Joint Evacuation Capabilities Based Assessment and the Global Patient Movement Joint Advisory Board to derive a DoDI outlining specifics of the Army’s Intra-theater AE mission.

Intra-theater MEDEVAC in a theater of operations is very complex when supporting other services, multinational, and host nation partners. A DoDI describing ‘how’ the Army is to execute intra-theater AE per DoDD 5100.01 would better posture the force for AE operations during future conflicts.
2.4 Joint Theater Patient Movement Capabilities Based Assessment (JTPECBA): Combatant Commanders (CCDR) and subordinate Joint Force Commanders (JFC) lack a comprehensive, fully-integrated joint system for the provision of effective enroute care and efficient movement of patients through the levels of care from the POI through a return to duty (RTD) decision or evacuation out of the JOA. The current ‘system’ comprises ad hoc solutions but doctrinal discrepancies remain. A Joint Capabilities Based Assessment (CBA) is ongoing to identify gaps and recommend joint solutions in creating a sustainable joint system. Army is lead agent for the CBA and it is co-chaired by OTSG and the Joint Staff. The intent is the preservation of deployed operational capabilities by effective and efficient movement of patients through the levels of care, as appropriate, from POI to the point where they are either RTD or evacuated out of the JOA.

2.5 Global Patient Movement Joint Advisory Board (GPMJAB): The GPMJAB provides recommendations for global patient movement (PM) policy guidance, processes and equipment standardization, and PM enabling information support systems. It is the DoD SME advisory body to DoD, Federal, State, and Coalition in DOTMLPF (or equivalent processes) to optimize casualty/patient care and safety during movement on all platforms from the point of injury/wounding through final disposition. Goals of the GPMJAB are to:

- Develop standardized Patient Movement Information Support Systems (PM-ISS) for all facets of PM and Enroute care.
- Develop recommendations for the standardization of global PM clinical policy guidance and procedure utilizing best practices and clinical research.
- Synchronize joint standards for policy, training, and equipping for all forces providing PM.
- Provide guidance and support on PM capability for Joint platforms capable of PM, develop visibility for tasking, identify C2, and designate funding line.
2.6 Grow MEPD as DOTMLPF Manager: MEPD represents the AMEDD and TSG and facilitates DOTMLPF actions on all matters pertaining to the strategic DoD directed aeromedical evacuation ‘function.’ That mission has expanded exponentially since transformation; however, MEPD manning has not kept pace. MEPD also serves as the TRADOC Capability Manager (TCM) for the AE MEP and outlines requirements for all AE platforms. These functions require a robust staff of analytic professionals and SMEs. The 2011 MEDCOM Manpower study determined a requirement for four additional full time government service positions within MEPD. None of these positions have been resourced. MEPD remains severely understaffed and overly reliant upon contract support, decreasing annually, to accomplish inherent governmental functions. A concept packet has been submitted to MEDCOM as per procedure, but approval has yet to be attained. MEPD will continue efforts to establish an appropriate staff in order to effectively support AE operations.

2.7 Aeromedical Evacuation Enterprise: Intended to provide maximum information dissemination, coordination, interaction, and issue resolution, the Aeromedical Evacuation Enterprise is a recurring teleconference hosted by MEPD. The Enterprise consists of Core MEDEVAC stakeholders who meet monthly and MEDEVAC Commanders in the field that meet quarterly. An agenda is published beforehand that lists issues for discussion, however, it is not limited to those issues. Minutes and the agenda are published on the MEDEVAC Enterprise Portal for widest dissemination. The Enterprise has been particularly effective in assisting aeromedical related initiatives and topic progress, while establishing general consensus among the community.

LOE3 Provide a Capable, Modernized, Standardized, Ready, and Tailorable MEDEVAC Platform

Campaign Objective Supported: Materiel Systems Integration & Life Cycle management

Goal: Provide state of the art platforms & equipment that are standardized and modular with the latest available technology.
Key Metrics:

- Reduce non-recurring expenses (NRE) and Research, Development, Test, and Engineering (RDT&E) costs for different AE platforms by creating fleet commonality.
- Improve AE platforms and Mission Equipment Package (MEP) through valid requirements documents.
- Document the space required by paramedics and ECCNs to accomplish 100% of their critical medical tasks while providing enroute care.
- Increase the ability to operate AE platforms under adverse conditions.
- Increase the aircraft power by 65% and decrease fuel consumption by 25%.
- Reduce weight and increase AE mission capability through the use of modular medical equipment.
- Increase onboard O₂ capability tailorable to the AE mission requirements.
- Increase aircraft range while maintaining external hoist capabilities.
- Increase AE platform speed, range, and carrying capacity to reduce logistics footprint and meet the Secretary of Defense (SECDEF) one hour evacuation mandate.

