

Army Regulation 95-1

Aviation

Flight Regulations

**Headquarters
Department of the Army
Washington, DC
22 March 2018**

UNCLASSIFIED

SUMMARY of CHANGE

AR 95-1
Flight Regulations

This major revision, dated 22 March 2018—

- o Aligns Commanding General, U.S. Army Aviation Center of Excellence as the force modernization proponent for aviation in accordance with AR 5-22 (para 1-22).
- o Designates Commander, Aviation and Missile Command responsibility for standardization of aircraft operator's manuals, checklists, and test flight manuals (para 1-23).
- o Clarifies prohibitions from performing crew duties (para 2-3).
- o Updates definitions and clarifies logging of aircrew duties, mission, and flight condition, removes seat position, and incorporates the provisions of AR 600-106 (para 2-6).
- o Mandates Centralized Aviation Flight Records System monthly synchronization to a central server (para 2-8).
- o Clarifies policy for unmanned aircraft system airspace integration into the National Airspace System and supersedes Army Directive 2012-02 (paras 2-9f, 2-10d, 5-2c(5)).
- o Clarifies seats out operations and incorporates medical evacuation litter requirements (para 2-15).
- o Moves configuration management from chapter 6 (para 2-17).
- o Updates operational support airlift requirements (chap 3, sec II).
- o Updates personnel authorized orientation flights (para 3-4).
- o Adds the Directorate of Evaluation and Standardization as the Aviation Branch lead agent for standardization, links the Directorate of Evaluation and Standardization to the Aviation Resource Management Survey program, and adds standardization communication as a method to clarify publications (chap 4).
- o Deletes table of aircraft and compatibility synthetic flight training system (formerly table 4-1).
- o Clarifies aircrew training program waiver and extensions with authorities (para 4-2).
- o Updates process and approval authority for aircraft qualification and additional aircraft qualification (para 4-6).
- o Updates emergency procedure training and clarifies authorization to conduct touchdown maneuvers (para 4-8).
- o Changes commander's investigation period to 14 days (para 4-10).
- o Specifies Directorate of Simulation as accreditation authority for flight training devices used to complete training and evaluation requirements (para 4-11).
- o Clarifies currency requirements (para 4-16).
- o Adds standardization pilot qualification requirement (para 4-26).

- o Changes maintenance examiner qualification requirement (par 4–28).
- o Adds flight surgeon requirements (para 4–30).
- o Establishes U.S. Army Forces Command as the Aviation Resource Management Survey program lead agency (para 4–41).
- o Renames Senior Leaders Conference to Aviation Senior Leaders Forum (para 4-42).
- o Deletes redundant Global Positioning System/area navigation information integrated into Federal Aviation Administration and Department of Defense policy (chap 5).
- o Moves cockpit voice recorder and flight data recorder from chapter 8 and updates flight information publication requirements (para 5–1).
- o Deletes aircraft equipment category II approach requirements (formerly table 5–3).
- o Authorizes unmanned aircraft systems to conduct instrument flight rules flight (para 5–4).
- o Updates emergency Global Positioning System recovery requirements (para 5–6).
- o Adds electronic flight bag requirements (para 5–7).
- o Updates aviation combat assessment program (chap 6, sec II).
- o Updates protective clothing requirements (para 8–8).
- o Moves tactical operations seats out operations to chapter 2 (formerly para 8–10).
- o Updates authorities to approve nonstandard aircraft (para 9–2).
- o Corrects multiple changes in flight hour programming (chap 10).
- o Adds guidance for small unmanned aircraft systems utilization (app D).
- o Establishes guidance for Soldier Borne Sensor utilization (app E).
- o Integrates AR 95–23 and manned and unmanned aircraft systems requirements into a sole source document and uses the terms aviator (or pilot) and operator to delineate between rated aviators and unmanned aircraft systems operators. The term crewmember can be used to infer some/all rated and nonrated personnel that perform flight duties (throughout).
- o Updates references, addresses, and organizations (throughout).

Aviation
Flight Regulations

By Order of the Secretary of the Army:

MARK A. MILLEY
General, United States Army
Chief of Staff

Official:



GERALD B. O'KEEFE
Administrative Assistant to the
Secretary of the Army

History. This publication is a major revision.

Summary. This regulation covers manned/unmanned aircraft operations, crew requirements, and flight rules. It also covers Army aviation general provisions, training, standardization, and management of aviation resources. The term aircraft and aircrew member will be considered synonymous and include both manned and unmanned requirements. Where there are differences, they will be annotated and clarified.

Applicability. This regulation applies to the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve unless otherwise stated. Also, it applies to persons involved in the operation, aviation training, standardization, and maintenance of such

aircraft and systems including aircraft on loan, lease, and bailment to the Army, the Army National Guard, and the U.S. Army Reserve. During mobilization, the proponent may modify chapters and policies contained in this regulation.

Proponent and exception authority.

The proponent of this regulation is the Deputy Chief of Staff, G–3/5/7. The proponent has the authority to approve exceptions or waivers to this regulation that are consistent with controlling law and regulations. The proponent may delegate this approval authority, in writing, to a division chief within the proponent agency or its direct reporting unit or field operating agency, in the grade of colonel or the civilian equivalent. Activities may request a waiver to this regulation by providing justification that includes a full analysis of the expected benefits and must include formal review by the activity's senior legal officer. All waiver requests will be endorsed by the commander or senior leader of the requesting activity and forwarded through their higher headquarters to the policy proponent. Refer to AR 25–30 for specific guidance.

Army internal control process. This regulation contains internal control provisions of AR 11–2 and identifies key internal evaluated controls (see app F).

Supplementation. Supplementation of this regulation and establishment of com-

mand and local forms are prohibited without prior approval from the Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400.

Suggested improvements. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Headquarters, Department of the Army, Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400.

Committee management. AR 15–39 requires the proponent to justify establishing/continuing committee(s), coordinate draft publications, and coordinate changes in committee status with the Office of the Administrative Assistant to the Secretary of the Army, Analysis and Integration Cell (AAAI–CL), 105 Army Pentagon, Washington, DC, 20310–0105. Further, if it is determined that an established "group" identified within this regulation later takes on the characteristics of a committee as found in AR 15–39, then the proponent will follow AR 15–39 requirements for establishing and continuing the group as a committee.

Distribution. This regulation is available in electronic media only and is intended for the Regular Army, the Army National Guard/Army National Guard of the United States, and the U.S. Army Reserve.

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*This regulation supersedes AR 95–1, dated 11 March 2014; AR 95–23, dated 7 August 2006; and AD 2012–02 dated 13 January 2012.

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Glossary

Chapter 1 Introduction

Section I

General

1–1. Purpose

This regulation establishes policy and procedures for Army manned/unmanned aircraft operations, flight rules, crew requirements, and general aviation provisions. It defines aircrew training and equipment requirements, standardization programs, and management of aviation resources. Also, this regulation covers procedures for the safety of flight (SOF) messages, aviation safety action messages (ASAMs), and other aviation safety processes.

1–2. References

See appendix A.

1–3. Explanation of abbreviations and terms

See the glossary.

1–4. Responsibilities

See section II of this chapter.

1–5. Internal control review evaluation

a. The regulation that prescribes policy, standards, responsibilities, and accountability for establishing and maintaining effective internal controls is AR 11–2. It also provides guidelines for the execution of the Army Internal Control Program.

b. Appendix F is the appropriate internal control evaluation. The evaluation follows the guidance in AR 11–2. Specifically, it will—

(1) Test whether prescribed controls are in place, operational, and effective. Analytical techniques, such as statistical sampling, should be used when appropriate to conserve resources.

(2) Identify areas where additions or reductions to existing controls are needed.

(3) Select corrective actions when deficiencies have been found that can be corrected locally.

(4) Refer deficiencies that cannot be corrected locally to higher command levels for assistance in correcting.

(5) Provide support for the commander’s annual statement on how adequate internal controls are within the organization.

1–6. Deviations

a. Individuals may deviate from provisions of this regulation during emergencies.

b. Report deviations from the provisions of this regulation, Federal Aviation Administration (FAA) regulations, or host country regulations with the details of the incident directly to the unit commander. Report incidents within 24 hours after they occur.

c. Violations of Title 14, Code of Federal Regulations (14 CFR), International Civil Aviation Organization (ICAO), the host country, and military aviation regulations will be treated per paragraph 2–13.

1–7. Waivers and delegation of authority

a. Authority to grant waivers is specified in the paragraphs of this regulation. Authority granted in this regulation to Army command (ACOM), Army service component command (ASCC), direct reporting unit (DRU) commanders, and the Director, Army National Guard (DARNG) may be further delegated by that commander or component director, except when expressly prohibited. All other commanders may not further delegate waiver authority unless authorized in the specific paragraph.

b. When waiver authority is not specified in specific paragraphs, waivers may be granted by the Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400. Waivers to provisions in chapters 2 and 7 only may be granted by the Deputy Chief of Staff, G–4 (DALO–MPV), 500 Army Pentagon, Washington, DC 20310–0500.

Section II

Responsibilities

1–8. Secretary of the Army

The SECARMY or authorized representative, unless otherwise stated in this regulation, will reserve all authority and final approval for Army aviation and will be responsible for operational support airlift (OSA) management (see para 3–10*a*).

1–9. Chief of Staff, Army or Vice Chief of Staff of the Army

The CSA or VCSA will approve Armywide grounding of a majority or an entire mission, type, design, and series fleet of aircraft (see chap 6).

1–10. Assistant Secretary of the Army (Financial Management and Comptroller)

The ASA (FM&C) will prepare and publish Army cost comparison rates and Army aircraft reimbursement rates annually and provide cost analysis support to OSA management and other agencies on request (see para 3–10*c*).

1–11. Administrative Assistant to the Secretary of the Army

The AASA will provide policy guidance on the use of OSA aircraft, including Service Secretary Controlled Aircraft (SSCA) assigned to the U.S. Army Priority Airlift Detachment (see paras 3–10*b* and 3–10*f*).

1–12. Office of the Chief of Public Affairs

Requests to engage in public demonstrations will be reported through channels to OCPA for transmittal to the Assistant to the Secretary of Defense for Public Affairs (ATSD (PA)). ATSD (PA) will approve requests to engage in public demonstrations. Criteria for public events is outlined in AR 360–1.

1–13. Chief, National Guard Bureau

On behalf of the CNGB, the DARNG will—

- a.* Support missions and establish procedures for OSA.
- b.* Retransmit SOF and ASAM messages (see chap 6).
- c.* Exercise responsibility for the safety and standardization of Army National Guard (ARNG) aviation by this regulation.

1–14. Deputy Chief of Staff, G–3/5/7

The DCS, G–3/5/7 will have staff responsibility for Army aviation, to include the following:

- a.* Selected waiver authority limited to those items referenced in paragraph 1–7.
- b.* Aviation operations and management (see chaps 2 and 3).
- c.* OSA, including—
 - (1) Establishing objective wartime requirements for OSA.
 - (2) Reviewing the continuing need for OSA aircraft inventory annually.
 - (3) Determining future OSA aircraft stationing and structure.
 - (4) Reporting Army OSA flying hour program (FHP) execution during the quarterly Program Performance and Budget Execution Review and overseeing centralized scheduling for Army OSA except executive jet scheduling (see chap 3 for OSA procedures).
- d.* Headquarters, Department of the Army (HQDA)-level staff responsibility for aviation training and flight procedures (see chaps 4 and 5).
- e.* The exercise of final approval authority for deviations from the standard Army aircraft baseline configuration (see chap 3).
- f.* Aviation life support (see chap 8).
- g.* Nonstandard manned/unmanned aircraft (see chap 9).
- h.* The Army FHP (see chap 10).
- i.* The electronic flight bag (EFB) program (see chap 5).

1–15. Deputy Chief of Staff, G–4

The DCS, G–4 (DALO–MPV) will—

- a.* Have staff responsibility for SOF messages and ASAMs (see chap 6).
- b.* Have staff responsibility for weight and balance (see chap 7).

- c. Develop policies and identify responsibilities for the Army Equipment Safety and Maintenance Notification System.
- d. Serve as the Army staff proponent for the Army Equipment Safety and Maintenance Notification System.
- e. Establish responsibility for developing an effective tracking and reporting system or method for appropriate feedback of safety and maintenance issues on fielded systems from the user to the combat and material developer and the U.S. Army Combat Readiness/Safety Center.
- f. Coordinate, as applicable, with appropriate HQDA staff elements, all safety and maintenance messages.
- g. Provide information on impacts to fleet readiness percentages by ACOMs, ASCCs, DRUs, or ARNG (data obtained from the Logistics Support Activity or weapon system program managers (PMs)).
- h. Establish responsibility for an internal tracking system for all safety and maintenance messages that record ACOM, ASCC, DRU, or ARNG compliance.
- i. Arbitrate conflicts during message generation through message issue and provide clear guidance.

1–16. The Surgeon General

TSG will coordinate health hazard assessment and other medical and nonmedical aspects relating to Aviation Life Support Systems (ALSS) (see chap 8).

1–17. Commanders of Army commands, Army service component commands, and direct reporting units

The commanders of ACOMs, ASCCs, and DRUs will—

- a. Maintain individual flight records (see chap 2).
- b. Oversee OSA (see chap 3).
- c. Monitor the U.S. Army Aviation Standardization Program (see chap 4).
- d. Oversee SOF and ASAMs (see chap 6).
- e. Implement ALSS policies and procedures (see chap 8).
- f. Be responsible for their nonstandard aircraft (see chap 9).
- g. Manage and report their FHP (see chap 10).

1–18. Commanding General, U.S. Army Training and Doctrine Command

The CG, TRADOC, in coordination with other HQDA agencies, will—

- a. Develop and recommend the doctrine, concepts, material requirements, and organization of Army aviation elements.
- b. Oversee the overall training of aviation weight and balance (see chap 7).
- c. Develop training, standardization, and evaluation literature for aircrew training programs (ATPs) (see chap 4).
- d. Oversee the doctrine, training, and material needs for ALSS (see chap 8).

1–19. Commanding General, U.S. Army Materiel Command

The CG, AMC will—

- a. Supervise the direction of overall command activities involving aviation weight and balance (see chap 7).
- b. Serve as the Department of the Army (DA) point of contact for all aviation life support equipment (ALSE) management (see chap 8).
- c. Designate Program Executive Office (PEO) Aviation to act as the platform configuration control manager of the aircraft under the supervision of their PMs (see chap 3).

1–20. Commander, U.S. Special Operations Command

The Commander, USSOCOM will serve as the proponent responsible for the development of training and operational requirements for special purpose insertion and extraction operations such as Fast Rope Insertion Extraction System (FRIES), Special Patrol Insertion Extraction System (SPIES), and short tactical airborne operations (STABO) with the U.S. Special Operations Command acting as the lead agent for these operations.

1–21. Commanding General, Army Test and Evaluation Command

The CG, ATEC will—

- a. Serve as the DA point of contact for engineering and or experimental test pilot (XP) issues.
- b. Assist the CG, U.S. Army Aviation Center of Excellence (USAACE) with the development of XP training and standardization.

1–22. Commanding General, U.S. Army Aviation Center of Excellence

The CG, USAACE will—

- a. Be the agency for submitting changes to selected AR 95-series publications.
- b. Be the DA preparing agency for aviation training and standardization literature.
- c. Be the proponent agency for the U.S. Army Aviation Standardization Program (see chap 4).
- d. Serve as the force modernization system proponent and chief of the Aviation Branch.

1–23. Commander, Aviation and Missile Command

The Commander, AMCOM will—

- a. Report SOF messages and/or ASAM conditions for issuance of SOF and ASAMs (see chap 6 and AR 750–6).
- b. Be the technical proponent for all Army aviation weight and balance (see chap 7).
- c. Designate PEO Aviation to serve as the overall configuration control manager of standard Army aircraft (see chap 3).
- d. Designate CG, USAACE responsibility for standardization of aircraft operator’s (AO’s) manuals, checklists, and maintenance test flight (MTF) manuals provided to Army aviation crewmembers.

1–24. Commander, Operational Support Airlift–Activity

The Commander, OSA–A will schedule Army requirements for support (see chap 3).

Chapter 2

Aviation Management

2–1. Personnel authorized to fly Army aircraft

a. The following personnel may fly Army aircraft/unmanned aircraft systems (UAS). Procedures for award of aeronautical designations are in AR 600–105 and AR 600–106.

(1) Army personnel who—

(a) Are active components and Reserve Components (RCs) part of the rated inventory or are rated acquisition corps officers with a pilot status code of 1 in a valid FA51*15Z position.

(b) Are UAS qualified operators serving in a valid table of distribution and allowances (TDA)/modified table of organization and equipment (MTOE) position.

(c) Have completed qualification, training, evaluation, and currency requirements of this regulation (see chap 4) for the aircraft to be flown, or are performing duties per paragraphs 2–4 or 3–4b(2).

(2) Civilian employees of government agencies and government contractors who have satisfied all of the following:

(a) Appropriate certifications or ratings.

(b) Written authorization from the appropriate ACOM, ASCC, DRU commanders, or their delegated approval authority; the CG, USAACE for units assigned to USAACE; or the DARNG for ARNG units, U.S. Army Reserve (USAR) aviation support facilities, or their delegated approval authority.

(c) Completed qualification training, evaluation, and currency requirements of this regulation (see chap 4) and the provisions of AR 95–20 (for contractor personnel), the contract, and statement of work for the aircraft to be flown.

(3) Crewmembers in other U.S. services who—

(a) Are in rated aviation service.

(b) Have completed the qualification, training, evaluation, and currency requirements of their service per this regulation (see chap 4) for the aircraft to be flown, or are performing duties under paragraph 3–4b(2).

