Introduction

The aeromedical physician assistant (APA), along with the supervising unit flight surgeon (FS), function as an aviation medicine team. They jointly manage the unit’s aviation medicine program to help prevent aviation accidents and ensure that all aircrew members are trained and fit for flying duty. As the aviation medicine subject matter experts, their daily mission is to provide medical care, medical training, and clinical supervision; monitor personnel medical availability; and advise and assist commanders on unit medical matters.

Duties of the Aviation Medicine Team

Typically, the FS has primary responsibility for the team. However, in the absence of the FS, or as directed by the commander or FS, the APA may assume primary responsibility for the team’s duties, which are as follows:

- Assist and advise the command in all aviation medicine matters.
- Establish, supervise, and administer the unit aviation medicine program.
- Provide routine primary and urgent care and specialty consultation for all aviation and support personnel (and aviation family members on a space-available basis per local policy), including the following tasks:
  - continuously monitor the health and happiness of unit personnel,
• Conduct flight duty medical examinations (FDMEs), including:
  ◦ issue Defense Department (DD) Form 2992, Medical Recommendation for Flying or Special Operations Duty (Jan 2015) for commander’s approval;
  ◦ review all unit FDMEs, DD 2992s, chronic medications, and health histories; and
  ◦ perform aeromedical consultations and in-flight evaluations for medical conditions that may adversely affect flying duties, or per current Aeromedical Policy Letters and Aeromedical Technical Bulletins.
• Conduct crewmember aeromedical training and assist the commander in developing an aeromedical training program in accordance with Training Circular 3-04.93, Aeromedical Training for Flight Personnel.¹
• Support air ambulance operations, including the following tasks:
  ◦ develop commander-approved air ambulance clinical operations standing orders and treatment guidelines based on the US Army Medical Evacuation (MEDEVAC) Critical Care Flight Paramedic Standard Medical Operating Guidelines, which is managed by the Medical Evacuation Proponency Directorate (MEPD) and available on MEPD’s MEDEVAC Enterprise Portal as well as the websites of the US Army School of Aviation Medicine (USASAM) and the US Army Institute of Surgical Research Joint Trauma System²–⁴;
  ◦ serve as medical director, providing oversight and developmental training programs for sustainment of flight paramedic (FP) enroute care and combat medic clinical skills; and
  ◦ serve as a medical technical advisor for local air ambulance operations and participate in evacuation missions as appropriate.
• Assist and advise the command on policies and procedures concerning

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preventive medicine, field hygiene, combat and operational stress control, hearing conservation, vision conservation and readiness, and unit immunization requirements, including the following tasks:

- develop and implement a unit health education program, and
- ensure that the command considers preventive and occupational aspects of all plans, operations, training, and security missions.

- Maintain health records on aviation personnel, including nonoperational aviators.

- Participate in the Aviation Safety Program and attend meetings, advising the command of potential safety problems, including the following tasks:
  - monitor the conditions and hazards present in the work environment;
  - advise the commander on crew endurance, crewmember interactions, and crewmember interface with equipment and the environment; and
  - make recommendations for improving human factors compatibility, crashworthiness, aviation life-support equipment, and survival features of aircraft.

- Take an active part and participate in developing and updating the medical portion of the pre-accident plan.

- Regularly take part in flight line operations, including the following tasks:
  - make frequent flight line visits, flying with all crewmembers and on all platforms in every environment; and
  - observe crewmembers for signs of physical or psychological deficiencies that could impact health and safety.