LOE3 Programs and Projects:

3.1 Fleet Commonality: The current MEDEVAC inventory includes four separate and distinct aircraft models (UH-60A, UH-60L, HH-60L, and HH-60M) with a mix of materiel solutions within each. A common platform and MEP will standardize the ‘way’ we do business while reducing long-term aviation and medical related NRE and RDT&E costs. Currently, the Life Cycle management of a single system is effectively 1/5th the cost of four separate systems. The Program Director (PD) MEDEVAC will divest all 34 HH-60L from the Army’s inventory by 2017 and will convert all UH-60A aircraft into HH-60L Digitized by 2022. This will leave a common fleet of 617 HH-60L Digitized and HH-60M platforms in the AE inventory.
3.2 Joint Capabilities Integration and Development System (JCIDS) and Update Operational Requirements Document (ORD): No formal JCIDS requirements documents exist which define the aircraft or MEP requirements for AE platforms. All of the current requirements were generated prior to formalizing the JCIDS process and have not been converted or officially 'grandfathered'. This creates funding challenges within the POM process and difficulties in changing or updating specific requirements. Given the ambiguity of the VCSA Charter with respect to specific capabilities development responsibilities, and the absence of a shared (Aviation/Medical) formal capabilities development and integration plan, AE requirements have not been captured within any formal JCIDS documents (e.g., Capability Development Document (CDD), Capability Production Document (CPD)) and a clearly defined process for shared capability development does not exist. As a result, AE capability development and improvement remains complicated and problematic. Preplanned Product Improvement (P3I) responsibilities and the conduct of RDT&E remain ad hoc and apportioned without an approved process and JCIDS reference documents. An IPAT has been directed within the AE ICDT to conduct a Capability Based Assessment (CBA) that will be developed before December 2014. This CBA will drive the development of the Initial Capabilities Document (ICD), which in turn will drive a CDD. Upon approval, this will establish a program of record with entry at Milestone B.

3.3 Aeromedical Evacuation Enroute Critical Care Validation Study (AE2C2VS): The current medical interior system was designed over 20 years ago primarily based on 'transport' requirements with minimum 91W base skills (less than EMT-B at that time). The increased focus on patient care (treatment) and the increase in medical skills and equipment to better care for the patient within the cabin have generated a requirement for improvements in the medical interior design. MEPD is coordinating a study through MRMC and USAARL to define the amount of space required for the Critical Care Flight Paramedic (CCFP) and Enroute Critical Care Nurse (ECCN) to properly treat and monitor patients in combat, installation, and DSCA missions. The results of this study will define the space required to provide advanced enroute treatment and may quantify changes to the current and future platforms to support the medical advancements made by the Army Medical Department in respect to training and equipment. The AE2C2VS will generate data to support new requirements for the Medical Interior. Once requirements can be established, capability developers will have the ability to design a cabin interior that will support the medical provider. The design concept can be validated by the study data. Validation by the end user will ultimately codify the AE2C2VS results and allow further designs and equipment development to be completed, as needed, in the future. The strategic implications and commander's intent for improvements in the pre-hospital system demand reevaluation of the current and future system on a routine basis.
AE2C2VS Timeline

SHORT TERM GOALS

2013
- Identify new tasks and personnel requirements
- Develop the Test Strategy and Test Plan

2014
- Jan – July 2014 complete testing
- Aug 2014 publish results
- Coordinate with PD-MEDEVAC

2015
- Use data from AE2C2VS to establish new requirements for patient/litter management system

2016
- Compare data and tasks performed with placement of new system and storage of patient care items (Monitor)

LONG TERM GOALS

2017
- Query the end user for update and design needs
- Update requirements document

2018
- Identify new tasks and equipment requirements
- Update study data.

2019
- Update storage and seating requirements for patient equipment and care providers

2020
- Evaluate if new study is needed based on change in tasks, personnel, and equipment

AE2C2VS

- Utilizing the current litter systems
- Applying the new Medical Tasks performed by the NRP & ECCN

- Giving the best available care to the Wounded Warrior
- Creating the most effective space to perform mission

The red line tracks hand movement of the medic

- 3D modeling and Motion Sensor technology to capture the movements of the NRP & ECCN while operating in the current platform to determine the space required
3.4 Sensor Development - Situational Awareness & Vision Enhancement System (SAVES): Adverse weather conditions and limited visibility are factors which increase risk and decrease mission effectiveness. The current Forward-Looking Infrared (FLIR) sensor provides additional visual capability, but is not authorized for pilotage use. SAVES will incorporate component technologies that have demonstrated the performance and maturity required to support an integrated pilotage solution. The planned benefits are a significant increase in mission effectiveness and similar decrease to the risk associated with operations in adverse weather conditions and limited visibility. The AE system requires priority of fielding; an integrated SAVES would reduce risk to our Soldiers and facilitate a rapid response for AE missions under adverse environmental conditions. PD MEDEVAC is leading the effort for funding, design, integration, and qualification of sensor technology that increases readiness, safety, and mission capability.