(c) Have written authorization from their Service and the ACOM, ASCC, DRU commanders, or DARNG.

(4) Crewmembers of foreign services who—

(a) Have completed the course of instruction prescribed by their Service and have been awarded an aeronautical or UAS designation as appropriate.

(b) Completed with qualification training, evaluation, and currency requirements of their service per this regulation (see chap 4), for the aircraft to be flown, or are performing duties under paragraph 3–b(2).

(c) Have written authorization, including a disclaimer absolving the U.S. Government from liability (unless a disclaimer is included under the provisions of an approved exchange program) from their government. The appropriate host ACOM, ASCC, DRU, or ARNG must provide written authorization that will include, as a minimum, the purpose and duration of the authorization. If authorized to fly, they will be restricted from performing pilot-in-command (PC) or aircraft commander (AC) duties unless serving in approved exchange officer positions established specifically for flying purposes.

(5) Personnel listed in paragraphs 2–1a(1) through 2–1a(4) who are not qualified or current to operate the aircraft/UAS to be flown when receiving training or performing limited cockpit duties per paragraph 2–4 or pilot duties per paragraph

3-4b(2) must be directly supervised by an instructor pilot (IP), a standardization instructor pilot (SP), an instrument examiner (IE), an instructor operator (IO), or a standardization instructor operator (SO), as appropriate, who is qualified and current in the aircraft/UAS being flown. The supervisory crewmember will be at one set of flight controls for manned aircraft or have immediate access to controls for UAS.

(6) Individuals receiving aviator/operator instruction authorized by approved program of instruction (POI). These people may operate Army aircraft/UAS as appropriate when training under an approved POI or ATP with instructors designated by the USAACE, Directorate of Evaluation and Standardization (DES).

(7) Flight surgeons (FSs) or aeromedical physician assistants in aviation service when in an aircraft not requiring more than one pilot as a minimum crew. Also, an IP/SP must be at one set of flight controls.

(8) Officers that have not completed an HQDA approved UAS qualification course may perform payload operator (PO) duties. Personnel performing such duties will—

(a) Fly with an IO, qualified and current on that UAS, who is in a position to gain immediate access to the flight controls or console.

(b) Not operate lasers or weapon systems.

b. All Army aviators in aviation service per AR 600-105 must meet physical requirements of AR 40-501, regardless of assignment.

c. All personnel who hold the military occupational specialty (MOS) of a UAS operator or UAS operator qualified officers authorized to perform operator duties, will undergo and successfully satisfy the requirements of at least a class IV flight duty medical examination in AR 40-501 while authorized to perform crewmember duties. This requirement does not apply to group 1 UAS.

d. Procedures for award of aeronautical designations is in AR 600-105 and AR 600-106.

2-2. Personnel authorized to start, run-up, shutdown and taxi Army aircraft

a. The following personnel are authorized to start, run-up, and taxi fixed wing (FW) aircraft:

(1) Personnel listed in paragraphs 2-1a(1) through 2-1a(6).

(2) Other personnel who meet the requirements of paragraph 3-21.

b. The following personnel are authorized to start, run-up, and shutdown rotary wing (RW) aircraft:

(1) Personnel listed in paragraphs 2-1a(1) through 2-1a(6).

(2) Nonrated crewmembers may start, run-up, and shutdown nonstandard rotary wing aircraft provided they are trained by approved courses of instruction and are integrated by approved nonstandard technical, training, and standardization publications.

c. The following personnel are authorized to start, run-up, and shutdown (UAS) aircraft:

(1) Personnel authorized to fly or operate Army UASs listed in paragraphs 2-1a(1) through 2-1a(6).

(2) Personnel meeting UAS maintenance and operations check requirements of this regulation.

d. Contractor personnel operating per AR 95-20 are authorized to start, run-up, and shutdown aircraft under the provisions of the contract using procedures in the operator's manual.

e. The chain of command must approve all aviation operations. Aviation operations are defined as any operation with the intent to start the main aircraft engines. Contractor aviation operations will be approved per AR 95-20.

2-3. Personnel prohibited from performing Army aircrew duties

The following crewmembers are forbidden from performing Army aircrew duties:

a. Rated officers in nonoperational aviation positions, except per paragraphs 2-4 or 3-4b(2) and AR 570-4, or conducting assessment flight evaluations at U.S. Army Special Operations Aviation Command or U.S. Navy Test Pilot School.

b. All rated officers and crewmembers while attending nonflying courses of instruction.

c. Those disqualified, temporarily suspended, or whose aviation service status is administratively terminated (see AR 600-105 or AR 600-106).

d. Military aviators in an authorized leave status when employed by a contractor to serve as a crewmember.

e. Officers of other government agencies on terminal leave from that agency and employed by a contractor to act as a crewmember.

2-4. Aviators restricted to limited cockpit duty (Manned)

a. Aviators ranked O-6 in nonoperational aviation positions and general officers who hold a U.S. military aeronautical designation may perform cockpit duties on a limited basis provided requirements specified in AR 570-4 are met. ATP requirements do not apply to officers performing duties per this paragraph. Officers performing such duties will—

(1) Maintain a current flight physical per AR 40-501.

(2) Fly with an IP/SP qualified and current in that particular aircraft at one set of the flight controls.

(3) Submit an annual request to the appropriate ACOM, ASCC, or DRU commander; head of Joint or Defense activity; Director of the Army Staff; head of the Army Staff agency; or DARNG as appropriate for approval. Information copies of the approved request will be sent to the Deputy Chief of Staff, G-1 (DAPE-PRP), 300 Army Pentagon, Washington DC 20310-0300; the Deputy Chief of Staff, G-3/5/7 (DAMO-AV), 400 Army Pentagon, Washington, DC 20310-0400; and Human Resources Command (AHRC-OPA-V), 1600 Spearhead Division Avenue, Fort Knox, KY 40122-5407.

b. Other ATP, synthetic flight training system (SFTS), and annual proficiency and readiness test (APART) requirements do not apply to officers performing duties per this paragraph.

2-5. Aircrew and maintenance checklists

a. (Manned) The publications and forms required by DA Pam 738-751 will be on each aircraft.

b. (Unmanned) The publications and forms required by DA Pam 750-8 for all UAS-associated vehicles and ground support equipment and DA Pam 738-751 for UAS air vehicles and UAS support equipment will be physically present for review by each Soldier directly involved in the actual flight of the UAS before operations commence.

c. Operator and crewmember checklists will be used for preflight through before leaving aircraft checks. While airborne, when time does not permit the utilization of the checklist or when its use would cause a safety hazard, required checks may be accomplished from memory.

d. Checklists and test flight manuals will be utilized while making operational maintenance checks, MTF, and preventive maintenance inspections.

e. Only DA approved operator's manuals and checklists will be used, except as specified in paragraph 9-5.

2-6. Logging flying time

An entry will be made on DA Form 2408-12 (Army Aviator's Flight Record) for each flight in aircraft and flight simulators by all crewmembers indicating duties performed, mission, and flight condition.

a. *Aircrew duty.* Use the following symbols to record flight time in aircraft, UAS, and simulators as appropriate when qualified per chapter 4, section II of this regulation and for flights in the aircraft/UAS when designated on the DA Form 5484 (Mission Schedule/Brief) to perform the duties specified by the symbol. Crewmembers instructing or evaluating without access to the flight controls will use the symbol for the duty being performed.

(1) *Rated officers.*

(a) Pilot (PI).

(b) Co-pilot (CP). When briefed, this symbol may be used by more than one aviator performing duties.

(c) Pilot-in-command (PC). The PC will be designated on the DA Form 5484, and occupy a position with access to the flight controls. The symbols MP, ME, XP, UT, IE, IP, or SP may also be used to designate the PC. The PC or equivalent symbol will be logged by only one aviator at the controls except as indicated in paragraphs 2-6a(1)(d), 2-6a(1)(e), and 2-6a(1)(i). While performing functional check pilot (FCP) duties, the PC symbol will be used for FCPs.

(d) Maintenance test pilot (MP). This symbol may be utilized by both aviators performing MP duties.

(e) Experimental test pilot (XP). This symbol may be used by both aviators on experimental test flights when assigned to a designated testing organization or activity and authorized by the DA Form 5484.

(f) Unit trainer (UT).

(g) Instrument examiner (IE). This symbol may be used by one aviator performing IE duties. The IE does not need to be the PC if performing duties at a station without access to the flight controls or when not qualified in the aircraft in which duties are performed.

(h) Instructor pilot (IP). This symbol may be used by one aviator performing IP duties. The IP does not need to be the PC if performing duties at a station without access to the flight controls.

(i) Maintenance test pilot evaluator (ME). This symbol may be used on functional test flights when training or evaluating an MP/ME.

(j) Standardization instructor pilot (SP). This symbol may be used when training or evaluating an IP/SP. The SP does not need to be the PC if performing duties at a station without access to the flight controls.

(k) Flight surgeon (FS).

(2) *Crewmember.* The following symbols will be used to record flight time when qualified and designated on the DA Form 5484 to perform the duties specified by the symbol.

(a) Crew chief (CE), aircraft mechanic.

(b) Flight engineer (FE).

(c) Flight medic (MO).

(d) (Manned/Unmanned) Unit trainer (UT).

(e) Crewmember flight instructor (FI). This symbol may be used by one crewmember performing FI duties.

(f) Crewmember standardization instructor (SI). This symbol may be used by one crewmember performing SI duties and only when evaluating an FI or SI.

(g) Door gunner (DG).

(h) Cabin attendant (CA).

(i) Equipment operator (EO).

(j) (Unmanned) Aircraft commander (AC). The AC will be designated on the DA Form 5484 and occupy a position with access to a set of controls. The symbols IO, SO, UT, or AC may be used to designate the commander of the aircraft. One crewmember will only log the AC or equivalent symbol in a position to operate the aircraft or payload.

(k) (Unmanned) Aircraft operator (AO).

(l) (Unmanned) Payload operator (PO).

(m) (Unmanned) Instructor operator (IO). The IO does not need to be the AC if not performing duties as the AO/PO. This symbol may be used by one crewmember performing IO duties.

(n) (Unmanned) Standardization instructor operator (SO). The SO does not need to be the AC if not performing duties as the AO/PO. This symbol may be used by one crewmember performing SO duties and only when evaluating an IO or SO.

(3) *Noncrewmembers*. Personnel performing noncrewmember duties use the duty symbol OR to record flight time when qualified and designated on the DA Form 5484 to carry out the functions specified by the symbol. Noncrewmembers must take part in regular aerial flight while performing duties not meeting the requirement of rated or crewmember duty and as approved on the DA Form 5484. Noncrewmembers include aviation supervisors, aviation maintenance personnel, aeromedical physician assistant, and others specified in AR 600–106 and not performing other qualified aircrew duties.

b. *Mission*. Use the following symbols to identify flight mission:

(1) A – acceptance test flight.

(2) C – combat mission directly against the enemy within a designated combat zone.

(3) D – imminent danger applies when it is authorized per Department of Defense (DOD) Financial Management Regulation (available at <http://comptroller.defense.gov/fmr/fmrvolumes.aspx>).

(4) F – MTF or functional check flights (FCFs).

(5) S – service missions, other than A, C, F, T, or experimental test flight.

(6) T – training flight for individual qualification, refresher, mission, or continuation training.

(7) X – experimental test flight.

c. *Flight condition*. Each crewmember will use only one of the following symbols to identify the condition or mode of flight for any period:

(1) Day (D). Between the hours of official sunrise and sunset.

(2) Hood (H). Simulated instrument meteorological conditions (IMC)—vision of the person flying the aircraft is artificially limited from viewing the horizon or earth surface. Aircraft attitude must be controlled using aircraft instruments. An observer is required for all hooded flights.

(3) Night (N). Between the hours of official sunset and sunrise.

(4) Night goggles (NG). Night vision goggles used during the night to include the use of head up display.

(5) Night systems (NS). Night vision systems installed on aircraft used during the night; also logged when two or more devices are used simultaneously.

(6) Weather (W). Actual weather conditions that do not permit visual contact with the natural horizon or the earth's surface. Aircraft attitude must be determined and controlled using aircraft instruments. This symbol will be used in the simulator when simulated weather conditions do not permit visual contact with the simulated horizon or earth's surface.

(7) Day system (DS). Used by C–37 or AH–64 only when night vision system installed on the aircraft is used during the day. Back seat must be equipped with black out curtains.

2–7. Computation of flying time

a. (Manned) Flying time starts when an airplane begins to move forward on the takeoff roll or when a helicopter lifts off the ground. Flying time ends when the aircraft has landed, and the engines are stopped or the flying crew changes.

b. (Unmanned) Flying hour computation for the UAS may differ from that of the UAS operator's due to the extended flight time capability. Flying time starts when an FW UAS begins to move forward on the takeoff roll (or takeoff launch for rail launch operations) or when a helicopter UAS lifts off the ground. Flying time ends when the unmanned aircraft has landed, and the engines are stopped or the flying crew changes, whichever comes first. Flying hour computation for the individual crewmembers will be logged only for that portion of the in-flight operations during which the operator is performing crew duty functions on the UAS and any of its mission or sensor systems.

2–8. Individual flight records

- a.* Aviation personnel will hand carry their individual flight records folder (IFRF) and individual aircrew training folder (IATF) between assignments. Individuals will present their records to the unit assigned or attached for ATP purposes within 14 calendar days after reporting for duty or placement on flying status orders per AR 600–106.
- b.* Commanders will maintain, close out, and distribute required individual flight records and individual aircrew training records for persons assigned or attached to their organization in accordance with TC 3–04.8.
- c.* Contractors will maintain records in accordance with AR 95–20 and approved procedures.
- d.* At a minimum, the unit flight records custodian will complete a synchronization with the Centralized Aviation Flight Records System (CAFRS) central database for all rated and nonrated personnel no later than the 15th of each month.
- e.* When a Soldier separates, the flight records custodian will complete a synchronization to deactivate and permanently store all flight records data. A copy of the IFRF along with the IATF will be given to the Soldier.

2–9. Use of airports, heliports, and other landing areas

- a.* Aviators may operate Army aircraft at airports and heliports designated as military, federal government, or public use in DOD or U.S. Government flight information publications (FLIPs). Private, closed, or otherwise restricted airports and heliports will be used only with prior permission of appropriate authorities and if the facility is suitable for operations.
- b.* Commanders may authorize the use of temporary landing areas (other than airports or heliports) off military reservations and government-leased training areas. They must obtain approval of the landowner or the approving authority and comply with the landing area requirements of the state or host country. Commanders will consult with the appropriate Department of the Army representative (DAR) or host nation aviation agency (see AR 95–2).
- c.* The installation or field training exercise commander will set policies on the use of aircraft landing sites on military reservations and field training areas.
- d.* Aviators may select landing and takeoff areas when on life-saving missions or when the further flight is inadvisable.
- e.* Aviators should be aware that they may be charged for the use of private facilities on public airports. The PC should report unexpected airport fees to the chain of command.
- f.* UAS will operate in accordance with AR 95–2 and current FAA certificate of waiver or authorization and orders.

2–10. Local flying rules

Installation or garrison commanders having Army aircraft assigned, attached, or tenant to their installation will prepare and publish local flying rules in coordination with the senior mission commander on the installation. Rules will include the use of tactical training and MTF areas, arrival and departure routes, and airspace restrictions as appropriate to help control air operations.

- a.* (Manned) Traffic pattern altitudes at Army airfields for airplanes should be 1,500 feet above ground level (AGL). Helicopter traffic pattern altitudes should be at least 700 feet AGL.
- b.* Installation or garrison commanders may set different altitudes based on noise abatement, fly-neighborly policies, or other safety considerations. These will be displayed in flight operations and provided to the U.S. Army Aeronautical Services Agency (USAASA) for publication in the DOD and U.S. Government FLIP.
- c.* (Unmanned) Operations outside of special use airspace will be conducted in accordance with AR 95–2.
- d.* Requests for deviations from FAA Order 7610.4T to operate UASs outside of restricted areas are processed through the appropriate DAR for the specific FAA region.

2–11. Special use airspace

- a.* AR 95–2 sets Army policy and procedures for handling special use airspace matters.
- b.* Operations in special use airspace will be conducted per instructions in the CFR, DOD and U.S. Government FLIP, host nation procedures, letters of procedures, letters of agreements, FAA certificates of authorization, and local air traffic control (ATC) measures.
- c.* In designated combat zones, airspace use, control, and management will be conducted per JP 3–52, in accordance with FM 3–52. ATC services will be per FM 3–04.120.
- d.* Unless approval is granted in advance through the appropriate DAR, all UAS flights and/or operations will be conducted in the appropriate special use airspace, per AR 95–2. Any UAS flight operations not conducted in the special use airspace must comply with AR 95–2 and applicable FAA Orders.

2–12. Aircraft lighting requirements

- a.* Army aircraft shall be illuminated to at least the minimum standards required by the country in which the flight operation occurs.

b. Anti-collision lights will be on when aircraft engines are operating except when conditions may cause vertigo or other hazards to safety.

c. Position lights will be on bright between official sunset and sunrise.

d. Commanders may authorize exemptions to lighting requirements in threat environments or for night vision device (NVD) flights when operating per AR 95–2. The exemption must be clearly defined and authorized by the unit commander in standard operating procedures or mission orders.

2–13. Flight violations

Policies and procedures for reporting and investigating alleged flight rules violations follow:

a. *Violations.* Report any violation of FAA, ICAO, host country, and/or any other pertinent aviation regulation. Any person witnessing or involved in a flight violation involving civil or military aircraft (MILAIR) will report it as soon as possible.

(1) Report violations by MILAIR to one of the following:

(a) The commander of the unit, activity, or installation, if known, to which the aircraft belongs.