- Monitor the Aviation Life Support Equipment (ALSE) program, including supervising the fitting and use of ALSE and crewmember personal safety equipment. Note: The APA is not a substitute for an FS in these activities, per Army Regulation (AR) 40-68, Clinical Quality Management.5

- In the event of an aviation mishap, the FS is expected to manage casualties, assist at the mishap site, obtain any necessary lab specimens, and serve as an accident investigation board member. An FS must be on an accident investigation board if the accident involves injuries or problems with personal protective equipment, egress from the aircraft, MEDEVAC, or rescue or survival, per Army Regulation 385-10, The Army Safety Program.6 The APA may assist
in aircraft accident investigations but cannot substitute for the FS in investigations or flight evaluation boards, or sign reports for these investigations or boards, per AR 40-68.5

- Although stated otherwise in AR 40-68, there is precedence for APAs performing aviation accident investigations when an FS is not available. APAs should contact the US Army Combat Readiness Center for specific guidance on reporting and processing accident reports, at email: usarmy.rucker.hqda-secarmy.mbx.safe-accident-information@mail.mil, or phone (703) 697-1267/1246. A useful guide for APAs is the Army Flight Surgeon Guide to Safety and Accident Investigations,7 as well as the Armed Forces Medical Examiner System’s Guidelines for the Collection and Shipment of Specimens for Toxicological Analysis.8

**Aviation Medicine Team Timeline**

The following are goals set forth to maintain the team’s mission during the first 30, 60, and 90 days after arriving to unit.

**Complete Within 30 Days**

1. Acquire a copy of the current US Army Forces Command commander’s Aviation Resource Management Survey (ARMS) guide, specifically the aviation medicine portion (available on the FORSCOM Aviation Division Army Knowledge Online [AKO] web page9).
2. Acquire the survey results of the previous ARMS, then maintain and reinforce all successful procedures and requirements outlined on the ARMS inspection and review all deficiencies, ensuring they have been corrected, or develop and implement a new plan to resolve all deficiencies over the next 60 to 90 days.
3. Review current unit and aviation medicine standard operating procedures (SOPs). If an adequate SOP is not available, either update the existing SOP or generate a new SOP. A draft aviation medicine SOP is available on USASAM’s AKO page10 or FORSCOM’s Aviation Division AKO page.9 Examples of some of the following SOPs can be found on one or both of the preceding links.

- Medical section SOPs that should be maintained:
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- Aviation Medicine
- Battalion Aid Station Clinical Operations
- Air Ambulance Standing Orders and Treatment Protocols
- Medical Personnel Training
- Medical Records Maintenance
- Medical Supply (Class VIII) and Pharmacy
- Use and Handling of Controlled Substances
- Mass Casualties Triage and Evacuation
- Accident Investigations and Toxicological Specimen Analysis Process

- Unit SOPs for review and familiarity:
  - Down Aircraft Recovery Team
  - Personnel Recovery
  - Aircrew Training Program and Aeromedical Training
  - Pre-Accident Plan and Safety Council

4. Review unit training completion documentation, required procedures, medical protocols, and SOPs. Update SOPs as needed to address FP medical training requirements and maintenance of skills and proficiencies for Nationally Registered Paramedic certification and critical care management.

5. Provide copies of AR 40-8, *Temporary Flying Restrictions Due to Exogenous Factors Affecting Aircrew Efficiency*,\(^\text{11}\) to all supported units. Ensure that commanders disseminate the regulation to their flyers and that the flyers have read it, understand it, and are aware of its implications.

6. Obtain a copy of the unit’s Aeromedical Continuation Training Program of Instruction and sign-in rosters used to validate medical sustainment training.

7. Obtain a copy of flight duty appointment orders for yourself and for all supervised medical personnel.

8. Participate in the commander’s Aircrew Training Program in accordance with Training Circular 3-04.11, *Commander’s Aircrew Training Program for Individual, Crew, and Collective Training*,\(^\text{12}\) by taking part in frequent and regular aerial flights in all types of aircraft of the supported units as required by AR 600-105, *Aviation Service of Rated Army Officers*;\(^\text{13}\) AR 600-106, *Flying Status for Nonrated Army Aviation Personnel*;\(^\text{14}\) and Department of the Army Pamphlet 385-90, *Army Aviation Accident Prevention Program*.\(^\text{15}\)

9. Maintain currency on information contained within the aviation
unit’s aircrew reading files per AR 95-1, Flight Regulations.  