3.5 Improved Turbine Engine Program (ITEP): The Army initiated efforts to design a replacement aircraft engine for the T700 in the late 1990s but specific funding did not become available until FY07 for Science and Technology (S&T) efforts. Objectives of the S&T program (Advanced Affordable Turbine Engine (AATE)), based on comparative parameters of the -701C engine, are to provide a 25% improvement in specific fuel consumption, a 65% increase in power-to-weight ratio, a 35% reduction in production and maintenance costs, and a 20% increase in engine design life. Two U.S. companies are participating in the AATE program: GE, maker of the original T700/CT7 family, and the Advanced Turbine Engine Company (ATEC), a 50/50 joint venture created in 2007 between Honeywell and Pratt & Whitney to develop AATE technology and a subsequent engine for the ITEP. The AATE program will transition these technology improvements to the ITEP. Full rate production of the Improved Turbine Engine is expected to be FY25. The ITEP requirements are derived from TRADOC Capability Manager-Lift (TCM-Lift) with input from TCM-Reconnaissance/Attack and MEPD. A draft CDD is currently being finalized in preparation for an expected ITEP Milestone A at the beginning of third quarter, FY14. MEDEVAC (HH-60M) is expected to be among the first aircraft fielded for ITEP.
3.6 AE Mission Equipment Package (MEP) Modularity: The current MEP design requires an all or nothing approach because entire subsystems must either be installed or completely removed to allow for mission dependent reconfiguration. The HH-60M litter support system, when installed, is designed for up to six patients even though 90% of urgent missions, in theater, have two patients or less. The totality of the system is inherently heavy and when installed, decreases aircraft performance significantly. When removed, the system must be removed in its entirety which results in patients evacuated and treated on the aircraft floor. This provides little to no flexibility and is not conducive to efficient evacuation operations. The current system was also not designed for patient care (treatment), rather more so for patient transport (see Focus Area 1.3 AE2C2VS for a complete explanation). The environmental control system faces similar limitations. The current cabin heater and cabin air conditioner (AC) are of interdependent design (i.e., essentially all or nothing). The heater is dependent upon the AC; thus, the AC must be installed in the winter (and vice-versa) creating undue weight and performance issues for the aircraft. Environmental control system modularity will allow rapid reconfiguration based on mission requirements, greater flexibility for the aircrew, and improved performance of the aircraft. PD MEDEVAC is exploring options for modularity within the MEP.
3.7 Onboard O\textsubscript{2}: The current onboard O\textsubscript{2} system, Advanced Medical Oxygen Generating System (AMOGS) does not produce requisite O\textsubscript{2} for greater than two patients simultaneously and is plagued with suitability and sustainability issues. The maximum continuous O\textsubscript{2} output is ~30 liters per minute (lpm) yet the prescribed demand is 15 lpm per patient. With six patients aboard the aircraft, the maximum O\textsubscript{2} output of 30 lpm would be split six ways resulting in each patient receiving only 5 lpm per patient. The United States Air Force (USAF) has an ongoing developmental effort titled Deployable Oxygen Generating System – Small (DOGS-S) with an approved USAF CDD. Part of their effort is to develop a small oxygen generator that will produce 15 lpm. The AMEDD has joined the USAF in their onboard O\textsubscript{2} effort instead of utilizing a separate effort. The AMEDD’s Directorate for Combat Doctrine and Development (DCDD) and United States Army Medical Materiel Agency (USAMMA) are conducting further analysis to determine alternate solutions for onboard O\textsubscript{2}. Liquid oxygen systems and carry-on production systems are possible alternatives. A portable system currently undergoing testing and review with USAMMA could begin fielding as early as FY16.