(b) The DAR of the FAA service area in which the alleged violation took place (see AR 95–2 for addresses).

(c) The Commander, U.S. Army Aeronautical Services Agency, Fort Belvoir, VA 22060–5582.

(d) The U.S. Army Aeronautical Services Detachment-Europe, if the incident took place in its area of responsibility (see AR 95–2 for address).

(e) The 8th Army Air Traffic Control, U.S. Forces Korea (U.S. Army Air Traffic Control & Airspace Coordinator’s office), if the incident took place in its area of responsibility (see AR 95–2 for addresses).

(f) The U.S. Army Criminal Investigation Command, in accordance with AR 95–2, if the violation results in significant property damage and/or destruction, serious injury, or death and is believed to have been caused by criminal acts or negligence.

(2) Report violations by civil aircraft to one of the following:

(a) The DAR of the FAA service area in which the alleged violation took place (see AR 95–2 for addresses).

(b) The Commander, U.S. Army Aeronautical Services Agency, Fort Belvoir, Virginia 22060–5582.

(c) The U.S. Army Aeronautical Services Detachment-Europe, if the incident took place in its area of responsibility (see AR 95–2 for address).

(d) The 8th Army Air Traffic Control, U.S. Forces Korea (U.S. Army Air Traffic Control & Airspace Coordinator’s office), if the incident took place in its area of responsibility (see AR 95–2 for addresses).

b. *Information reported.* To report an alleged violation, use a letter or memorandum format. DA Form 2696 (Operational Hazard Report) is not normally used to report flight violations. When reporting an alleged violation, provide as much information as possible. The report should include the following:

(1) Type and make of aircraft.

(2) Tail number.

(3) Name of PC or AC (see para 2–13d).

(4) Unit assigned if military.

(5) Location where aircraft is based.

(6) Description of the alleged violation, to include the following:

(a) Specific reference to regulations violated.

(b) Narrative of what happened.

(c) Time and date the alleged violation occurred.

(d) Where the alleged violation occurred.

(7) Name and phone number of the individual reporting the alleged infringement.

(8) Names, addresses, and phone numbers of additional witnesses, if any.

(9) Other pertinent information.

c. *Investigation.*

(1) Investigate reports of alleged violations received from the FAA, ICAO, or a host country under the provisions of AR 15–6.

(2) Commanders receiving a report of violations from sources other than those listed in paragraph 2–13c(1) will first determine if it involves personnel or aircraft under their command and initiate an investigation under AR 15–6, if necessary.

(3) If warranted by available evidence, commanders may convene a flight evaluation board instead of conducting a separate investigation (see AR 600–105).

(4) Based on the outcome of the inquiry, commanders may take appropriate administrative, judicial, or nonjudicial action.

(5) Results of investigations conducted per AR 15–6 or AR 600–105 will be reported through channels to the Commander, U.S. Army Aeronautical Services Agency, Fort Belvoir, VA 22060–5582. The report will include the findings of the investigation, the corrective action taken or proposed, any conclusions derived, the nature of disciplinary action taken (if any), and any other pertinent information. This report must reach USAASA within 60 days of the commander receiving notification of the alleged violation, unless—

(a) The immediate commander cannot complete the investigation or the administrative or disciplinary action within this time. In this case, an interim report will be forwarded detailing the reasons for the delay.

(b) A flight evaluation board is convened. Notify USAASA when the board is convened and of the expected completion date.

(c) Under no circumstance will a report of investigation prepared under the provisions of this regulation be released outside of the DOD except in accordance with Section 552, Title 5, United States Code (5 USC 552) (commonly known as the Freedom of Information Act (FOIA)) and 5 USC 552a (commonly known as the Privacy Act), as implemented by AR 25–22 and AR 25–55. All requests for information under 5 USC 552 and 5 USC 552a will be referred to the installation or unit operations security coordinator for processing according to AR 25–22 and AR 25–55.

d. *Names.* Names of flight crew involved in actual or alleged violations will be treated as restricted information and not be released to the public or any agency outside the DOD except by proper authority. Any person receiving requests for names of flight crews of Army aircraft should direct such inquiries to the Commander, USAASA.

2–14. Mission approval process

Commanders in the grade of O–5 and above will develop and publish policies and procedures for the mission approval process for those units under their command. When the chain of command lacks a commander in the grade of O–5, the ACOM, ASCC, DRU, or ARNG may adjust this requirement. Adjustment authorities granted throughout this paragraph will not be delegated below the general officer level. Approval authorities and procedures established for tactical and combat operations may differ from those utilized for garrison operations. Commanders will establish a training and certification program to ensure standardization and understanding of the mission approval and risk management process for personnel defined in paragraph 2–14a.

a. Definitions.

(1) *Initial mission approval authority.* Unit commanders or their designated representatives (for example, operations officer) determine the mission feasibility and accept or reject the mission.

(2) *Mission briefing officer.* Commander or their designated representative that interacts with the mission crew or air mission commander to identify, assess, and mitigate risk for the specific mission. Commanders will select briefing officers based on their experience, maturity, judgment, and ability to effectively mitigate risk to the aircrew and designate them by name and in writing. Mission briefers are authorized to brief regardless of risk level. (Manned) Briefing officers must be a qualified and current PC in the mission profile as determined and designated by the commander. (Unmanned) Briefing offices are leaders designated by the commander. If the designated individual is a UAS operator they will be a qualified and current AC.

(3) *Final mission approval authority.* Members of the chain of command who are responsible for accepting the risk and approving all aviation operations (ground and air) within their unit. They approve missions for a specific risk level. Final mission approval authorities may only approve those missions whose assessed risk level is commensurate with their command level. Commanders in the grade of O–5 and above will select final mission approval authorities from the chain of command and designate them in writing along with the level of risk (low, moderate, high, extremely high) they are authorized to approve. At a minimum, company level commanders and below are the final mission approval authority for low-risk missions, battalion level commanders and above for moderate-risk missions, brigade level commanders and above for high-risk missions, and the first general officer in the chain of command for extremely high-risk missions. Approval authorities are based upon levels of command authority and not rank.

(a) For units lacking these positions, the ACOM, ASCC, DRU commander, or the DARNG may adjust them within these guidelines.

(b) For Urgent and Urgent Surgical aeromedical evacuation missions, brigade commanders are authorized to delegate high-risk final mission approval authority to battalion commanders in the grade of O–5 and moderate-risk final mission approval authority to air ambulance company commanders in the grade of O–4. Additionally, brigade commanders will implement the policies outlined in AR 40–3 when developing their Urgent and Urgent Surgical aeromedical evacuation mission approval procedures. This authority may not be further delegated.

(c) During bonafide absences, battalion and brigade commanders may authorize their field grade deputy commander (O–5), executive officer, S–3, or air ambulance company commander (O–4) to accept the risk and approve the operation on their behalf provided they are trained and notify the commander as soon as possible.

b. Mission approval process. The following three-step mission approval process must be completed before mission execution.

(1) *Step 1—initial mission approval.* The initial mission approval authority approves the mission in accordance with the commander's policies and procedures by considering some of the following factors: alignment with the unit's mission essential task list, aircraft required and availability, availability of required special mission equipment, trained aircrew availability, other training and mission impacts, tactical and threat considerations, and so on. This step is not a detailed hazard and risk analysis for specific flight operations, but rather an assessment of the unit's capability to accomplish the mission. Initial approval may occur at different levels of command depending on how the mission is generated. For example, a mission generated at the brigade level might be accepted by the battalion operations officer while the company commander might approve a platoon training mission.

(2) *Step 2—mission planning and briefing.* This step involves detailed planning, risk assessment and risk mitigation by the aircrew, and review by the mission briefing officer (MBO). Briefers are authorized to brief missions regardless of the level of mitigated risk. Self-briefing is not permitted unless approved by the first officer in the grade of O-5 or above in the chain of command. The interaction between the crew and briefer is paramount to identify, assess, and mitigate risk for the specific flight or mission. MBOs are responsible for ensuring key mission elements are evaluated, briefed, and understood by the PC/AC, and AMC as appropriate. MBOs will, at a minimum, review and assess the following key areas in the mission planning process:

- (a) The flight is in support of an operational unit mission and has obtained initial mission approval (see para 2-14b(1)).
- (b) The crew thoroughly understands all tactical, technical, and administrative mission details.
- (c) Assigned crews are allocated adequate pre-mission planning time. The mission is adequately planned to include performance planning, notices to airmen (NOTAMs), instrument flight procedures per paragraph 5-1b, and coordination with supported units.
- (d) Crews are qualified and current for the mission in accordance with this regulation and the commander's flight crew qualification and selection program per paragraph 4-18, to include current ALSE, aircrew reading file currency, and crew experience appropriate for the mission.
- (e) Forecast weather conditions for the mission, including departure, en route, and arrival weather, meet the requirements of this regulation and local directives outlined in paragraph 5-2c.
- (f) Crews meet unit crew endurance requirements.
- (g) Complete commander's risk management program procedures and risk mitigated to the lowest level possible.
- (h) Required special mission equipment is operational.
- (i) Review ground and/or strip alert mission analyses and risk reduction procedures.
- (j) Mitigate operational security risks for sensitive or classified aviation operations when the aircraft is assigned a unique address code and/or the location is broadcast by Automatic Dependent Surveillance-Broadcast (ADS-B), Mode S Transponders, or personal electronic devices. See the USAASA website <http://www.usaasa.tradoc.army.mil/> for more information.

(3) *Step 3—final mission approval.* Based on the resulting mitigated risk, the appropriate final approval authority reviews the mission validity, planning, risk mitigation, and authorizes the flight/operation by the commander's policy. Initialing, signing, or documenting verbal approval on the DA Form 5484 and/or risk assessment worksheet (RAW) are all acceptable methods of recording approval of the appropriate authority in the mission approval process. If a crewmember or a mission parameter change increases the resultant risk, the PC/AC or AMC will be re-briefed, and the mission reappraised as required.

2-15. Seats out operations on Army aircraft (Manned)

a. Authorizations to remove seats and/or seatbelts will be for operational/training necessity only and never for convenience.

b. Crewmembers will wear a properly adjusted seat belt and shoulder harness while performing crew duties. Approved alternate restraining harness is authorized for crewmembers when required to perform specified crew tasks in accordance with aircrew training module (ATM).

c. Missions that require the removal of seats or alternate restraint methods (other than approved Airworthiness Release (AWR)) must be considered higher risk to passengers. These missions are outlined in USSOCOM 350-6 (available via the DES page on Army Knowledge Online at <https://www.us.army.mil/>) and TC 21-24.

(1) *Risk Management.* Authorization to remove seats and seat belts does not negate the responsibility of leaders to further risk mitigate seats out operations. Requestors and approval authorities must carefully weigh the mission/training benefits of seats out operations against the increased risk these operations create for passengers.

(a) Static load rehearsals of door strap removal, individual restraint release, and aircrew offload signal followed by passenger offload must be rehearsed prior to mission execution.

(b) Passengers will be secured by seat belts, individual alternate restraints, and/or door straps as applicable. Alternate restraints are intended to replicate a seat belt as much as possible; therefore, they must be of a length and type that mitigates injuries by limiting passenger movement and preventing ejection during a hard landing, crash, or rollover sequence. Where the device attaches to the aircraft must also be considered and briefed to passengers.

(2) *Infiltration/exfiltration techniques.* The conduct of paradrop, rappelling, helocast, caving (Jacobs) ladder, SPIES, STABO, and FRIES with seats removed/stowed when required by an approved mission essential task list or approved USAACE POI/training support package can be performed without seats installed. No special approval or waiver is required for the passengers. Mission passengers will be secured per paragraph 2–15c(1)(b) from before take-off until the pre-coordinated and briefed individual restraint and/or door strap release point/time.

(3) *Airland.* Operations including air assault, tactical air transport operations, and patients not restrained in accordance with paragraph 8–10 (for example, casualty evacuation) require acceptance of risk for removal of seats and seat belts and is the responsibility of the passenger's chain of command. Airland operations (air assault or tactical air transport) passengers will be secured per paragraph 2–15c(1)(b) from before takeoff until after the aircraft is safely on the ground and the aircrew signals clear to offload.

(4) *Approval authority.* For airland seats out operations in Army aircraft, approval authority is the first one-star (O–7) in the passenger's chain of command. Army aircraft are defined as any U.S. Army, Army National Guard, or Army Reserve aircraft.

(a) The approval authority must accept the additional risk to their personnel and acknowledge the risk in the authorization via memorandum. Verbal orders of commanding officer authorization is authorized but will be documented via memorandum as soon as practicable.

(b) For operations in support of training, approvals to remove seats and seat belts will be granted on a case-by-case basis only and are limited to specific missions or training events. Blanket approvals are not authorized.

(c) For operations in support of Overseas Contingency Operations, approval to remove seats and seat belts may be granted for a specific period of time (in other words, number of days, specific operation, and so forth). The approval authority will document and disseminate that decision. Seats out operations will not be approved for extended or open-ended operations.

(d) Once passenger's chain of command accepts the risk, the aviation mission approval process is completed per paragraph 2–14 of this regulation. Aviation risk assessments will not automatically be considered as high risk when passenger seats/seat belts are removed.

2–16. Noise abatement

a. The Assistant Chief of Staff Installation Management will disseminate noise abatement policies guidance. Installations will develop and publish local noise abatement programs that minimize aircraft noise footprint on and near the installation and within the local flying area and establish good public relations programs to educate and inform the public.

b. Installations will record and retain annual flight operations data for airfields and heliports for development of noise contours (see DODI 4165.57 and AR 200–1) to support noise management and land use planning.

c. Aircrews will participate in noise abatement and fly-neighborly programs to minimize annoyance to persons on the ground when missions and safety are not adversely affected.

d. When operating in noise sensitive areas, unless required by the mission, all Army aircraft will maintain a minimum of 2,000 feet above the surface of the following: national parks, monuments, recreation areas and scenic river ways administered by the National Parks Service; National Wildlife Refuges, Big Game Refuges, or Wildlife Ranges operated by the U.S. Fish and Wildlife Service; and wilderness and primitive areas administered by the U.S. Forest Service.

e. Army aviation activities which normally operate in or adjacent to those areas listed in paragraph 2–16d may enter into local agreements with the controlling agency to modify procedures required for mission accomplishment.

2–17. Configuration management

a. The CG, AMCOM will designate PEO Aviation to serve as the overall configuration control manager of the Army fleet of standard Army aircraft. In coordination with the USAACE and the DCS, G–3/5/7, subordinate PMs of PEO Aviation will establish a baseline configuration for each standard Army aircraft and recommend approval for any deviation from the baseline. Approval of deviations from the standard configuration will be made by the DCS, G–3/5/7 (DAMO–AV). Deviations must meet a recognized Army operational requirement.

b. Each PM will serve as the individual configuration control manager of the platform under their control. Individual PMs will work with commands desiring deviations from the approved standard baseline.

(1) PMs will determine if an authorized deviation already exists that would fit the need.

(2) PMs will determine the cost and impact of such deviations and package the recommendation for consideration, after coordinating with the applicable agencies.

(3) For deviations that do not meet a previously approved Army requirement, PEO Aviation will coordinate the request with the USAACE, AMCOM, and the DCS, G-3/5/7 (DAMO-AV) for final approval.

(4) For deviations that meet a previously approved Army requirement, PEO Aviation will coordinate the request with the DCS, G-3/5/7 for final approval.

c. The commanders of ACOMs, ASCCs, DRUs, and the ARNG will maintain their aircraft to the Army standard baseline configuration. Commanders wishing a deviation to the baseline will coordinate with the aircraft PM for technical assistance and forwarding of the request for approval by the DCS, G-3/5/7 (DAMO-AV).

Chapter 3 Operations and Safety

Section I

Use of Army Aircraft

3-1. Use of Army aircraft, general

Army aircraft will be utilized for authorized purposes only. Army owned, operated, or controlled aircraft will only be used to transport Army personnel, government property, other official government passengers, or other passengers and cargo as authorized by statute and DOD issuances, or Army Directives, regulations, or policies. Specifically, use of Army aircraft must comply with paragraphs 3-2, 3-3, 3-4, or 3-5 of this chapter and must not otherwise be prohibited by paragraph 3-6 of this regulation. Also, air travel must be the most economical mode of transportation consistent with the accomplishment of the military mission, and the particular aircraft to be utilized must be the least costly one available that is capable of satisfying the transportation requirement. Travel by MILAIR that is mission essential, regardless of cost or availability of commercial service, will require complete documentation signed by the senior passenger. This authority cannot be delegated.

a. UAS use must comply with paragraph 3-3 and must not be prohibited by paragraph 3-6 of this regulation. The only authorized classes of missions designated for an Army UAS are operational use and, as approved, special use. To ensure that the noncombatant status of civilians and contractors is not jeopardized, commanders shall consult with their servicing judge advocate office for guidance before using civilian or contractor personnel in combat operations or other missions involving direct participation in hostilities.

b. Group 1 UAS procured per chapter 9 of this regulation for non-tactical missions (for example, Corps of Engineers dam inspections; research and academic activities within Army research laboratories; Research, Development, and Engineering Command (RDECOM); military academies; or public affairs events) are exempt from the qualification, evaluation, and currency requirements of this regulation. Owning organization is responsible for safe operations and compliance with applicable FAA circulars.

c. The classes of missions Army aircraft may be authorized to perform are:

- (1) Required use.
- (2) Operational use.
- (3) Special mission use.
- (4) Other official use.

d. DODI 4515.13 applies to Army FW and RW for transportation eligibility.