10. Become a participating member of the unit’s Pre-Accident Plan Safety Council, taking part in meetings and training as follows: 
   • plan to conduct aviation accident prevention surveys (AAPSs) in aviation medicine every 6 months for component 1 and annually for components 2 and 3, and 
   • record deficiencies noted in the AAPS in the unit hazard log and resolve them.

11. Review the unit Down Aircraft Recovery Team SOP and address any deficiencies or concerns with the unit commander.

12. Review the unit Personnel Recovery SOP and address any deficiencies or concerns with the unit commander.

**Complete Within 60 Days**

1. Review the unit’s individual flight records folders, health records, and DD 2992s to verify the following information and organization: 
   • ensure that all DD 2992s are in time sequence, without historical gaps (known as “up-slips and down-slips”); 
   • ensure that individual flight records contain applicable medical waivers and approval letters; 
   • ensure that extensions have proper dates and are granted for flight physicals prior to the expiration date of the current physical; 
   • ensure that signatures are in order, and that flight records match health records; 
   • ensure that you and/or the aid station representative have access to all the required documents and records; 
   • ensure that the unit has a medical records custodian fully trained and in compliance with the Health Insurance Portability and Accountability Act and protected health information protocols; 
   • ensure that records are stored and secured in compliance with regulations; and 
   • ensure that sign-out procedures are established to maintain accountability of health records.

2. Develop evolving air ambulance medical treatment protocols, in writing, for flight medics.
Complete Within 90 Days

1. Institute an FDME and Flight Duty Health Screen SOP, detailing to aircrew members the phases for initiating and completing all aspects of their annual flight physical.

2. Establish a flight surgeon SOP to monitor flight physicals created, submitted, and processed, as well as their final disposition, through the Aeromedical Electronic Resource Office, US Army Aeromedical Activity, Fort Rucker, AL. Moreover, the flight surgeon SOP should include the routing of the DD 2292 in accordance with local unit policy. At a minimum, a copy should be included in the aircrew member’s patient record. Note: A copy of the DD Form 2992 must be maintained in the aircrew member’s electronic health record and individual crew member’s flight record. (There is a strong push to move away from paper copies, which will likely be reflected in future revisions of AR 40-66, Medical Record Administration and Healthcare Documentation. Currently AR 40-66 still includes DA Form 4186 rather than DD Form 2992 and does not state it should be uploaded into the electronic health record.)

3. Ensure that the unit has a working medical skills training program that satisfies all FP, combat medic, and provider credentialing and certification sustainment requirements.

4. Actively participate and lead in medical training for unit medical staff. Current regulations do not require an emergency medicine doctor or emergency medicine physician assistant to be assigned to any unit command hierarchy that is responsible for oversight of flight medics. With the implementation of the AMEDD Flight Paramedic with Critical Care training program, there is now a potential for a significant “hands-on” skills gap in emergency medicine training between the FPs and the APAs, who do not have formal emergency medicine training. If you are not an emergency room residency-trained PA, you should make every effort to attain the skills necessary to be a legitimate trainer and validation officer of the unit’s FPs, eg, have an understanding of emergency medicine comparable to the skills of a nationally certified FP with critical care training. If you are not an emergency medicine residency-trained PA, completion of a neonatal resuscitation program with critical care skill training that meets the requirement for the FP F2 additional skill identifier should be considered. At a minimum the following courses are recommended:
• ACLS: Advanced Cardiac Life Support
• PEPP: Pediatric Education for Prehospital Professionals
• PALS: Pediatric Advanced Life Support
• ATLS: Advanced Trauma Life Support (or equivalent course in advanced medical life support)
• JECC: Joint Enroute Critical Care Course
• ITLS: International Trauma Life Support
• Fundamental Critical Care Course

5. Ensure that a unit flyer medical training and safety program is established with required familiarization training.
• Ensure that sign-in and tracking rosters are maintained.
• Assist the unit aircrew life support equipment shop with Class VIII support and survival education.

6. Review the unit pre-accident plan and ensure it addresses the duties and responsibilities of unit medical personnel. Review and develop the medical portion of the unit’s pre-accident plan.

7. Review the entire ARMS checklist and ensure all additional requirements are accounted for.

References