3.8 External Support Store System (ESSS) Hoist: The ESSS Mounted Hoist is part of the AE MEP used on UH-60 aircraft. It allows use of the external hoist on aircraft not produced with the external hoist mount. However, the use of the ESSS-mounted hoist precludes the use of ESSS-mounted fuel systems for extended range operations, thereby reducing capability or requiring the use of internally-mounted fuel systems. Although the ESSS hoist mount is essential for use of the IMMSS patient handling system, it prevents extended range hoist operations. Installation of the integrated (HH style) hoist mount onto UH aircraft is expensive and extremely labor intensive. However, if applied during L-Digitization, while the aircraft is already disassembled, the costs will be reduced significantly. Prioritization is ongoing.
3.9 Future Vertical Lift (FVL) / Science & Technology (S&T): Technology is rapidly advancing in vertical lift aircraft design and development. Advanced aircraft systems will provide vastly improved performance, much greater speeds and ranges, and allow for increased lift capacity. There are several platforms flying today that have substantially better speed, range, and lift capabilities than traditional helicopters. The Army should capitalize on these advances to increase efficiencies for the AE role to save life, limb, and eyesight and to provide the best AE system possible for the Soldier. FVL is a major initiative for Army deep futures, focusing on the CSA's vision of a more responsive, agile, and capable force. The United States Army Aviation Center of Excellence (USAAAE) formed an S&T Working Group to address Aviation Commanders' concerns, concepts, ideas, and capabilities required for future operations. The S&T Working Group will focus on Deep Futures planning (2025 and beyond) to develop concepts to assist in S&T funding acquisition and POM planning. MEPD is a key member in the S&T Working Group, with the intent of focusing S&T resources towards the user community goals, coordinated with the Engineering and Research and Development plans and timelines. The S&T Working Group initiatives are focused on near, mid, and far-term goals that align with Army Aviation priorities for research and development engineering efforts. Cohesive and parallel S&T objectives will ensure priorities are properly resourced to attain timely Technology Readiness Levels (TRL) and reduce technical risk.

**Future Vertical Lift (FVL)**

**MEDEVAC 1 Hour Mandate -> Speed is essential**

**HH-60 1 Hour Response = 40 Miles radius**

**JFVL 1 Hour Response >100 Miles radius**

**JFVL Essentials:**
- Increased Survivability
- Increased Power
- Increased Fuel Efficiency
- Increased Safety (DIVE)
- Reduced Signatures
- Tactile Sensors
- Comms Net-Centric
- DataLink for MUM
- Tele-medicine
- Pilot-Alias
- Fly-by-wire
- Rapid Launch < 5 minutes

**WHAT WE NEED:**
- Significant Increases in Speed (230+ knots) & Range (>500 Miles)
- Vertical lift Capabilities
- Increased Capacity
- Potential for Advanced Resuscitative Procedures on route

**Takeaways: REVOLUTIONIZE MEDICAL DOCTRINE**
- Improved Range = Greater Coverage and Flexibility in MTF distribution/location
- Potential for reduced number of deaths and long term disabilities
- Improved capability to clear future battlefield
3.10 Transport Telemedicine: The projection of medical care between higher echelons of care and lower echelons of care through the application of bi-directional medical communications technology in order to increase patient survival, health readiness, and availability of care. Telemedicine is a multifaceted approach that ultimately will enable real-time transfer of patient medical information from the platform to the servicing MTF, document record, medical supervisor, and Armed Forces Longitudinal Technology Health Application (ALTHA) in order to capture treatment data and/or provide real-time clinical guidance between medic and provider. The telemedicine ICDT is a continuation of efforts encompassing the entire AMEDD. Solutions are expected to be incremental, but will eventually realize 21st century communication technology within the cabin and improve pre-hospital capabilities immensely. Transport telemedicine technology is projected to begin fielding in FY17.

LOE4 Access, Develop, and Train Aeromedical Officers to Meet the Challenges of the 21st Century

Campaign Objective Supported: Aeromedical Evacuation Officer and Leader Development

Goal: Develop technically skilled, multi-functional, informed Aeromedical Evacuation Officers and leaders to serve in key developmental positions IOT provide AE oversight, management, and communication at the strategic level.

Key Metrics:

- Increase the Accession Pool from which 67Js are selected.
- Increase awareness by the AE Officer of the four distinct career paths for 67Js.
- Increase opportunities and positions for AE Officers with an Acquisition Additional Skill Identifier (ASI) 8X; align personnel spaces and Long Term Health Education Training (LTHET) opportunities to support this effort.
- Increase attendance by selected AE Officers at the Aeromedical Pre-Command Course; improve course POI and course alignment.
- Develop AE Officers through Officer Professional Development (OPD) via Defense Connect Online (DCO).
- Increase AE awareness through the use of technology (AE Portal & Newsletter).
- Improve strategic AE oversight and expertise by realigning current 67J key billets throughout the joint force.
LOE4 Programs and Projects:

4.1 67J AOC Life Cycle Model: The latest Area of Concentration (AOC) 67J career model has been developed, but has not been incorporated within DA PAM 600-4 (Army Medical Department Officer Development and Career Management). The AOC requires a re-baseline across the breadth of grades, specifically the field-grade billets. We must also take a hard look at how we recruit and assess 67Js, and move forward with designating a secondary AOC NLT the eighth year of Service. The Consultant and the senior members of the MSC continue to look at these, along with other initiatives, to ensure 67J AOC officers continue to be the strongest in both the MSC and the AMEDD. The Consultant will continue to develop the 67J career model to create additional opportunities while increasing competitiveness for promotion and command and ensuring the best qualified officers remain in the AMEDD. The career model may be slightly modified pending any changes that the AMEDD is currently making to the leader development process prior to publishing DA PAM 600-4.

4.2 67J Acquisition Career Model (8X): The AMEDD does not have an established AE Acquisition pipeline representative within the shared AMEDD/Army Aviation AE product management Enterprise. The Aviation branch ‘grows’ acquisition experts and have true representation within POM program reviews while the AMEDD representatives, assigned within the PEO Aviation, arrive with little or no acquisition training, background, or experience. As a result, the Officers and the program remain at a disadvantage when competing for resources. Without the requisite key and developmental positions or educational background, the PD MEDEVAC officer is not prepared to function as a senior acquisition officer. Currently, AE represents over 1/3rd of the Army’s utility aircraft fleet so it is vital that the AMEDD develops officers with acquisition experience and education to serve in positions within the MEDEVAC Enterprise (e.g., PD MEDEVAC, USAARL, MRMC, MEPD) to ensure AMEDD requirements are documented, funded, and appropriately resourced. Several existing 67J positions have been identified for coding with the Acquisition ASI for 8X to ensure de-
development of 67J Officers to function as senior acquisition Officers. The overall end state is to incorporate these positions into the Military Acquisition Position List (MAPL). This is the Consultant’s number one Officer development priority within the Enterprise.

4.3 Pre-CMD (PCC) (MAJ/04) Course: The United States Army School of Aviation Medicine (USASAM), MEPD, and the MEDEVAC Enterprise will continue to educate 67J Officers selected for Air Ambulance Command at the AMEDD Pre-Command Course at Fort Rucker, AL. Operational SMEs and DOTMLPF specialists are utilized to provide the most up to date aeromedical information available. The importance of 67J Commanders attending the PCC is invaluables because they receive an education on the latest technologies, operations, and tactics techniques and procedures (TTPs) for AE on current and future battlefields. We must proactively reach out to these commanders to ensure they attend this preparatory course to ensure success in their respective commands. All AMEDD and AE Enterprise members need to support this significant developmental course if asked to do so.

4.4 67J OPD via DCO: DCO and the MEDEVAC Enterprise Portal allow the Consultant, MEPD Director, and SMEs in Aviation and AE to hold regular Officer Development sessions with the AE Community. The Consultant anticipates creation of regularly scheduled OPD sessions via DCO for 67J Officers throughout the force.

4.5 MEDEVAC Enterprise Newsletter: Published semiannually, the MEDEVAC Enterprise Newsletter updates the community on current and future MEDEVAC initiatives. The newsletter is informative and educational, while also providing a venue for the Enterprise and AE leaders to share information and shape the message of Army AE. This strategically significant document ensures all members of the Enterprise are synchronized in both thought and effort.
4.6 MEDEVAC Enterprise Portal: The MEDEVAC Enterprise Portal serves as the common operation picture for the entire MEDEVAC Enterprise providing secure, streamlined access to relevant documents, meeting information (e.g., scheduling, minutes, trip reports), comprehensive POC information, the ability for the MEDEVAC community to quickly submit requests for information (RFIs), unlimited file storage (up to UNCLASSIFIED//FOUO classification) for participating Directorates/Commands/Units, secure collaboration forums hosted on milBook, and detailed information for all things MEDEVAC on milWiki. The portal can be accessed at https://www.us.army.mil/suite/page/684746 or by typing “MEDEVAC” in AKO Search.

4.7 67J Authorizations in Key Commands: As a DoD strategic mission, the Army requires senior Aeromedical Evacuation expertise (67J) within strategic and Joint level commands (CENTCOM, TRANSCOM, MRMC, CAB, and other major commands as required). Aeromedical policy decisions are being made within strategic elements that greatly impact the Army dedicated system with no Army AE representation. The Army and the AMEDD requires a voice within Joint decisions that affect AE and should be positioned to shape those decisions. This effort requires a re-baseline of 67J positions throughout the Army as we are currently in a period of no growth.