3-2. Required use

Required use includes those missions with a designated required use traveler per DODD 4500.56 and Army Directive 2017-05 where the use of MILAIR is required due to the constant requirement for secure communications, security, or for transportation to satisfy exceptional scheduling needs. Within the DA, the SECARMY and the CSA are required to use MILAIR travel for all air travel when in a duty status.

3-3. Operational use

Operational use includes those missions required to accomplish the Army's mission and to maintain the combat readiness of aviation and ground units. Operational use missions include, but are not limited to, the following:

- a. Actual or simulated tactical and combat operations.
- b. Aircrew/crewmember training.
- c. Intelligence.
- d. Counter-narcotics activities (CNA).
- e. Search and rescue.

- f. Transportation of prisoners.
- g. Use of defense attaché controlled aircraft.
- h. Research and development.
- i. Maintenance flights/FCFs.
- j. Flight tests.
- k. Repositioning or reassignment of aircraft.
- l. Transport of troops and/or equipment (non-medical evacuation).
- m. Special use (Defense Support of Civilian Authorities/intelligence related activities, humanitarian, disaster relief, and deployments).
 - n. Aeromedical evacuation by aeromedical units.
 - (1) Aeromedical evacuation applies to eligible personnel described in DODI 4515.13.
 - (2) Army aircraft may be used to transport U.S. Armed Forces patients when deemed necessary by competent medical authority (see DODI 4515.13). FW and RW aircraft not equipped to handle litters or patients requiring special care en route will only transport ambulatory patients who need no en route medical treatment, except as required for emergencies.
 - (3) Civilians and personnel not covered in paragraphs 3–3n(1) and 3–3n(2) may be provided aeromedical transportation to the nearest medical facility where immediate treatment is available. Transport will only occur when there is an emergency involving an immediate threat to life, limb, or sight, and when suitable commercial services (air taxi, charter air ambulance, or aeromedical evacuation configured commercial air) are not available, feasible, or are inadequate. Installation and/or senior mission commanders in coordination with aviation brigade or separate Army aeromedical evacuation unit commanders will develop written policies that establish specific procedures for notification, mission acceptance, and launch authority.
 - (4) Army air ambulance aircraft are dedicated evacuation platforms in support of aeromedical missions described in AR 40–3. All requests to utilize air ambulance aircraft for missions other than in support of the aeromedical or humanitarian relief missions defined in this paragraph will be forwarded through ACOM, ASCC, DRU, or ARNG to the Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400 for approval.
 - o. Aeronautical research and space and science applications.
 - p. Exercising command and/or supervision authority at adjacent and local installations.

3–4. Special mission use

Unless specified, the commander of the ACOM, ASCC, DRU, or the DARNG owning the aircraft must approve of missions authorized in this paragraph. They may delegate approval authority as specified in paragraphs 3–4a through 3–4f and no lower than the first general officer in the chain of command if not specified. Army aircraft may be used for the following purposes:

a. *Public affairs.* Army aircraft may be used for public affairs missions and public affairs travel in accordance with DODI 4515.13, DODI 5410.19, AR 360–1, and current Army Directives. Consultation of these publications will occur before these missions are approved. Approval of an aerial request by the OCPA does not authorize the flight nor constitute acceptance of the mission. These missions are still subject to paragraph 2–14 and must serve an aviation purpose. Public affairs missions include, but are not limited to, the following:

- (1) Performance by DOD demonstration teams.
- (2) Flyovers of public affairs events.
- (3) Tactical demonstrations.
- (4) Aerial reviews.
- (5) Static displays or aerial demonstrations not on a military installation (will comply with AR 360–1).
- (6) Aerial activities defined as all other aerial demonstrations not listed in paragraphs 3–4a(1) through 3–4a(5) designed to portray performance techniques by a single aircraft or group of aircraft or personnel. Such demonstrations include, but are not limited to, air to air refueling, helicopter flight techniques, maximum performance takeoff, performance record demonstrations, mass parachute jumps, air delivery of equipment, assault aircraft demonstrations, tactical helicopter troop landings, air rescue demonstrations, and aircraft rappelling, fast rope, or STABO demonstrations.
- (7) Units assigned an aerial demonstration mission within the continental United States (CONUS) will comply with 14 CFR 91. If parachuting is involved, 14 CFR 105 will also apply. Coordinate with the DAR before conducting aerial demonstrations off a military installation. The list of DARs is in AR 95–2.
- (8) Outside the continental United States (OCONUS) units assigned an aerial demonstration mission will comply with published ACOM, ASCC, DRU, and host nation regulations.

b. *Orientation flight.* Army aircraft may be used for orientation flights in accordance with DODI 4515.13, DODD 4515.12, and the following:

(1) Aviation unit commanders in the grade of O-5 or above, their corresponding aviation standardization officer in the grade of W-4 or above, and aviators assigned to Combat Aviation Brigade (CAB) as the command chief warrant officer (CCWO) in the grade of W-5 who are not qualified in aircraft within their unit are authorized to conduct an orientation flight when all of the following conditions met:

- (a) Flight is for demonstrating or determining the capabilities of the aircraft.
- (b) Commander, CCWOs, and standardization officers must be assigned to that documented position.
- (c) Aircraft and crew must be under their command or responsibility for standardization.
- (d) If simulated emergency procedures will be conducted, the flight will be designated high risk.
- (e) Must be qualified in the category of aircraft to be flown.
- (f) Must be current per paragraph 4-9b for flights in forecast IMC.
- (g) Flights in a designated combat or imminent danger zone must be approved by the first two-star level commander in the chain of command. Approval authority for flights outside of a designated combat or imminent danger zone may be delegated down to commanders in the grade of O-6.

(2) Nonrated personnel and rated personnel not qualified in the aircraft occupying a pilot station when the operator's manual or mission requires two pilots as minimum crew.

- (a) Flight is for demonstrating or determining the capabilities of the aircraft.
- (b) NVD or nap of the earth flight must be specifically authorized.
- (c) Flight will be in visual meteorological condition (VMC).
- (d) If simulated emergency procedures will be conducted, the flight will be designated high risk.
- (e) Flight is approved by the commander of the ACOM, ASCC, DRU, or the DARNG providing the aircraft or the CG, USAACE for flights at USAACE. Authority granted to approve these orientation flights will not be further delegated below the first general officer in the chain of command.
- (f) Flights in a designated combat or imminent danger zone must be approved by the first O-8 level commander in the chain of command.

(g) If any of the conditions in paragraphs 3-4b(2)(a) through 3-4b(2)(f) cannot be complied with, a waiver may be requested per paragraph 1-7.

(h) Members of Congress and their staffs may be provided orientation flights only with the approval of the Office of the Chief of Legislative Liaison, Support Operations Division, 1600 Army Pentagon, Washington, DC 20310-1600. State and local officials may participate in orientation flights in direct support of Homeland Defense missions.

c. *Casualty evacuation or aeromedical evacuation by non-aeromedical evacuation units.* Performance of aeromedical evacuation and casualty evacuation by non-aeromedical units will be performed in accordance with paragraph 3-3n and when approved by the commander.

d. *Other emergency situations.* The ACOM, ASCC, DRU, or ARNG will notify the Deputy Chief of Staff, G-3/5/7 (DAMO-AV), 400 Army Pentagon, Washington, DC 20310-0400, when decisions are made to use Army aircraft for emergency situations and full details provided as soon as possible. When danger to public health or safety prevents prior approval, Army aircraft may transport civilian personnel in the following situations:

- (1) Personnel engaged in search and rescue.
- (2) When severely injured or critically ill patients in CONUS require immediate lifesaving aeromedical evacuation. Applicable events are major fires, earthquakes, flood, industrial or transportation accidents, epidemics, or similar natural or man-caused catastrophes.
- (3) Volunteers with special search and rescue equipment who volunteer to help and have no other means of transportation. Their services must be requested by the Aerospace Rescue and Recovery Service.

e. *Security assistance missions.* Chiefs of military assistance advisory groups and defense attachés may approve missions for transportation of all personnel under their control. They may do this for their aircraft only in accordance with DODI 4515.13 and Army Directive 2017-05.

f. *Other.* Army aircraft may also be used for the following:

(1) Travel per Army Directive 2017-05 to events such as memorial services, retirements, graduations, public ceremonies, field demonstrations, patient visitation, or parades for military personnel who are participating or representing the Army or DOD in an official capacity only. MILAIR transportation requests will not be approved for the sole purpose of attending such activities in a personal capacity.

(2) Transportation for other authorized activities such as sponsored athletic teams, bands, or other welfare; morale; recreation; and chaplains' programs in accordance with DODI 4515.13.

(3) Support of sport parachute clubs set up by installation commander under AR 215-1.

(4) Military spouse orientation flight programs under the following conditions:

(a) Flights are to satisfy specific retention or motivation objectives and will be conducted as safely and efficiently possible.

- (b) Flights will be accommodated within the command FHP.
 - (c) Flights will be conducted in the local area only.
 - (d) Flights will not be conducted above 10,000 feet pressure altitude except in pressurized aircraft.
 - (e) Passengers will not occupy flight crew seats with access to flight controls.
 - (f) Passenger restrictions in paragraph 3–8 will apply.
 - (g) Accompanied spouse travel will be in accordance with DODI 4515.13 and applicable SECARMY guidance.
 - (h) An ACOM, ASCC, DRU commander, or the DARNG desiring to establish a spouse orientation program will submit a copy of the proposed plan to the Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400 for approval.
 - (i) When ACOMs, ASCCs, DRUs, or ARNG have approved plans, they have approval authority for subordinate unit requests for orientation flights.
- (5) Aircraft support of community relations and public information will comply with AR 360–1 and DODI 4515.13.
- (6) Transportation of members of Congress and accompanying staff members (when approved by the Office of the Chief of Legislative Liaison (OCLL)) in accordance with DODD 4515.12.
- (7) Flyovers, including the missing man formation at memorial or funeral services in honor of rated and/or designated aviation personnel or dignitaries, will comply with DODI 5410.19 and DODD 5410.18.
- (8) Commanders in the grade of O–6 and above, including state Army aviation officers for ARNG, will approve FAA employees or designated pilot examiners engaged in flight checks or examining rated personnel using U.S. Army aircraft. Use of Army aircraft to exclusively obtain or renew an FAA rating is prohibited.
- (9) All requests for transportation not provided for in this paragraph and waiver requests to the provisions of this paragraph will be forwarded through the ACOM, ASCC, DRU, or ARNG to the Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400.

3–5. Other official travel

Administrative travel, also called “other official travel,” includes travel to give speeches; attend conferences, meetings, or training courses; make routine site visits; and other similar uses. The justification for the use of FW MILAIR for administrative travel usually requires showing that MILAIR is essential versus commercial air. The rationale for the use of RW aircraft for administrative travel usually involves showing that MILAIR is essential versus ground transportation unless commercial air travel is also available between the general departure and destination locations. All travel will comply with current DODDs, DODIs, and Army Directives.

3–6. Prohibited missions

- a. Army aircraft will not be used to conduct flights for personal use. They will not be used for transportation of personnel or equipment to any place or event in an unofficial capacity.
- b. Army aircraft will not be used for domicile (place of residence) to duty, or duty to domicile, transportation unless authorized under 31 USC 1344, 10 USC 18505, or as approved by the SECARMY.
- c. Requests for exceptions to travel policies will be forwarded through Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400, through the Army Headquarters Services, Director of Executive Travel (OAASA–AHS–ZT), 9301 Chapek Road, Building 1458, Fort Belvoir, VA 22060, to the Administrative Assistant to the Secretary of the Army, 105 Army Pentagon, Washington, DC 20310–0105.
- d. Use of Army aircraft exclusively to obtain or renew an FAA rating is prohibited.
- e. Army UAS will not be operated in a manner outside of the definition of public aircraft.

3–7. Passenger policy

- a. Service personnel are authorized to fly as passengers in Army aircraft while on duty and when authorized by their commander. Verbal authority is permitted. “Service personnel” are defined as follows:
 - (1) Active duty members of the Army, Navy, Air Force, Marine Corps, and Coast Guard.
 - (2) Active status member of RC as defined in DODD 4515.12.
 - (3) DOD civilians when on official business.
 - (4) Employees of other U.S. Government agencies and technical advisors to DOD component authorities when traveling on official business for DOD.
- b. Army personnel traveling on OSA flights on permanent change of station orders, temporary duty, emergency leave, space availability, or official business are authorized to wear appropriate civilian clothing. Personnel must ensure that their dress and personal appearance are appropriate for the occasion and reflect positively on the Army.

c. Personnel will not make an aerial flight if determined medically unfit by competent medical authority, or if they are disabled and not physically capable of caring for themselves while enplaning, deplaning, or while in flight by DODI 4515.13.

d. Personnel specified as eligible passengers in DODI 4515.13 are authorized as passengers in Army FW aircraft. Authorized travelers (other than spouse and Family member travel) must have travel orders or transportation authorization published by the installation travel authority. Spouse and Family member travel must have travel or transportation authorization issued by the DCS, G-3/5/7 (DAMO-AV) or as specified in DODI 4515.13 or Army Directive 2017-05 and meet the requirements established therein. The orders must specify if travel is reimbursable or nonreimbursable. Travel for other executive departments or government agencies, or for the judicial or legislative branches of the Federal Government, have unique requirements defined in DODI 4515.13. Coordinate these requirements with the Office of the Chief Legislative Liaison, Support Operations Division, 1600 Army Pentagon, Washington, DC 20310-1600.

e. Dependents authorized to travel under this or other paragraphs are defined in DODI 4515.13.

f. Aircraft will not deviate from mission flight plans to accommodate space available passengers.

g. Policies for FW aircraft transportation of foreign personnel and approval authorities are specified in DODI 4515.13.

h. Contractor employees when performing duties specified in their contract or statement of work and on an official contractor identification memorandum or letter of authorization in accordance with Army Directive 2017-05 or DODI 4515.13 are authorized passengers.

i. Submit questions or requests for waiver concerning passenger eligibility as outlined in this paragraph through ACOM, ASCC, DRU, or ARNG to Deputy Chief of Staff, G-3/5/7 (DAMO-AV), 400 Army Pentagon, Washington, DC 20310-0400.

3-8. Passenger restrictions

a. Passengers are restricted from the following types of flights:

- (1) Maintenance, engineering, functional, or experimental test flights.
- (2) Aerobatics flights.
- (3) Aerial demonstrations (mission essential personnel authorized) as defined by DODI 5410.19 and AR 360-1.
- (4) Flight crew emergency procedures training.
- (5) NVD qualification and refresher training.
- (6) Aeronautical record attempts.
- (7) Aircraft acceptance flights.

b. Personnel on the aircraft during the above operations will be limited to the minimum essential and those making evaluations or performing required maintenance checks. Army aircraft will be used for authorized purposes only.

Section II

Operational Support Airlift

3-9. Operational support airlift missions

The OSA missions are movement of high priority passengers and cargo with time, place, or mission-sensitive requirements. DODI 4500.43 provides OSA-A policy guidance, definitions, procedures, and responsibilities. DODI 4515.13 provides transportation eligibility policy and procedures for MILAIR, and Army Directive 2017-05 provides SECARMY policy for travel by DA senior officials.

3-10. Operational support airlift management responsibilities

a. The SECARMY is responsible for—

- (1) Establishing clear accountability for aircraft management at a senior officials level.
- (2) Developing and implementing policies that specify validating requirements and procedures for scheduling assets in support of Army OSA requirements.

b. The AASA, on behalf of the SECARMY, will provide management and policy oversight for the use and scheduling of the Army executive jets designated as SSCA.

c. The ASA (FM&C) will prepare and publish an annual cost per flying hour message that includes DOD and non-DOD costs per flying hour rates by aircraft mission, type, design, and series for all Army aircraft. The ASA (FM&C) will also publish annually the gross hourly salary for military and civilians to be used for cost effectiveness analysis.

d. The DCS, G-3/5/7 has management responsibility for the following areas:

- (1) Establish objective wartime requirements for Army OSA aircraft.

(2) Review annually the continuing need for aircraft appropriated based solely on wartime readiness requirements, and for reasons other than wartime requirements, as well as the cost effectiveness of aircraft operations. When not fully justified, the Army will release aircraft determined to be excess.

(3) Review, analyze, and evaluate Army OSA and/or non-OSA utilization data to determine future aircraft stationing and changes to the aviation structure.

(4) Report the Army OSA FHP execution during the quarterly program performance and/or budget execution review.

e. Combatant command, ACOM, ASCC, or DRU commander, or the DARNG will—

(1) Ensure that procedures are developed within each subordinate unit to allow for the OSA–A to capture all OSA travel requirements.

(2) Designate helicopter scheduling authorities to schedule Army helicopter assets to support OSA mission requirements.

(3) Establish internal control procedures to ensure subordinate units comply with OSA program requirements.

f. Operational relationships are established in consonance with the AASA, Director of the Army Staff, and DCS, G–3/5/7.

g. The Commander, OSA–A delegated by DARNG oversees operations, training, standardization, maintenance, readiness, mobilizations, safety, and risk management command oversight for all ARNG FW elements.

h. The ACOM, ASCC, and DRU commanders of owning and/or attached units, ARNG adjutant generals, and USAR general officer commands will—

(1) Validate all OSA requests generated from subordinate units, tenant activities, and designated agencies. Validator duties may be delegated to an individual within the chain of command. Validator duties and mandatory training will be performed in accordance with USTRANSCOM Instruction 10–19, also known as the OSA Remote User’s Guide.

(2) Develop internal control procedures to ensure compliance with appropriate DOD issuances, this regulation, and the OSA Remote User’s Guide.

(3) Ensure accurate record keeping and timely submission of OSA requests.

(4) Ensure designated officials, CONUS airplane flight units, and RW units tasked to support OSA are networked to OSA automated remote users’ system.