LOE5 Professionalize Enroute Care

Campaign Objective Supported: Professionalization of Pre-Hospital Medicine

Goal: Develop providers that are trained, sustained, and ready to provide world class care using standardized treatment to increase survivability during AE operations.

Key Metrics:
- Maintain Nationally Registered Paramedic and critical care (CC-NRP) skills proficiency on live patients to ensure 100% of flight paramedics are always prepared to perform AE.
- Maintain CC-NRP recertification to ensure 100% of flight paramedics maintain F2 ASI.
- Increase utilization of home station NRP training.
- Publish and sustain standardized AE protocols.
- Increase survivability by integrating AE onboard blood program.
- ECCN capabilities codified in doctrine and organization.
- Meet the Army goal of 100% CC-NRP by 2018.

Observations and lessons learned from OIF/OEF identified multiple capability gaps involving the enroute care provided to patients with complex battle injuries from the point of injury (POI) and between roles of care. Foremost was a lack of standardized pre-hospital advanced emergency medicine and trauma skills training and certification of Army flight med-
ics. Army flight medics are responsible for providing enroute medical care from the POI and throughout successive roles of care, but lack the appropriate training, certification, and credentialing to handle the type of injuries being encountered. Extensive analyses led to the Department of the Army approval of National Registry Paramedic (NRP) with additional Critical Care training as the new standard for Army flight medics. The AMEDD is working feverishly to build a manageable inventory of qualified NRPs with intention to meet the Army goal of 100% trained by 2018. This goal is exceptionally aggressive and will be extremely challenging.

Another pre-hospital gap specifically concerns post-surgical, multi-trauma critical patient transport within theater. These patients require an advanced skillset equal to that normally found within an ICU. A Request for Forces (RFF) was approved for specially trained Enroute Critical Care Nurses (ECCN). These ECCNs manage highly sensitive Critical Care patients during transport/transfer. Initially, the ECCNs were split between the Forward Surgical Team (FST), Combat Support Hospital (CSH), and the MEDEVAC unit. As the theater continued to refine TTPs, ECCNs TACO Ned directly to the MEDEVAC units proved to provide the most advantageous result. The ECCN is currently managed as an ad-hoc provisional solution but the Army Surgeon General directed this capability be codified in doctrine and thus has become standard. The Enroute Critical Care (ECC) IPAT is assessing the overall future capability requirements and continues to refine the permanent solution.

It is important to note that both of these skill sets are complimentary and critical in the execution, treatment, and evacuation of patients from POI and through successive roles of care. Neither provides a complete solution on its own. The combination of NRP flight medics and ECCNs will help professionalize pre-hospital enroute care and reduce mortality and morbidity within current and future conflicts.

LOE5 Projects and Programs:

5.1 CC-NRP Sustainment: The requirement to sustain task proficiency of the NRP (68WF2) with critical care skills. Current 68W sustainment address only the EMT level utilizing the TC 8-800 and does not yet address the CC-NRP. Sustainment for CC-NRP is a unit and individual responsibility yet the AMEDD is responsible to provide an appropriate model and the means to succeed. That model and way ahead has not been developed, but multiple options are under examination. Any future model must support the concept of sustainment of skills proficiency as an independent yet complementary component of recertification. Following the concept set forth in the National Emergency Medical Service (EMS) Scope of Practice Model, an individual may only perform a skill or role for which that person is:

- Educated (has been trained to do the skill or role)
- Certified (has demonstrated competence in the skill or role)
- Licensed (has legal authority issued by the State to perform the skill or role)
- Credentialed (has been authorized by medical director to perform the skill or role)

All other military medical providers follow this model within their respective fields. With the expanding roles of the Flight Paramedic with critical care skills, it is imperative to develop a model that satisfies this concept in order to ensure sustainment of highly perishable and ever changing hands-on skills proficiencies. The goal will include an additional Publication that is a continuum of TC 8-800 using a program similar to the Aircrew Training Program (ATP) used by Army Aviation that sustains pilot and aircrew proficiency. This approach has proven successful for aircrew training and the AMEDD hopes to leverage the ATP as an outline for the CC-NRP sustainment. This also assists in the National Registry recertification process.

5.2 CC-NRP Recertification: The recertification of the NRP is required every two years. Continuing Education (CE) units/hours are accumulated over the two years and documented in the MODS system. The system is managed by Army EMS at the AMEDD Center & School which also manages the recertification of the biannual EMT requirement for the
68W MOS. The NRP requires a higher level of certification and replaces EMT as the requirement for flight Medics. The recertification process outline is complete and the information on how to complete the requirement is in ALARACT 071/2014 - CRITICAL CARE FLIGHT PARAMEDIC (CCFP) NATIONAL REGISTERED PARAMEDIC (NRP) RECERTIFICATION (68W10-40F2). The process for receiving the required 72 CE hours is in development within the Sustainment LOE 3.1. The graphic below depicts the requirements.