(5) Ensure FW OSA CONUS flight requests are submitted to OSA–A.

(6) Ensure flight activities submit post-mission reports for all missions flown.

(7) Provide notification to requesters of travel support, nonsupport, or schedule deviations.

(8) Brief users on procedures for initiation, cancellation, or modification of airlift requests.

(9) Designate a centralized point of contact for receiving space available travel requests and maintain space available roster.

(10) Assign appropriate priority, urgency, justification, and category (PUJC) codes for each OSA request in accordance with DODI 4500.43. The OSA validators will retain specific justifications for PUJC codes assigned for each airlift request for 2 years subject to periodic review by appropriate agencies.

(11) Examine and approve all senior federal travelers’ (all general officer and civilian equivalent) travel requests. Validation for senior federal travel may not be delegated below the grade of O–8.

i. Commander, OSA–A, will—

(1) Serve as scheduling authority for Army FW OCONUS and operational use missions.

(2) Serve as reviewing authority for all Army FW OSA requests entered into Joint Air Logistics Information Systems (JALIS).

(3) Report the use of OSA by DA Presidential appointees to U.S. Transportation Command semi-annually.

(4) Analyze cost computations of OSA in accordance with DODD 4500.56.

(5) Maintain a current listing of designated Army OSA validators.

(6) Provide all designated OSA validators with access codes, user identification, and program manuals for JALIS.

(7) Retain all requests for aircraft support and post-mission data for a period not less than 2 years after completion of the fiscal year (FY).

j. Aviation units performing OSA mission support will conform to the reporting requirements contained in the OSA Remote User’s Guide and this regulation.

(1) The aviation unit commander will appoint an airlift coordinator. The airlift coordinator duties are outlined in the OSA Remote User’s Guide.

(2) Report all training flights in Logistics Flight Records in accordance with OSA Remote User’s Guide.

(3) The aviation unit may schedule training missions. However, this regulation prohibits aviation units from scheduling training missions for the sole purpose of carrying passengers and or cargo.

(4) Retain all post-mission data, including non-OSA missions, for not less than 2 years after completion of the FY.

3-11. Operational support airlift justification

Within the policy guidance prescribed by DODI 4500.43 and this regulation, scheduling authorities schedule the use of aircraft for OSA missions based on the following criteria:

a. Base cost analysis procedures on the OSA scheduling system. Accomplish commercial cost comparisons for FW OSA by incorporating cost elements specified in DOD issuances and ARs.

b. For airlift requests meeting the criteria prescribed in paragraph 3-11*a*, each OSA flight request will be assigned an appropriate PUJC code by the OSA validator established in the OSA Remote User's Guide and DODI 4500.43.

3-12. Operational support airlift procedures

a. The OSA validators will publicize transportation requests and aircraft scheduling procedures within their areas of responsibility. Procedures will include requirements for units or individuals to request OSA in advance and to accept variations in departure or arrival times and will be reviewed by the authorizing official. Consider urgent operational demands when determining if a spread is possible in departure and arrival times. Validators will establish the PUJC codes for all OSA requests based on the OSA Remote User's Guide and DODI 4500.43. Rank or grade alone is not sufficient to justify support of airlift requests or placement in any particular PUJC.

b. Army personnel will submit requirements for official travel to the authorizing official within their chain of command.

c. Authorizing officials will state requirements for official government travel and forward all approved requests to OSA validators a minimum of 4 duty days before the date of intended travel and in sufficient detail to allow the validator to assign the airlift requests with the appropriate PUJC. Signature of the senior traveling passenger is required and cannot be delegated. Also, senior federal travelers (all general officer and civilian equivalent) will have their travel requests reviewed and approved no lower than the grade of O-8.

d. OSA validators will ensure that requests are received from a proper authorizing official with the appropriate signature of the senior passenger. They will submit approved requests for Army FW OSA within CONUS and OCONUS to OSA-A. Submit RW OSA requests within the National Capital Region to the Military District of Washington for scheduling.

e. The JALIS automated remote user's system will be used to submit OSA requests. Submit requests to OSA-A within the time frames outlined below.

(1) Except in emergencies, process flight requests through OSA-A not later than 4 duty days before the departure or as soon as identifying an OSA mission requirement. Priority "1" requests may be submitted telephonically and confirmed by message.

(2) Team or group travel request (as defined in DODI 4515.13) for 15 or more individuals for Army OSA flights will be submitted not later than 30 days before departure date, not including requests for special air mission support. A team consisting of 14 or fewer individuals traveling as a group, or part of a group, may be submitted not later than 4 duty days in advance of the date of desired travel or as soon as the requirement is identified.

f. Transmit cancellations or changes to CONUS OSA flights to Joint Operational Support Airlift Center using the OSA Remote Users Guide.

g. Passenger reporting time for OSA flights is not later than 30 minutes before scheduled departure time.

h. Validators will not submit requests for FW backup support for approved helicopter requests.

i. RW units in the National Capital Region are required to complete post-mission report when providing support to OSA.

3-13. Operational support airlift data collection and use

a. OSA-A will collect Army OSA and/or non-OSA FW utilization data for—

(1) Justifying the use of government aircraft in lieu of commercially available aircraft or the use of one government aircraft instead of another.

(2) Recovering the costs of operating government aircraft when appropriate.

(3) Determining the cost effectiveness of various aspects of aircraft programs.

(4) Analyzing trends in inventory and seat utilization for each mission, type, design, and series OSA aircraft, by priority of travel, to include opportune airlift.

(5) Comparing OSA and/or non-OSA flying hours flown to those budgeted in the annual FHP.

(6) Summarizing the number of OSA and/or non-OSA missions flown.

(7) Summarizing passenger requests and total passengers moved by priority.

b. OSA-A will retain all aircraft support requests and post-mission data for not less than 2 years after completion of the FY. The OSA validator will maintain a copy of all requests for OSA support for not less than 2 years after the end of the FY. The aviation unit will retain all post-mission data, including reports on all training flights, for not less than 2 years after completion of the FY.

Section III

Safety

3-14. Safety functions, mishap reports, investigations, and release of information

- a.* Procedures for investigating and reporting aircraft mishaps are in AR 385-10 and DA Pam 385-40.
- b.* Policy and procedures for reporting casualties and notifying next of kin of personnel involved in aircraft accidents are prescribed in AR 638-8.
- c.* Requests for aircraft mishap reports will be answered per AR 385-10.
- d.* Requests for information under the FOIA will be processed per AR 25-55.
- e.* In all instances of an aviation Class A accident, the first general officer in the chain of command must accept the out brief from the accident investigation team.
- f.* Commanders will implement the aviation accident prevention program per DA Pam 385-90.

3-15. Risk management

- a.* Commanders will integrate risk management into aviation mission planning and execution at every level. Guidance on risk management is in TC 3-04.11, ADP 5-0, ATP 5-19, and DA Pam 385-30.
- b.* The risk management process begins at mission conception and continues through mission completion. Apply the process with the goal of eliminating hazards where possible and reducing residual risks to acceptable levels.
- c.* Commanders or equal authority for organizations lacking a military commander will develop local checklists and RAWs for mission briefing officers to use in assessing mission planning and risk as per paragraph 2-14 of this regulation. File the RAW with the mission briefing sheet.

3-16. Crew endurance

- a.* Commanders will design a crew endurance program tailored to their unit mission and include it in their standard operating procedures (see DA Pam 385-90). The leader's guide to crew endurance is available at <https://safety.army.mil/>.
- b.* Crew endurance is an integral part of the overall risk management program. It is used to control risks due to sleep deprivation or fatigue and to prescribe thresholds for command decisions whether to accept those risks.
- c.* Commanders should consider the advice of the FS and aviation safety officer in designing their programs.

3-17. Operational hazard reporting

DA Form 2696 will be used to notify commanders and safety councils of anything affecting the safety of Army aircraft or related personnel and equipment. The commander will have reported hazards investigated immediately and will correct unsafe conditions (see AR 385-10 for instructions).

Section IV

Aircraft Maintenance

3-18. Maintenance test flights and functional ground and flight checks

- a.* Conduct MTFs per DA Pam 738-751 for Army aircraft having AMCOM approved MTF manuals. Army aircraft lacking an AMCOM approved MTF manual will have functional ground and/or flight checks/maintenance flights conducted to conform to the airworthiness authority's approved procedures.
- b.* Army and contract maintenance pilots performing MTFs for Army aircraft having AMCOM approved MTF manuals must be qualified and current per paragraph 4-27 or 4-28 of this regulation. Army and contract pilots performing functional ground and/or flight checks and/or maintenance flights conducted per the airworthiness authority's approved procedures must be qualified and current per paragraph 4-27e of this regulation.
- c.* The MTFs or functional ground or flight checks/maintenance flights for Army aircraft under bailment to contractors will be conducted in accordance with this regulation unless changed by the terms of the contract.

3-19. Maintenance operational check

- a.* Authorized personnel will perform maintenance operational checks per DA Pam 738-751 and/or applicable aircraft technical manual/master service manual.
- b.* Personnel who are authorized to start, run-up, shutdown, and taxi aircraft for maintenance operational checks and are not qualified per paragraph 2-1a(1) through 2-1a(6) will—
 - (1) Undergo appropriate normal and emergency procedures training conducted by a maintenance trained aircraft IP/SP/ME/IO/SO, as the case may be, on the specific mission, type, design, and series aircraft.

- (2) Be evaluated semi-annually by a maintenance trained airplane IP/SP/ME/IO/SO on all functions they are required to perform.
- (3) Have written authorization from the commander which specifies the operations and checks permitted.
- c. Unqualified personnel per paragraphs 2-1a(1) through 2-1a(6) or paragraph 2-2b(2) are prohibited from starting, running up, or shutting down helicopters.
- d. Commanders may authorize personnel to start, operate, and stop auxiliary power units. These persons will—
 - (1) Undergo appropriate normal and emergency procedures training conducted by an IP/SP/ME/IO/SO in the specific mission, type, design, and series aircraft.
 - (2) Be evaluated annually by an IP/SP/ME/IO/SO as appropriate on all functions they are required to perform.
 - (3) Have written authorization from the commander. This approval must specify the operations and checks permitted.
- e. Contractor personnel performing maintenance operational checks and/or operating aircraft auxiliary power units will utilize requirements listed in AR 95-20 or government flight representative approved contractor ground and flight operating procedures utilizing this paragraph as service guidance.

Section V

Army Aircraft Performance Records

3-20. Requests for performance records

The policy for handling requests from the Services for authority to establish performance records by MILAIR is contained in DODI 5410.19 and AR 360-1. It authorizes periodic official demonstrations of MILAIR to establish new performance such as speed and endurance records.

3-21. Purpose of performance records

The following policies apply to the use of Army aircraft for the purpose of performance records:

- a. Only Service aircraft will become eligible to establish new performance records. These aircraft will be eligible 6 months after the first aircraft is delivered to an operational unit.
- b. Service requests to engage in public demonstrations to establish performance records and release information on new performance records will be submitted to the ATSD (PA), for approval or disapproval, after coordination—
 - (1) By the ATSD (PA) within DOD.
 - (2) With other appropriate departments of the U.S. Government.
 - (3) With the National Aeronautic Association.
- c. Requests in paragraph 3-21b will be accompanied by a description of the specific aircraft, full justification of the purpose of the record attempt, flight plans, and information supporting the attempt.
- d. Requests by ACOM, ASCC, DRU, or the ARNG for authority to establish performance records by MILAIR will be submitted to the Deputy Chief of Staff, G-3/5/7 (DAMO-AV), 400 Army Pentagon, Washington, DC 20310-0400, at least 60 days before any proposed record attempt.

Chapter 4 Training

Section I

Training Program and Literature

4-1. General

The ATP will be in accordance with TC 3-04.11. The aviation maintenance training program applies to enlisted maintenance personnel.

4-2. Aircrew training program waivers and extensions

- a. Authorities listed below may grant unit waivers and/or extensions to ATP requirements to units under their command:
 - (1) *Army command, Army service component command, and direct reporting unit commanders.* This authority will not be delegated below the first general officer in the chain of command.
 - (2) *Director, Army National Guard.* This authority will not be delegated below the ARNG Aviation and Safety Division (ARNG-AV).
 - (3) *Other.* This authority may be delegated to commanders, O-6 and above during an operational deployment.

b. The first commander, O-6 or above, in the individual's chain of command or the state Army aviation officer for ARNG may grant individual waivers to ATP requirements.

c. Waivers and/or extensions will indicate the specific requirement waived and/or extended and for the specified period.

d. Any crewmember affected by a waiver or extension that has not completed all components of the APART within the preceding 24 months will be designated readiness level (RL) 3 pending completion of the missing component(s). Commanders are not authorized to waive this requirement.

e. Aviators are required to complete an APART instrument evaluation, per paragraph 4-9, within the preceding ATP year before flying into forecast IMC. Exceptions are listed in paragraph 4-21d. Commanders are not authorized to waive this requirement.

4-3. Publications

Aircraft operator's manuals and checklists are the primary references governing the operation of a specific aircraft. Approved aircrew training tasks, field manuals, technical manuals, and training circulars will be used as required. When differences exist between other Army aviation publications and this regulation, this regulation has precedence. DA Form 2028 (Recommended Changes to Publications and Blank Forms) will be submitted through the aviation unit commander to the proponent of the manual.

4-4. Aircrew information reading files

Aviation units will establish and maintain aircrew information reading files. Assigned aircrew personnel will read and remain familiar with these files.

4-5. Aircrew training program

a. The ATP ensures combat readiness through standardized training and evaluations.

b. The ATP is mandatory for all military aviators assigned to operational aviation positions and operators assigned to UAS equipped units. Individual ATP requirements include flying hour, SFTS requirements, task iteration, and evaluation requirements including RL progression requirements and the APART.

c. Army aviation personnel assigned or attached to another Service will meet the requirements of that Service.

d. Department of the Army Civilian (DAC) aviation personnel will be trained and evaluated as specified in writing by the commander. DACs will complete the minimum flying hour approved aircrew training task iteration and evaluation requirements as determined by the commander/hiring authority.

e. DAC and contractor IPs and/or IEs serving in flight simulator only positions will be trained and evaluated as necessary to meet the requirements of the job description or statement of work. They will—

(1) Be qualified as IPs in accordance with paragraph 4-24 in the aircraft related to the flight simulator in which they provide flight instruction or evaluations.

(2) Be qualified as IEs in accordance with paragraph 4-25 in the category of aircraft related to the flight simulator in which they provide instrument instruction and evaluations.

(3) Be evaluated annually by an SP or IE, as appropriate, who is current in the aircraft related to the flight simulator in which they primarily provide flight and or instrument instruction or evaluations.

f. Instruction or evaluations received from individuals not qualified per paragraphs 4-5e(1) through 4-5e(3) will not be used to satisfy ATP requirements.

g. The commander may excuse an aviator/operator scheduled for active duty separation or retirement from all ATP requirements, beginning no sooner than 6 months before the scheduled retirement or separation date. This does not apply to those who have initiated action to join an RC aviation unit or aviators that have applied to work for the Army as an aviation contractor or DAC. Aviators/operators excused from ATP requirements are prohibited from performing crew duties.

4-6. Aircraft qualification training

a. *Qualification training.*

(1) Requests for formal training at other DA designated training bases are routed through the aviation office of the ACOM, ASCC, DRU, or ARNG to Deputy Chief of Staff, G-3/5/7 (DAMO-AV), 400 Army Pentagon, Washington, DC 20310-0400 for approval.

(2) Unless otherwise approved by DCS, G-3/5/7 (DAMO-AV), local transition training will not be conducted when a formal DA qualification course or an appropriate USAACE approved POI exists. Exceptions may be granted on an as required basis through the aviation office of the ACOM, ASCC, DRU, or ARNG by the Deputy Chief of Staff, G-3/5/7 (DAMO-AV), 400 Army Pentagon, Washington, DC 20310-0400.

(3) Local qualification training in single engine helicopters is authorized provided that the unit has qualified IPs/SPs, and training is conducted using USAACE approved training materials.

(4) To ensure standardization throughout Army aviation, flight training will be performed using the training and evaluation requirements prescribed in TC 3–04.11 and approved aircrew training tasks.

(5) Training an aviator/operator in an aircraft category other than that in which they are qualified to fly is permitted only in a formal school course (see the Army Training Requirements and Resources System (ATRRS) course catalog at <https://atrrs.army.mil/>). An Army aviator/operator qualified in an aircraft category by another U.S. military Service is authorized local qualification training in that category. Conduct local qualifications under the auspices of an official course utilizing a DA approved POI.

(6) Aviator, IP, and IO training in nonstandard aircraft will be conducted per chapter 9 of this regulation.

(7) Those aviators/operators who complete qualification training conducted by the Regular Army, ARNG, USAR, or other U.S. military Service will be awarded an additional MOS or additional skill identifier (ASI).

(8) Enter a statement of completed aircraft or aircraft system qualification training in the IATF and IFRF. Forward the statement of completed qualification to HRC for input in individual's personnel file.

b. Additional helicopter qualifications. Aviators requesting additional helicopter qualification courses will submit a waiver request through their chain of command (O–5 level); to the aviation office of the ACOM, ASCC, DRU, or ARNG; to the Aviation Branch of HRC; to the Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400 for approval. The ACOM, ASCC, DRU, ARNG, and HRC will not enroll individuals in ATRRS without the approved DCS, G–3/5/7 (DAMO–AV) waiver included in the application. Waiver requests will contain the following information:

(1) Requesting aviator's name and rank.
(2) DOD identification number.
(3) Unit and/or gaining command, if appropriate.
(4) Requests due to relocation of an officer the ARNG and USAR will list the distance to the nearest unit with aircraft the aviator is qualified with justification for not assigning the officer to that organization.

(5) Requests from ARNG and USAR will contain the current unit strengths in the gaining command and shortages created by the move in the losing command.

(6) Current aircraft qualifications.

(7) Justification for multiple helicopter qualifications.

c. Exceptions to paragraph 4-6b.

(1) Aviators involved in new equipment fielding.

(2) Series qualification required for assignment per HRC assignment instructions or move within ARNG or USAR.

(3) Aviators who are qualified in aircraft scheduled for divestiture by the DCS, G–8 and who are required to train on a replacement aircraft.

(4) Aviators selected for battalion or brigade command but not qualified in at least one of the gaining command's helicopters.

(5) Aviators selected for the XP program.

(6) Aviators assigned to the USSOCOM.

4–7. Annual proficiency and readiness test

a. Conduct the APART within the designated APART period and in accordance with TC 3–04.11.

b. Process individuals who fail to meet APART requirements under paragraph 4–10 of this regulation.

4–8. Emergency procedures training

The conduct of training in emergency procedures is per ATM. Training will be in an approved simulator or dual controlled aircraft. A qualified IP/SP/IO/SO who is current in the mission, type, design, and series or UAS group will be at one set of the controls and/or in a position to gain immediate access to the required controls and/or console.

a. (Manned) Airplanes.

(1) Engine failure and/or malfunction training in multi-engine airplanes may only be conducted under the following conditions:

(a) Complete engine stoppage and/or shutdown (propeller or turbine stopped) will be in visual flight rule (VFR) conditions at least 4,000 feet AGL and limited to not more than one engine at any one time.

(b) Simulated engine shutdown on climb out after takeoff may be accomplished if indicated airspeed is at or above the prescribed velocity of safe single engine operation. Exceptions are granted for those aircraft which are specifically authorized "V1" engine cuts.

(c) The usable length of the runway used for landing must be at least 4,000 feet long, corrected for runway conditions based on the aircraft performance.

(2) Touch-and-go landings may be performed under the following conditions:

(a) Aircraft must have two sets of controls.

(b) An IP or SP must be at one set of controls.

(c) Runway used must meet accelerate-stop distance requirements plus 2,000 feet.

(d) Training involving touch-and-go landings will be according to the appropriate ATM.

b. *Helicopters-single engine.*

(1) Hydraulics-off, autorotations (except from a hover), and anti-torque touchdown emergency procedures training will be conducted only during aviator and IP qualification and transition training per formal POI at DA designated training bases. Touchdown emergency procedures are also authorized for—

(a) IPs and SPs designated by the commander to conduct touchdown emergency procedures at DA designated training bases.

(b) The DES IPs and SPs.

(c) Local qualification training in single engine helicopters with a qualified and current IP/SP.

(d) XPs while conducting authorized flight testing or training.

(e) The A/MH-6 IPs and SPs.

(2) Unannounced touchdown autorotations are not permitted.

(3) Perform touchdown emergency procedures specified paragraph 4-8b in commander designated training locations free from obstructions. There must be air-to-ground communications and crash and fire rescue equipment available. Night training areas will be designated.

(4) Conduct autorotations with power recoveries and terminations with power per the aircrew training task.

c. *Helicopters-multi-engine.*

(1) In multi-engine helicopters, touchdown autorotations and anti-torque touchdown emergency procedure training are prohibited. Conduct autorotations with power recoveries and terminations with power per the aircrew training task.

(2) When authorized, the commander must designate/authorize locations to train emergency procedures to the ground.

4-9. Hands-on performance test

Aviation personnel on flight status must complete periodic hands-on performance tests by an IP, SP, IO, SO, IE, ME, FI, or SI as appropriate per the appropriate master task list (MTL) or nonstandard aircraft ATM and TC3-04.11. Hands-on tests are the following:

a. *Standardization flight evaluation.* This flight consists of visual flight maneuvers and/or procedures conducted in each primary, additional (only if a different mission, type, design than the primary), and alternate aircraft/UAS a crew-member is assigned to operate. The evaluation is conducted to determine the examinee's ability to perform assigned flight duties.

(1) The evaluation will consist of the flight evaluation described in the appropriate MTL or nonstandard aircrew training manual.

(2) The evaluation will be conducted by a designated IP, SP, IO, SO, FI, or SI as necessary once each year.

(3) (Unmanned) The first commander, O-5 or above, in the chain of command may, on a case-by-case basis, direct use of a compatible UAS flight simulator if circumstances preclude safe, affordable, or timely evaluation in the UAS.

b. *Instrument flight evaluation.* An instrument flight evaluation will determine examinee's ability to perform assigned flight duties under IMC.

(1) The evaluation will be conducted—

(a) Per TC 3-04.11 and the appropriate MTL or nonstandard aircraft ATM.

(b) Annually, in an aircraft equipped with dual controls, by an IE qualified and current in aircraft category or a compatible simulator by an IE qualified in the aircraft category. Simultaneous evaluations of two aviators/operators may be conducted if both perform the tasks and procedures required by the MTL or nonstandard aircraft ATM.

(c) Annually in the examinee's primary and alternate aircraft if dual rated and needed to fly both categories.

(2) The commander may authorize the use of a compatible flight simulator if circumstances preclude safe, affordable, or timely evaluation in the aircraft.

(3) Emergency procedure training will not be initiated while under IMC, except in an authorized simulator.

c. *Proficiency flight evaluation.* This evaluation is administered to any crewmember in any aircraft, UAS, or compatible flight simulator they are required to operate. No notice proficiency evaluations may be written examinations, oral evaluations, aircraft flight evaluations, or compatible flight simulator evaluations. The proficiency flight evaluation (PFE) will be conducted—

(1) At the discretion of the commander.

- (2) At the direction of HQDA.
- (3) By an IP, SP, IO, SO, IE, ME, FI, or SI per the appropriate MTL or nonstandard ATM.
- (4) To determine an individual's proficiency.
- (5) To determine which phase of training is suitable for entry into or continuing in the ATP.

d. Post-mishap flight evaluation. This flight evaluation is administered to a crewmember to determine their ability to perform required duties following an aircraft/UAS mishap. Personnel performing crew duties involved in a Class A or B mishap will be suspended from flight duties until successful completion of a flight evaluation. The evaluation will be conducted in the same mission, type, design, and series aircraft/UAS in which the mishap occurred. Individuals performing crew duties involved in a Class C or lower mishap may be suspended from flight duties and required to complete a flight evaluation at the discretion of the commander. An IP, SP, ME, IO, SO, FI, or SI will conduct the evaluation (see AR 40–501 for medical release requirements before the flight).

e. Medical flight evaluation. This flight evaluation measures a crewmember's ability to perform required duties after incurring a medical disability. The evaluation will be administered on the recommendation of the FS. The evaluation of flight duties will be conducted by an IP, IE, SP, IO, SO, FI, or SI (see AR 40–501 for medical release requirements before the flight).

f. Maintenance test pilot evaluator, maintenance test pilot evaluation, and functional check pilot evaluation. This evaluation encompasses MTF or FCF maneuvers and is conducted in each aircraft the aviator must test fly. The evaluation will be performed—

- (1) To establish MP or ME or FCP qualification.
- (2) By a designated ME (or commander designated maintenance/functional IP, SP, IO, or SO) qualified and current in the aircraft.
- (3) During the APART in the primary aircraft and each training year in alternate and additional aircraft.

4–10. Failure to meet the aircrew training program requirements

a. When ATP requirements, other than the PC requirements, are not fulfilled the commander will suspend the crewmember and investigate. This investigation will take no longer than 14 days from the date of notification. After investigation, the commander will—

- (1) Take one of the following actions:
 - (a) Authorize an extension up to 30 days to complete the requirements. The 30-day extension will start after the commander completes his investigation. Commanders are not permitted to grant themselves an extension.
 - (b) Request a waiver of requirements per paragraph 4–2 of this regulation.
 - (c) Recommend or convene a flying evaluation board per AR 600–105 for rated officer.
- (2) If an extension is granted, restrict the individual from performing PC/AC duties in the aircraft/UAS (primary, additional, or alternate) and, if applicable, briefing officer duties until the missing ATP requirements are met.
- (3) Enter restrictions imposed and extensions granted in an IATF/CAFRS.
- (4) Enter extensions and waivers given on the individual's flight records.

b. For primary aircraft, if additional time or waiver is not granted, or if requirements are not met within the authorized period, the commander will—

- (1) Impose a nonmedical suspension and either—
 - (a) Request a waiver of ATP requirements from the appropriate authority per paragraph 4–2 of this regulation;
 - (b) Recommend or convene a flying evaluation board per AR 600–105 for rated officers;
 - (c) Terminate flying status order for a crewmember per AR 600–106; or
 - (d) Initiate proceeding for MOS reclassification for enlisted Soldiers.
- (2) Process, per the appropriate federal civil service regulations, for a DAC.
- (3) Enter suspensions imposed and/or waivers granted in the IATF and IFRF.

c. When the PC ATP requirements for specific company or battalion commanders and warrant officer positions are not met, the commander will impose a nonmedical suspension per AR 600–105 and investigate. This investigation will take no longer than 14 days from the date of notification. After investigation, the commander will take one of the following actions:

- (1) Request a 30-day extension from the first O–6 in the chain of command. If approved, the approval will be reported to the first general officer in the chain of command.
- (2) If an extension is not granted or the requirement is not met at the end of the extension, the commander will either—
 - (a) Place the officer before a flying evaluation board per AR 600–105; or
 - (b) Request a waiver from this requirement through the ACOM, ASCC, DRU, or ARNG from Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400.

d. Individuals who fail a hands-on performance test will be restricted from performing the flying duty for which evaluated (see para 2–6). The restriction will apply to all aircraft with similar operating and handling characteristics as defined in the MTL. Restrictions will be listed in the crewmember training record and will remain in effect until successful completion of a reevaluation.

(1) When the failure is in the crewmember’s primary aircraft/UAS, the commander—

(a) Must reclassify the individual to the appropriate RL.

(b) Authorize additional training, if necessary.

(c) Reevaluate the individual or impose a temporary suspension from flying duties.

(d) If the suspension is imposed, flying evaluation board provisions of AR 600–105 apply for officers.

(e) Reevaluate, provide additional training to, or remove crewmember from flight status per AR 600–106.

(2) When the failure is in a crewmember’s additional or alternate aircraft, the commander—

(a) Must reclassify the individual to the appropriate RL.

(b) Authorize additional training if necessary.

(c) Reevaluate or restrict the individual from performing flight duties in that aircraft.

e. Results from flying evaluation boards will be provided to the Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400.

4–11. Synthetic flight training system requirements

a. Training, evaluations, and flying hour credit will only be conducted on simulator devices accredited (in accordance with AR 5–11) by the Director, Directorate of Simulation (DOS), USAACE.

b. Crewmembers must use the accredited flight training device designed for their primary aircraft/UAS as per the current SFTS table as produced by Directorate of Training and Doctrine (DOTD).

c. DES, in coordination with DOS, will determine compatible flight simulators that meet FW requirements in accordance with the appropriate MTL.

d. Annual SFTS training requirements are outlined in TC 3–04.11 and the current Simulator Annual Flying Hour Requirements table produced by USAACE, DOTD (ATZQ–TD). FW recurrent training requirements are outlined in the appropriate MTL or nonstandard aircraft ATM.

e. Training requirements may be reduced based upon the distance the aviator must travel to the SFTS (except FAC3 designated aviators). For distance considerations consult the current simulator annual flying hour requirements table in the appropriate ATM.

f. For Army aviation simulators, ACOMs, ASCCs, DRUs, and the ARNG having aviation simulator management authority and senior aviation commanders within their geographical area, working in coordination with Installation Management Command where applicable, will—

(1) Establish simulator instructor/operator (I/O) responsibilities, competencies, and requirements to support the aviation mission of the units designated to utilize the facilities.

(2) Develop policies and procedures to ensure I/Os have the training, skills, knowledge, and experience to provide effective aviation training.

(3) Design and implement a viable standardization/quality assurance program within their command to ensure I/O proficiency.

g. The USAACE, DOTD (ATZQ–TD) will maintain and distribute a list of accredited flight training devices to the field (via ATMs).

4–12. Civilian flight time for Reserve Component personnel

Flight time or tasks flown in a civilian capacity may be credited toward the ATP requirements of RC personnel at the commander’s discretion and will be documented in the IATF and IFRF during the annual closeout.

a. Tasks performed in Army aircraft/UAS by civilians will be credited toward applicable ATP requirements.

b. Commanders may give credit for tasks performed in civilian aircraft/UAS if the aircraft and tasks are similar to the approved aircrew training task requirements.

c. Flight time acquired in Army aircraft/UAS by RC crewmembers while employed by the U.S. Government, or flight time acquired in civilian aircraft/UAS will not be used as the following:

(1) Training instead of unit training assemblies.

(2) Additional flight training periods.

(3) Entitlement to aviation career incentive pay, total operational flying duty credit, or retirement points as applicable.

4-13. Aeromedical training

Flight crewmembers will receive aeromedical and, if required by the command, low pressure/high altitude training per TC 3-04.11 and TC 3-04.93.

4-14. Deck landing operations training

Deck landing operations, including qualification, currency, procedures, and requirements, will be completed as outlined in FM 1-564 and the current Army/Air Force Deck Landing Qualification Memorandum of Understanding with the U.S. Navy and the USAACE Maritime Operations Training Support Package. Units conducting deck landing operations with utility/cargo aircraft will ensure crewmember training, qualification, and currency standards are addressed in their unit standard operating procedures.

4-15. Aircraft mission survivability training

- a. Flight crews will receive aircraft survivability training as per TC 3-04.9.
- b. A unit without assigned aircraft survivability equipment (ASE) and Army Special Operations aviation units may utilize alternative ASE training programs and devices approved by its ACOM, ASCC, DRU, or the ARNG.
- c. Units will establish and maintain accounts with the Army Reprogramming Analysis Team-Software Engineering to receive and process classified ASE mission data per AR 525-15. Accounts are required to download mission data sets and operational flight programs for ASE.

4-16. Currency

Currency requirements in any one series aircraft will satisfy the currency requirement for all aircraft with similar operating and handling characteristics (series group). Separate currency is required for all other aircraft.

- a. (Manned) To be considered current in the aircraft, individuals must take part in flight once every 60 days at a crew station with access to the flight controls. Individuals must perform designated duties in a crew station authorized on the Commanders Task List. If 60 days have elapsed since the last flight, the crewmember will be administered a PFE in the aircraft. NVD currency will be per TC 3-04.11 and the appropriate MTL.
- b. (Unmanned) To be considered current, an operator must perform a flight at the AO station once every 60 days. The flight may be conducted with the aircraft or in a simulator. If 120 days have elapsed since the last aircraft flight, the operator will be administered a PFE in the aircraft per the appropriate MTL. Simulators may not be used to reestablish currency.

4-17. Similar aircraft

Aircraft with similar operating and handling characteristics will be determined by the Similar and Series—Group Aircraft Table produced by USAACE, DOTD (ATZQ-TD).

Section II

Flight Crewmembers

4-18. Flight crews

Unit commanders must establish, in writing, formal flight crew qualification and selection programs. Programs will contain qualification and selection criteria and evaluation requirements. IP/operators and safety officers will aid commanders in the selection process. Rated and nonrated personnel will be designated, in writing, by the commander, specifying the duties and flight crew stations that they are authorized to occupy per TC 3-04.11.

4-19. Pilot-in-command

The PC will be—

- a. The individual responsible and having final authority for operating, servicing, and securing the piloted aircraft.
- b. Selected per paragraph 4-18 for each flight or series of flights.
- c. Qualified, current, and designated RL1 in the aircraft mission, type, design, and series.
- d. Listed in the flight plan or unit operations log.
- e. Responsible for crew and passenger briefings.
- f. At a crew station with access to the flight controls.
- g. Approved per the mission approval process before each mission. UTs, IPs, SPs, MEs, or IEs, when performing duties from other than the pilot or CP station will participate in the mission approval process.

4-20. Air mission commander

When two or more aircraft are operating as one flight, the unit commander will designate one of the rated aviators of the flight as an air mission commander to be in command of all aircraft in the flight. The designation of air mission commander is an assignment of command responsibility and is not an aircrew duty assignment. Air mission commanders will be chosen based on recent aviation experience, maturity, judgment, their abilities for mission situational awareness, the understanding of the commander's intent, and not necessarily upon rank or grade. Air mission commanders will participate in the mission approval process and may receive the final mission approval for all crews in the flight.

4-21. Pilot

- a. The pilot, when designated, will be—
 - (1) At a crew station with access to the flight controls.
 - (2) Qualified and current in the aircraft mission, type, design, and series.
 - (3) Briefed by the PC.
 - (4) Listed on the flight plan or unit operations log.
- b. Flight trainees undergoing training and personnel performing limited cockpit duties per paragraph 2-4 may perform pilot duties when an IP is at one set of controls. The IP must be qualified and current in the mission, type, design, and series aircraft being flown.
- c. When the operator's manual or mission requires two pilots as minimum crew, two pilots qualified and current in the mission, type, design, and series aircraft to be flown are required. When an IP qualified in the mission, type, design, and series aircraft being flown is at one set of controls; the following additional personnel meets this requirement:
 - (1) Persons undergoing authorized training.
 - (2) Personnel performing limited cockpit duties per paragraph 2-4.
 - (3) Personnel receiving orientation flights per paragraph 3-4b(1).
- d. Flight trainees meet this requirement when undergoing initial instrument qualification and a qualified instructor is at one set of controls. Officers performing limited cockpit duty per paragraph 2-4 do not meet this requirement unless they have undergone an instrument flight evaluation per paragraph 4-9b in the aircraft category being flown within the previous ATP year or are undergoing instrument training.