5.3 Home Station NRP Training: The 300-F1 course (JBSA NRP course), which is the only course that meets the requirements in the DoD to train the ASI F2 NRP portion, can only train 120 medics per year. The requirement for ASI F2 medics to be produced in a year is 248 as briefed to TSG. The additional 128 medics to be trained are done at local unit sites. This allows commanders to send medics who require NRP training to a local, approved college/course and keep them in the unit (as opposed to the JBSA course, which is a PCS move). This training is paid for by the AMEDD C&S and no unit funds are required. Timeline for this LOE is based on unit and attrition rates. Both of these items will be reviewed and modified at the end of FY14.
5.4 Standardize Paramedic Protocols: The new flight medic, certified as a nationally registered paramedic with credentialed skills reflective of their civilian counterparts, will match the provider to the skills required by the complex battle injury patient. All civilian paramedics work within a system of medical protocols that is provided to them by their respective medical facilities which satisfy state and/or national clinical practice guidelines (CPG) for delivery of prehospital medical care. The Department of the Army has no such standardized document or CPG established for the delivery of enroute medical care. Historically, the development of these guidelines was left to the local unit medical director, typically a Flight Surgeon or Aeromedical Physician Assistant with no residency training in emergency medicine. With the advanced skill set of the Flight Paramedic, along with additional critical care training, it is apparent that a training skills gap is developing between the unit medical director and the Flight Medic. It is now essential to provide a central emergency medicine standardized clinical practice guideline for patient care aboard the air-ambulance. The AMEDD is developing a standardized protocol set for Army flight medics which captures each certification level. These Protocols set the standard of care and give all units a benchmark to start from. Final protocol approval is expected on or about Sep 2014 but will be dependent upon staffing processes and review procedures for each protocol.

5.5 Onboard Blood Management: Current technological and medical advances have made it possible to deliver blood forward of MTFs by MEDEVAC Paramedics. Traumatically injured patients have associated blood loss and require fluid resuscitation. Past practices have been to give Colloid and Crystalloid fluids, in place of blood products, to the patient to maintain a survivable blood pressure. With the ability to give blood, a decrease in Morbidity and increase in oxygen-carrying fluids is possible. The Theater Surgeon currently manages the Protocols that allow specifically trained medics to administer blood. The Protocols in 3.4 will address this task and in the future define how and who will administer and receive blood and blood products. Full DOTMLPF impacts will require further analysis and may be synced with other LOE Objectives.
5.6 Codify Enroute Critical Care Nurse (ECCN)

**Strategy:** The ECCN is a nurse trained in Enroute Critical Care. The requirement to move post-operative patients who are stabilized (not stable), but require a high level of care, created the need for ECCNs to assist flight medics to move patients in a theater of operation. The ECC IPAT is focused on the transport of critically wounded following Damage Control Resuscitation (DCR) and/or the key enabler for improving POI care and that the resourcing of a new unit comprised of ECCNs that would be sourced, as required, on the battlefield. The IPAT Functional Solutions Analysis (FSA) recommended development and resourcing of a new unit comprised of ECCNs that would be sourced, as required, on the battlefield. The Flight Paramedic Program was again re-emphasized as the key enabler for improving POI care and that the ECC program is focused on the transport of critically wounded following Damage Control Resuscitation (DCR) and/or Damage Control Surgery (DCS).

Solution recommendation:

a. Update Doctrine to reflect ECC capability and develop a separate Standard Requirement Code (SRC) within the early entry module of the Medical Brigade.

- One team per Medical Brigade, consisting of 10 nurses (PROFIS), minimum grade 1LT, utilizing the 66H8A (Critical Care Nurse), 66HM5 (Emergency Nurse) or equivalent, with one member being the Director / OIC (O-4/O-5).
- SRC would deploy with the early entry module or separate and be assigned to evacuation platforms in the AOR by the senior medical element. Once the AOR stabilizes, the team will be assigned to its perspective capability components (e.g., Forward Surgical Team, Advanced Trauma Management, Combat Support Hospital), based on METT-TC.

b. Restructure, relocate, and resource the Joint Enroute Care Course (JECC) or existing course, creating a joint enroute care curriculum that incorporates civilian standards (e.g., Transport Nurse Advance Trauma Course (TNATC)).