4-22. Co-pilot

The CP will assist in the performance of tasks as directed by the PC and is an aviator who—

- a. Is at a crew station with access to the flight controls but is not qualified or current in the aircraft being flown.
- b. Is at a crew station without access to the flight controls and performing duties required for the mission.
- c. Is performing CP duties at other than a flight crew station and is undergoing training or evaluation conducted by an IP, SP, IE, UT, or ME.

4-23. Unit trainer

The unit commander may appoint UTs to conduct specialized training to assist in unit training programs. UTs are prohibited from conducting emergency procedures training in the aircraft/UAS. UTs are forbidden to evaluate aircrew training tasks. Commanders may authorize rated aviators and UAS operator UTs to conduct duties from any crew station. They may also authorize UTs to validate successful completion of required training; for example, border and corridor qualifications, local area orientation, and other locally directed requirements. When performing UT duties, the UT must be qualified and current in the aircraft/UAS being flown.

4-24. Instructor pilot

The IP will train and evaluate all personnel in designated aircraft per approved aircrew training tasks and TC 3-04.11. To become qualified as an IP for helicopters or airplanes, an aviator must be qualified as a PC and must complete one of the following:

- a. *Helicopters.*
 - (1) A course of instruction for IPs at an authorized Aviation Proponent School in the mission, type, and design aircraft in which IP duties are to be performed.
 - (2) An IP equivalency evaluation administered by an SP selected by USAACE, DES (ATZQ-ES) in the mission, type, and design aircraft in which IP duties are to be performed. Commanders will coordinate with DES before submitting a request for equivalency evaluation through the chain of command to DCS, G-3/5/7 (DAMO-AV) for approval.
 - (3) In the absence of a course of instruction for IPs at an authorized Aviation Proponent School for the aircraft, ACOM, ASSC, DRU commanders, or the DARNG may approve an additional IP qualification to be conducted locally for helicopter IPs who are qualified per paragraph 4-26a or 4-26b of this regulation.

b. Airplanes.

(1) A course of instruction for IPs at an authorized Aviation Proponent School in the aircraft category in which IP duties are to be performed.

(2) An IP equivalency evaluation administered by an SP selected by DES in the aircraft category in which IP duties are to be performed. Commanders will coordinate with DES before submitting a request for equivalency evaluation through the chain of command to DCS, G-3/5/7 (DAMO-AV) for approval.

(3) In the absence of a course of instruction for IPs at an authorized Aviation Proponent School for the aircraft, an additional IP qualification may be conducted locally for airplane IPs who are already qualified per paragraphs 4-26a or 4-26b of this regulation.

4-25. Instrument examiner

The IE will conduct instrument training/evaluations per approved aircrew training tasks and TC 3-04.11.

a. To become qualified as an IE, an aviator must—

(1) Be an IP in either aircraft category;

(2) Complete a course of instruction for IEs at an authorized Aviation Proponent School; or

(3) Complete an IE equivalency evaluation administered by an IE selected by USAACE, DES (ATZQ-ES). The examinee must be an IP in the aircraft category in which evaluation is conducted. Commanders will coordinate with DES before submitting a request for equivalency evaluation through the chain of command to DCS, G-3/5/7 (DAMO-AV) for approval.

b. To become qualified as an IE, an aviator must be designated, in writing, by the commander of each category aircraft performing IE duty.

c. Simulator only IEs not current in the aircraft category must be evaluated annually in the simulation device by an IE which is current in the aircraft represented by the simulator.

4-26. Standardization instructor pilot

The SP may train and evaluate all personnel in the designated aircraft per approved aircrew training tasks. SPs have technical supervision of the unit aviation standardization program as specified by the unit commander. They advise the commander at all levels of aviation standardization within the command.

a. Qualified IPs per paragraph 4-24 will be designated in writing as SPs by unit commanders and be qualified and current in at least one of the aircraft assigned to the unit. Commanders may authorize SPs to instruct and evaluate from any station.

b. An SP will administer training and evaluation in specified SP duties as described in the ATM and 3-04.11.

c. For additional aircraft, the aviator must meet the following requirements:

(1) Designated as SP in primary aircraft.

(2) Qualified in accordance with paragraph 4-24 for the additional aircraft.

(3) Successfully complete an SP evaluation.

4-27. Maintenance test pilot and/or functional check pilot

MPs perform MTFs and maintenance operational checks to evaluate the airworthiness of the aircraft as established in applicable Army publications (for example, TMs and MTFs). FCPs perform flights and ground checks to validate airworthiness according to the Federal Aviation Regulations (FARs) and original equipment manufacturer (OEM) requirements.

a. Aircraft with test flight procedures published in the appropriate MTF manual will be test flown by qualified MP and/or MEs only.

b. To become qualified as a helicopter MP, aviators must complete one of the following:

(1) Aviation Maintenance Officers Course (AMOC) and the associated aircraft Maintenance Test Pilot Course.

(2) An equivalency evaluation administered by an ME selected by USAACE, DES (ATZQ-ES). Commanders will coordinate with DES before submitting a request for equivalency evaluation through the chain of command to DCS, G-3/5/7 (DAMO-AV) for approval. Individual must show successful completion of the AMOC before the conduct of the equivalency evaluation.

(3) Waivers may be granted on a case-by-case basis through the ACOM, ASCC, DRU, or ARNG to the DCS, G-3/5/7 (DAMO-AV).

c. MPs must be current and qualified in the aircraft to be flown. MPs will comply with procedures in TM 1-1500-328-23 and the appropriate aircraft MTF manual.

d. Helicopter contractor MPs required to be an MP will be qualified by either method outlined in paragraph 4-27b, but are not obliged to attend AMOC.

e. Pilots performing functional ground and flight checks and/or maintenance flights conducted per the airworthiness authority's approved procedures are not required to be graduates of AMOC or any Maintenance Test Pilot Course; however, they must be a PC and meet the task iteration and initial and/or annual evaluation requirements of the ATP or other HQDA approved guidance. Unless otherwise directed by HQDA, unit commanders will train these pilots locally. Contractors performing this function will be qualified per the contract.

4–28. Maintenance test pilot evaluator

The ME will train and evaluate MPs and other MEs in designated aircraft per MTL. MEs have technical supervision of the unit aviation maintenance program as specified by the unit commander. The ME is the technical advisor for the commander at all levels of aviation maintenance and responsible for maintenance standardization within the command. To become qualified as an ME for helicopters, an MP qualified per paragraph 4–27 must meet the following requirements:

- a.* At least 50 hours of MP time in the designated aircraft and start training approved by the first O–6 in the chain of command.
- b.* Complete the current USAACE ME Training Support Package conducted by an ME.
- c.* The initial evaluation will be administered by a DES ME if available. If a DES ME cannot meet unit timelines, a unit ME can conduct the initial evaluation.
- d.* For additional aircraft the aviator must meet the following requirements:
 - (1) Designated as ME in primary aircraft.
 - (2) Qualified in accordance with paragraph 4–27 for the additional aircraft.
 - (3) Complete an ME evaluation.

4–29. Experimental test pilot

The XPs are graduates of the U.S. Naval Test Pilot School or other accredited test pilot schools and are designated by the commander to perform experimental and engineering flight tests.

4–30. Flight Surgeon

The FS is a rated officer that must perform duties aboard an aircraft that are essential to specific flight missions. The FS along with the 68W SI is the primary trainer and evaluator of MOs for medical protocols and medical tasks. FSs will be—

- a.* In an assigned flight position by MTOE/TDA per AR 600–105 or as required by the contract.
- b.* Selected per paragraph 4–18 for each and/or series of flights.
- c.* Complete a course of instruction at an authorized Aviation/Medical Proponent School.
- d.* Trained to perform aircrew training tasks per the TC 3–04.11 and appropriate aircrew training tasks.
- e.* Develop and implement medical protocols when acting as a medical director for MOs.
- f.* Listed on the flight briefing and flight plan or unit operations log.

4–31. Crew chief (Manned)

The CE is a crewmember that must perform duties aboard an aircraft that are essential to its operation and/or specific flight mission. They will be—

- a.* In an assigned flight position by MTOE and/or TDA per AR 600–106 or as required by the contract.
- b.* Selected per paragraph 4–18 for each flight and/or series of flights.
- c.* MOS-qualified.
- d.* Trained to perform crew duties per TC 3–04.11 and approved aircrew training tasks.
- e.* Listed on the flight briefing and flight plan or unit operations log.

4–32. Flight engineer

The FE is a crewmember that must perform duties on the aircraft that are essential to its operation and/or specific flight mission. They will be—

- a.* In an assigned flight position by MTOE and/or TDA per AR 600–106 or required by the contract.
- b.* Selected per paragraph 4–18 for each flight and/or series of flights.
- c.* MOS-qualified.
- d.* Trained to perform crew duties per TC 3–04.11 and the appropriate task list.
- e.* Listed on the flight briefing and flight plan or unit operations log.

4–33. Flight medic

The MO is a crewmember that must perform duties aboard an aircraft that are essential to its operation and/or specific flight mission. They will be—

- a. In an assigned flight position by MTOE and/or TDA per AR 600–106 or required by the contract.
- b. Selected per paragraph 4–18 for each flight and/or series of flights.
- c. MOS and ASI F2-qualified or equivalent.
- d. Trained to perform crew duties per the TC 3–04.11 and appropriate aircrew training tasks.
- e. Listed on the flight briefing and flight plan or unit operations log.

4–34. Crewmember flight instructor

The FI trains and evaluates other crewmembers and noncrewmembers in their designated aircraft system or aircraft mission per the MTL or nonstandard aircraft ATM as applicable. To become qualified as an FI, the crewmember must be qualified in accordance with this regulation and complete one of the following—

- a. Complete a course of instruction for FIs at an authorized Aviation Proponent School.
- b. Complete an FI equivalency evaluation administered by an SI selected by USAACE, DES (ATZQ–ES) in the type aircraft in which the FI duties are to be performed. Commanders will coordinate with DES for an equivalency evaluation. An equivalency evaluation only applies to MOSs with an authorized Aviation Proponent School.
- c. If an authorized Aviation Proponent School does not exist or is not available for a specific aircraft or MOS, commanders may select a highly experienced crewmember to perform FI duties. The selected individual will be trained and evaluated by an IP, SP, or an SI per the approved aircrew training tasks and TC 3–04.11.
- d. Crewmembers with an authorized N1 ASI who change MOS will retain the N1 identifier and are not required to complete an Enlisted Flight Instructor Course for their new aircraft MOS.

4–35. Crewmember standardization instructor

The SI is a crewmember that trains and evaluates FIs, and SIs. They also assist the unit SP with supervision and maintenance of the unit ATP.

- a. To be designated by the commander as an SI, the FI must complete a course of instruction for FIs at an authorized Aviation Proponent School.
- b. To be designated by the commander as an SI, the FI must complete an SI evaluation administered by an SI/IP/SP in the type aircraft in which the SI duties are to be performed.
- c. Battalion/Brigade/Task Force SIs are authorized to perform SI duties on all aircraft assigned to their unit for which they have completed an aircraft qualification.
- d. If an authorized Aviation Proponent School does not exist or is not available for a specific aircraft or MOS, commanders may select a highly experienced crewmember to perform SI duties. The selected individual will be trained and evaluated by an IP/SP/SI per the approved aircrew training tasks and TC 3–04.11.
- e. Crewmembers with an authorized N1 ASI who change MOS will retain the N1 identifier and are not required to complete an Enlisted Flight Instructor Course for their new aircraft MOS.

4–36. Aircraft commander (Unmanned)

The AC will be—

- a. Responsible and have final authority for operating, servicing, and securing the UAS they operate.
- b. Selected per paragraph 4–18 for each flight or series of flights.
- c. Qualified, current, and RL1 in the UAS system to be flown.
- d. Listed in the flight plan or unit operation log.
- e. At a crew station with access to the flight controls.
- f. The UT, IO, or SO when evaluating or instructing with access to the flight controls. (Access to the controls for the AO can also be achieved from sitting in the back of the shelter.)
- g. Approved according to the mission approval process before each mission. (The UT, IO, or SO—when performing duties other than the AO or PO—will participate in the mission approval process.)

4–37. Aircraft operator (Unmanned)

- a. The AO, when designated, will be—
 - (1) At a crew station with access to the controls.
 - (2) In an assigned flight position by MTOE and/or TDA, or required by the contract.
 - (3) Qualified and current in the aircraft UAS system.
 - (4) Briefed by the AC.
 - (5) Listed on the flight plan or unit operation log.

b. When the operator's manual or mission requires two operators as minimum crew, two operators qualified and current in the UAS system to be flown are required. When an IO/SO qualified in the UAS system being flown is in a position to gain immediate access to the controls/console, the following additional personnel meets this requirement:

- (1) Persons undergoing authorized training.
- (2) Personnel receiving orientations per paragraph 3-4b(1) of this regulation.

4-38. Instructor operator (Unmanned)

The IO will train and evaluate all operators in their designated aircraft per approved aircrew training tasks and TC 3-04.11.

a. The IOs must be designated, in writing, by the unit commander and be qualified and current as an AC in the aircraft to be operated.

b. To become qualified as an IO, the operator must complete one of the following:

- (1) A DA approved IO course in the UAS group in which IO duties are to be performed.
- (2) An IO equivalency evaluation administered by a standardization operator (SO) selected by USAACE, DES (ATZQ-ES) in the aircraft in which IO duties are to be performed. Commanders will coordinate with DES before submitting a request for equivalency evaluation through the chain of command to DCS, G-3/5/7 (DAMO-AV), for approval.
- (3) In the absence of a course of instruction for IOs at an authorized Aviation Proponent School for the aircraft, an additional IO qualification may be conducted locally for UAS IOs who are already qualified per paragraph 4-38b(1) or 4-38b(2) of this regulation.

4-39. Standardization instructor operator

The SO may train and evaluate all operators as well as other personnel in the designated aircraft per approved aircrew training tasks. SOs have technical supervision of the unit UAS standardization program as specified by the unit commander or assist the SP with supervision and maintenance of the ATP. They advise the commander at all levels of UAS standardization within the command.

a. Qualified IOs per paragraph 4-38 will be designated in writing as SOs by unit commanders and be qualified and current in at least one of the UAS assigned to the unit.

b. An SO will administer training and evaluation in specified SO duties as described in the ATM and 3-04.11.

Section III

Standardization

4-40. Aviation standardization program

a. The aviation standardization program is designed to ensure a high degree of safety and aviation readiness in accomplishing the combat mission of the aviation force. This is achieved by command supervision, employment of standard aviation tasks, use of official publications, and maintenance of a disciplined aircrew force by administration of frequent tests and flight evaluations.

b. The lead agent for the U.S. Army Aviation Standardization Program is USAACE, DES (ATZQ-ES). DES executes training, ATP assessments, and evaluations for Army aviation units worldwide on behalf of the CG, USAACE, to achieve standardization in individual and collective flight training.

c. Commanders will—

- (1) Appoint a standardization officer.
- (2) Ensure that Army aircraft are operated according to standard procedures in the operator's manuals.
- (3) Designate evaluators, instructors, examiners, and trainers in support of the ATP.
- (4) Ensure that required training, tests, and flight evaluations are completed.
- (5) Review, approve, and implement standardization policies and procedures of the standardization programs.

4-41. Aviation Resource Management Survey

a. Designate U.S. Army Forces Command (FORSCOM) to serve as the lead agency for the Aviation Resource Management Survey (ARMS) program.

b. The Army ARMS program is designed to assist the commander in assessing the readiness and resource management of all assigned aviation units. The ARMS evaluates the resource management of unit aviation programs, provides staff assistance, and identifies internal and systemic issues for resolution. The focus of the ARMS includes all aviation components of both manned and unmanned units.

c. The ARMS program lead will—

- (1) Plan the ARMS schedule through quarterly and annual synchronization sessions.

- (2) Maintain and store data metrics.
 - (3) Maintain program business rules.
 - (4) Outline specific functional areas for the survey, focusing the inspection on aviation specific functions that require additional scrutiny above the established command inspection program: flight operations, standardization, tactical operations, aviation survivability equipment—electronic warfare, logistics, maintenance, safety, petroleum, operations, ALSE, medicine, training, airfield, and air traffic services at non-Installation Management Command airfields and heliports.
- d.* The ACOM, ASCC, DRU, and ARNG will conduct ARMS every 24 to 36 months using the Army ARMS. Units may be surveyed more frequently based on location, mission, or as an integral part of the commander's validation of unit pre-deployment readiness or as directed by HQDA, the aviation branch chief, or the ACOM, ASCC, DRU, or the ARNG.
- e.* The ARMS findings are confidential communications between the ARMS team and commanders that are critical to ensure an open, candid exchange of information. They will be provided to the surveyed units upon completion, and an executive summary of the survey results will be forwarded to the unit through command channels. Results will be made available upon request for HQDA and the aviation branch chief. Only overall ARMS findings and trends will be presented during the Aviation Senior Leaders Forum. Specific unit results will not be released without specific approval of the DCS, G-3/5/7 (DAMO-AV).