- Include real patient exposure and sustainment training requirement and/or pre-deployment validation.
- Dunker training during pre-deployment is required.
- Equipment will be assigned to the SRC to include Aviation Life Support Equipment (ALSE), helmet, and flight vest.
- ALSE equipment will be maintained by the Medical Brigade S4 and the ECC team will draw equipment from Medical Brigade upon deployment orders.
- Team members have appropriate verbiage in their deployment orders that will allow them to draw ALSE at the Medical Brigade. All other patient care equipment will be provided through the Patient Movement Items (PMI) pool of equipment in the AOR.
Aeromedical Evacuation Campaign Strategy 2020 - End State:

Army AE is focused on combat operations, Defense Support to Civil Authorities, and installation AE support by producing trained, capable, sustainable, properly equipped, modular formations with competent leaders that provide speed, range, mobility, evacuation, and treatment as a combat multiplier in support of the appropriate commanders and agencies. Through material systems integration and life cycle management, state of the art AE platforms and equipment will be standardized and modular, with the latest available technology. AE officers will be technically skilled, multifunctional, informed, combat service support leaders serving in key positions. Enroute care will be professionalized with medical care providers that are trained, sustained, and ready to provide world class care using standardized treatment which increases survivability. Senior leaders will provide oversight, management, and communication at the strategic level for the AE mission. AE units will balance force structure requirements while maintaining capability to complete DoD patient evacuation requirements in combat, DSCA, and installation support environments. Army AE maintains America’s trust as an adaptable, capable, and ready force multiplier that enables the combatant commander the ability to respond, prevent, shape, and win while maintaining a 95% or better patient survival rate.
<table>
<thead>
<tr>
<th>Acronym</th>
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<tr>
<td>AATE</td>
<td>Advanced Affordable Turbine Engine</td>
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<td>ACP</td>
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<td>Installation Management Command</td>
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<td>ITEP</td>
<td>Improved Turbine Engine Program</td>
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<tr>
<th>Abbreviation</th>
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<td>IPAT</td>
<td>Integrated Process Action Team</td>
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<td>Mission Equipment Package</td>
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<td>MN(P)</td>
<td>Mission Need for Production</td>
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<td>MRMC</td>
<td>Medical Requirements and Materiel Command</td>
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<td>MTF</td>
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<td>MTOE</td>
<td>Modified Table of Organization and Equipment</td>
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<tr>
<td>OIF</td>
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<td>OEF</td>
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<td>OCO</td>
<td>Overseas Contingency Operations</td>
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<td>ORD</td>
<td>Operational Requirements Document</td>
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<td>P3I</td>
<td>Preplanned Product Improvement</td>
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<tr>
<td>PCS</td>
<td>Permanent Change of Station</td>
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<td>PD MEDEVAC</td>
<td>Program Director for Medical Evacuation</td>
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<td>PEO</td>
<td>Program Executive Officer</td>
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<td>PM ISS</td>
<td>Patient Movement Integrated Support Systems</td>
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<td>POI</td>
<td>Point of Injury</td>
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<td>POM</td>
<td>Program Objective Memorandum</td>
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<tr>
<td>RDT&amp;E</td>
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<td>ROA</td>
<td>Rule of Allocation</td>
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<td>RTD</td>
<td>Returned to Duty</td>
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<td>SAVES</td>
<td>Situational Awareness &amp; Vision Enhancement System</td>
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<td>TTP</td>
<td>Tactics, Techniques, and Procedures</td>
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<td>USAARL</td>
<td>United States Army Aeromedical Research Laboratory</td>
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<td>USAMMA</td>
<td>United States Army Medical Material Agency</td>
</tr>
<tr>
<td>VCSA</td>
<td>Vice Chief of Staff of the Army</td>
</tr>
</tbody>
</table>
MEDICAL EVACUATION
PROPONENTY DIRECTORATE

Building 4103 Gladiator Street
Fort Rucker, AL 36362
Com: (334) 255-1166
DSN: (312) 558-1166

Director (334) 255-3884
Deputy Director (334) 255-1191
Secretary (334) 255-1166
Aeromedical Evacuation Physician Assistant (334) 255-0302
MEPD Operations Officer (334) 255-2917
MEPD NCOIC (334) 255-1170
MEPD Operations NCO (334) 255-0513
Aeromedical Evacuation Futures (334) 255-1201
Current Operations (334) 255-0512
NDGI Aeromedical Evacuation SVP (334) 347-7612
Aeromedical Evacuation SME (334) 255-0464
Knowledge Management (334) 255-0464
Aeromedical Evacuation Contract Site Lead (334) 255-9792
Aeromedical Evacuation Analyst (334) 255-9473
Conference Room (334) 255-0338