4-42. U.S. Army Aviation Senior Leaders Forum

- a.* Army aviation senior leaders meet annually to review issues affecting the capability of commanders to perform missions with aviation assets.
- b.* The forum chairman is the CG, USAACE. Membership consists of aviation unit commanders (O-6 and above); their senior warrant officer; command sergeants major; ACOM, ASCC, DRU, or the ARNG aviation officers; and other persons designated by the chairman.
- c.* For direction and control, senior leaders will meet in formal session at least annually at the call of the chairman.
- (1) Approved forum minutes will be forwarded to members for further distribution to subordinate aviation units.
 - (2) Funds for travel, per diem, and overtime, if needed, must be approved in accordance with DOD and Army rules governing conferences. If funding is approved, it will be provided by the member's parent organization.
- d.* Issues to be presented at the annual forum will be addressed to the Commander, U.S. Army Aviation Center of Excellence, Directorate of Training and Doctrine (ATZQ-TD), Fort Rucker, AL 36362-5214.

4-43. Army command, Army service component command, direct reporting unit, and Army National Guard aviation standardization committees

- a.* Commanders monitor the implementation of the U.S. Army Aviation Standardization Program. They provide the command with a continuing assessment of the program. Funds for travel, per diem, and overtime, if required, will be provided by the member's parent organization.
- b.* Standardization committees will be organized to—
- (1) Recommend and review directives, provide guidance, and respond to specific inquiries and requests.
 - (2) Coordinate requests for support from subordinate aviation units.
 - (3) Prepare and review recommended changes to aviation standardization literature and forward to proponents.
 - (4) Monitor ARMS trends.
 - (5) Write and publish supplements to this regulation.
 - (6) Meet at the call of the chairman.
- c.* Members will be designated in writing by the commander as follows:
- (1) A chairman and secretary.
 - (2) Commander of subordinate aviation units.
 - (3) An aviation safety officer, aviation maintenance officer, FS, FW/RW/UAS SP/SO, tactical operations officer, master gunner, SI, and air traffic services representative.
- d.* Aviation standardization and training issues that require action by USAACE will be addressed to Commander, U.S. Army Aviation Center of Excellence, Directorate of Evaluation and Standardization (ATZQ-ES), Fort Rucker, AL 36362-5214. Issues that require action by HQDA will be sent to the Deputy Chief of Staff, G-3/5/7 (DAMO-AV), 400 Army Pentagon, Washington, DC 20310-0400.

4-44. Installation, theater, or Combat Aviation Brigade standardization committees

- Installations or theaters with more than one CAB will designate a commander of the committee as chairman and staff the committee equitably from across the brigades. When an installation or theater has one CAB, this requirement can be met by that unit. Funds for travel, per diem, and overtime, if required, will be provided by the member's parent organization.
- a.* Standardization committees will be organized to—

- (1) Supervise and coordinate the command implementation of the U.S. Army Aviation Standardization Program.
 - (2) Monitor the proficiency of all assigned or attached aviators in operational aviation positions and other crewmembers specified in TC3–04.11.
 - (3) Coordinate requests for aviation standardization support from assigned or attached aviation units.
 - (4) Prepare and review recommended changes to aviation standardization literature and forward to proponents.
 - (5) Monitor ARMS trends.
 - (6) Prepare installation, theater, or local aviation procedures and policies, as required.
 - (7) Forward issues to the ACOM, ASCC, DRU, or the ARNG Standardization Committee for resolution.
 - (8) Meet at the call of the chairman.
- b.* Members will be designated in writing by the commander as follows:
- (1) A chairman and secretary.
 - (2) Commanders, state Army aviation officers, or chiefs of all aviation units or activities assigned or attached to the installation.
 - (3) An aviation safety officer, aviation maintenance officer, FS, aircraft/UAS SP/SI/SO, IE, aviation mission survivability officer (AMSO), master gunner, and air traffic services representative.

4–45. U.S. Army Aviation Center of Excellence

The Aviation Branch is the proponent agency for the U.S. Army Aviation Standardization Program. In addition to the responsibilities listed in paragraphs 1–22 and 4–45, the USAACE will—

- a.* Act as reviewing agency for Army aviation training, standardization, and technical publications to ensure that they are standardized and accurate. This is accomplished by USAACE, DES (ATZQ–ES) through continuous review and coordination with users and proponents and by developing normal and emergency procedures for aircraft operator’s manuals.
- b.* Act as approval authority for all aviation POI, initial key personnel training, and new equipment training, and associated training materials to include lesson plans and media. Submit to U.S. Army Aviation Center of Excellence, Directorate of Training and Doctrine (ATZQ–TD), Fort Rucker, AL 36362–5214.
- c.* In coordination with the FORSCOM ARMS branch, participate in the ARMS (standardization section) development and review to ensure inspections/survey objectives are complementary and not duplicated. Participate in quarterly and annual synchronization sessions to deconflict unit visits to facilitate commander’s guidance and reduce training distractors.
- d.* Advise the ACOM, ASCC, DRU, and/or ARNG of the status of aviation flight standardization activities. DES will also provide information about implementing aviation standardization policies and procedures Armywide.
- e.* Develop and recommend changes to general guidelines for the U.S. Army Aviation Standardization Program. Clarification to proponent publications for Armywide aviation standardization requirements is accomplished by DES through the use of the standardization communication (STACOM).

Chapter 5 Flight Procedures and Rules

5–1. General

- a.* Army personnel engaged in the operation of Army aircraft/UAS shall comply with applicable—
 - (1) Federal aviation regulations, laws, and rules.
 - (2) The ICAO regulations.
 - (3) Host country regulations, laws, and rules.
 - (4) Military regulations.
 - (5) Non-aviation federal and state laws applicable to Army aviation operations.
 - (6) DOD FLIP.
 - (7) Aircraft operator’s manuals approved supplements and checklists and applicable AWRs.
- b.* All U.S. Government (FAA and DOD) instrument approach and departure procedures are authorized when operating in the United States, U.S. territories, or U.S. military facilities OCONUS. The FAA and DOD FLIP does not provide procedure charts for all airfields that have instrument approach and departure procedures. Required procedure charts may be added to the DOD FLIP by direct contact with the U.S. Army Aeronautical Services Agency, 9325 Gunston Road, Suite N319, Fort Belvoir, VA 22060–5582. Use of commercial and/or non-U.S. Government instrument procedures in Army aircraft is dependent on the source of the procedure and the necessity for a compliance review. Compliance reviews are not required for OCONUS standard terminal arrival routes (STARs) and en route navigational products.
 - (1) Foreign Terminal Instrument Procedures (FTIP) published in DOD FLIP are authorized. Instrument procedures published by countries and at airports listed in the U.S. Army Host Nation Acceptance List (HNAL) may be flown without

any further processing or approval in accordance with the Commander, USAASA HNAL policy memorandum. This includes area navigation (RNAV)/required navigational performance (RNP) procedures. U.S. Army HNAL policy and information may be obtained at the USAASA website.

(2) Commanders of U.S. Army aviation units, having “mission approval authority” in accordance with AR 95–1 are authorized to approve the use of U.S. Air Force or U.S. Navy Terminal Instrument Procedures (TERPS) reviews. The commander or their designated risk assessment authority will ensure that the reports are current for the duration of the mission, signed by a TERPS specialist, and that the appropriate aircraft category has been evaluated. U.S. Air Force and U.S. Navy loose leaf instrument procedures are also authorized. U.S. Navy or U.S. Air Force reports that do not meet these criteria will require a compliance review request. Information on how to access US DOD loose leaf procedures, FTIP, TERPS reviews, and non-U.S. Government/commercial instrument procedures is available on the USAASA website <http://www.usaasa.tradoc.army.mil/index.asp>.

(3) Compliance reviews are required for all non-U.S. Government civil or military FTIP. Consult the current HNAL for exceptions. The unit commander or the designated risk approval authority will submit compliance reviews to USAASA at least 10 days in advance. The request will include the name and location of the airfield, name and identification of the procedure, and the date required.

c. Smoking or open flames are prohibited in, or within 50 feet of, Army aircraft.

d. Procedures for packaging, handling, and air transportation of dangerous materials are described in AR 700–15. Aircrews assigned to move hazardous materials in Army aircraft will comply with the requirements listed in these publications.

e. Aircraft must be bonded or grounded during fueling, de-fueling, arming, de-arming, oxygen servicing, and loading or unloading of flammable or explosive cargo. Aircraft will be grounded for maintenance in accordance with TM 1–1500–204–23–1, ATP 3–04.7, and the applicable aircraft-specific maintenance publication(s).

f. The following rules apply to recording devices on aircraft:

(1) Cockpit voice recorders (CVRs), flight data recorders (FDRs), and digital source collectors (DSCs) that are installed on aircraft and in control stations and/or shelters should be operational for all flights. However, a non-operational CVR, FDR, or DSC should not result in mission cancellation. Information collected by these devices may be classified or sensitive and should be protected as such.

(2) The commander will contact the U.S. Army Combat Readiness Center to ascertain appropriate recovery actions whenever an Army aircraft equipped with CVR, FDR, or DSC (to include weapons video systems) is involved in a mishap or destroyed as a result of enemy action.

g. When published minimums require conversion between runway visual range (RVR) and miles or metric equivalent, the conversion table in DOD and/or U.S. Government FLIP will be used. The RVR is the controlling visibility factor when published and reported for a runway.

h. The following flight rules apply prior to instrument Global Positioning System (GPS) flight.

(1) Pilots will check GPS NOTAMs and/or Receiver Autonomous Integrity Monitoring (RAIM) via the FAA NOTAM website <https://www.notams.faa.gov/dinsqueryweb/>, an FAA flight service station, or other approved NOTAM source. For GPS operations OCONUS, information on how to obtain predictive RAIM may be obtained from the USAASA website. If using a commercial database, the vendor’s NOTAMs will be verified before flight.

(2) Pilots will ensure all required navigation performance levels can be met when operating in designated RNAV/RNP airspace. When a designated required navigation performance level cannot be achieved, the pilot will revise the route or delay operation until the appropriate required navigation performance level can be ensured.

(3) The instrument flight rules (IFR) GPS flight will not be conducted with an expired navigational database.

(4) The appropriate suffix for GPS and/or RNAV/RNP equipment will be entered on the flight plan. When operating in the National Airspace System, IFR GPS may be used as a substitute to the automatic direction finder and/or distance measuring equipment receivers subject to the terms and restrictions in the FAA Aeronautical Information Manual.

i. The IFR GPS equipment and navigational databases are considered navigation equipment. The GPS is authorized for IFR flight under the following conditions:

(1) The IFR GPS is authorized in AWR, Supplemental Type Certification, Operator’s Manual and DOD FLIP. The PC will check prior to use by consulting the DOD FLIP Area Planning.

(2) The installed GPS equipment is certified for IFR operation during the applicable portion of the flight (en route, terminal, and instrument approach use) in accordance with the applicable supplemental type certificate, AWRs, interim statements of airworthiness qualification, aircraft operator’s manual, and/or applicable supplemental operator’s manuals.

(3) The aircraft has installed and operational navigational aid (NAVAID) receiver(s) that can receive available ground based NAVAID signals for the route of flight, destination, and any required alternate airport. When operating OCONUS, consult DOD FLIP and/or USAASA/USAASD–E for host nation authorized substitutions of GPS in lieu of ground based NAVAID(s). If no ground based NAVAIDs are available, the commander must determine the appropriateness of the flight.

(4) During IFR flight with equipment that permits the use of precise positioning service, the GPS should be operated in the precise positioning service mode.

(5) Current DOD and/or U.S. Government FLIP and or approved commercial and/or non-U.S. Government approved products will be carried and accessible at all times when using IFR databases. U.S. Army approved EFBs and/or FLIP may also be used. Commanders will establish a program if an EFB is used. See paragraph 5–7 for EFB requirements.

(6) The RNAV/RNP departure, arrival, en route, and terminal procedures will only be flown using way points retrieved from an approved non-corruptible database. The system must be able to retrieve the procedure by name from the aircraft navigation database. Manual entry or update of the navigation database other than storing user defined data is not authorized (except for approved emergency GPS procedures). Use of commercial IFR databases in Army aircraft is only authorized in the United States and U.S. territories. Use of commercial databases elsewhere in the world are restricted to en route navigation (including STARS) or to U.S. military facilities. Consult the USAASA HNAL for approved RNAV/RNP approach procedures.

j. Flight in IMC which violates FAA, host country, or ICAO regulations will be considered deviations per paragraph 1–7 and will be treated per paragraph 2–13.

5–2. Preflight

Before beginning a flight, the aircrew will acquaint themselves with mission, procedures, and rules.

a. *Planning.* The aviator/operator will evaluate aircraft performance; departure, en route, and approach data; NOTAMs (including GPS, Digital Aeronautical Flight Information File (DAFIF), temporary flight restrictions and local NOTAMs, host country requirements, theater requirements (for example, Air Control Order, Air Tasking Order, special instruction, and so forth)) for the route to be flown; and appropriate DOD and/or U.S. Government FLIP and/or approved commercial and/or non-U.S. Government approved procedures per paragraph 5–1b of this regulation. If using DAFIF as a database, DAFIF notices (W series) for the route of flight will be checked via the NOTAM website.

b. *Fuel requirements.* At takeoff, aircraft must have enough fuel to reach the destination and alternate airport (if required) and have a planned fuel reserve of—

- (1) Rotary wing.
 - (a) VFR, 20 minutes at cruise.
 - (b) IFR, 30 minutes at cruise.
- (2) Fixed wing.
 - (a) VFR (day), 30 minutes at cruise.
 - (b) VFR (night), 45 minutes at cruise.
 - (c) IFR, 45 minutes at cruise.

c. *Flight weather planning.* Pilots will obtain departure, en route, destination, and alternate (if used) weather information before takeoff. The following weather requirements apply:

(1) *Flight into icing conditions.* Aircraft will not be flown into known or forecasted severe icing conditions. If a flight is to be made into known or forecasted moderate icing conditions, the aircraft must be equipped with adequate operational deicing or anti-icing equipment.

(2) *Flight into turbulence.* Aircraft will not be intentionally flown into known or forecasted extreme turbulence or into known severe turbulence. Aircraft will not be intentionally flown into forecasted severe turbulence unless ACOM, ASCC, DRU commanders, or the DARNG has established clearance procedures and—

- (a) Weather information is based on graphical forecast for aviation (GFA).
- (b) Flights will be made in areas where encountering severe turbulence is unlikely.
- (c) Flights are for essential training or essential missions only.
- (d) Flights are considered extremely high risk.
- (e) Flights are terminated or depart turbulence if severe turbulence is encountered.

(3) *Flight into thunderstorms.* Aircraft/UAS will not be intentionally flown into thunderstorms.

(4) *Visual flight rules flight.* Destination weather must be forecast to be equal to or greater than VFR minimums at estimated time of arrival (ETA) through one hour after ETA. When there are intermittent weather conditions, the predominant weather will apply. Aviators may file flight plans to a destination within Class B, C, D, and E surface area airspace when weather conditions are forecast to be equal to or greater than known special visual flight rules (SVFR) minima for that airspace at ETA through one hour after ETA. Helicopter SVFR minima is 1/2-mile visibility and clear of cloud unless a higher minimum is required at the airfield. For airspace class, forecast en route weather must permit flight with separation from clouds and flight visibility equal to or greater than minimums stated in table 5–1 of this regulation.

(5) *(Unmanned) Instrument flight rules flight.* Destination and en route weather must be VFR at the mission altitude and for the arrival procedure at ETA through 1 hour after ETA.

(6) *(Manned) Instrument flight rules flight.* Destination weather must be forecast to be equal to or greater than the published weather planning minimum for the approach procedure to be flown at ETA through one hour after ETA. When there are intermittent weather conditions, the predominant weather will apply. Aviators flying helicopters may reduce destination and alternate Category A visibility minimums by 50 percent, but not less than 1/4 mile or metric equivalent. Reduction of visibility for approaches labeled “copter only” is not authorized, and this reduction is applied after all other corrections. Category II approach procedures may not be used in destination or alternate weather planning.

(7) *Graphical forecast for aviation.* If there is no weather reporting service, the aviator may use the GFA.

(8) *Weather briefing.* Weather information will be obtained from a U.S. military weather facility. If U.S. military weather service support is not available, consult DOD and/or U.S. Government FLIP for guidance. For all IFR flights and/or VFR cross-country flights, the weather forecast will be void one hour and 30 minutes from the time the forecast is received provided the aircraft has not departed. The crew should update weather briefing information on stopover flights.

d. Flight plan. Aircraft will not be flown unless a flight plan (military or civil) has been filed or an operation’s log completed. The PC/AC is responsible for the flight plan and has flight plan approval authority. Local commanders will establish policies specifying the flight plan or operations log to be used.

(1) All Army aircraft that are instrumented for IFR flight and are flown by an instrument-rated pilot/qualified operator will operate on IFR flight plans except when—

- (a) Flight is primarily for VFR training.
- (b) Time will not permit mission completion under IFR.
- (c) Mission can only be accomplished under VFR.
- (d) Excessive ATC departure, en route, or terminal area delays are encountered.
- (e) Hazardous weather conditions must be avoided.

(2) (Manned) Concerning a stopover flight, if the original manifest does not list passenger or crew changes at stopover points, changes will be filed with military installation base operations, FAA flight service, or other competent authority.

(3) After departing a nonmilitary airfield, the PC/AC will advise flight service station or other competent authority of the departure time.

(4) Locally produced operations logs may be used for local flights.

(5) (Manned) A crew and passenger manifest is required for all flights. For tactical or tactical training flights, the passenger manifest will be prepared and retained by the supported unit.

e. Alternate airfield planning. An alternate airfield is required when filing IFR to a destination under any of the following conditions:

- (1) Radar is required to execute the approach procedure to be flown.
- (2) The instrument approach NAVAIDs to be used are unmonitored.
- (3) The predominant weather at the destination is forecast at ETA through one hour after ETA to be less than—
 - (a) Ceiling 400 feet above the weather planning minimum required for the approach to be flown.
 - (b) Visibility one mile (or metric equivalent) greater than the planning minimum required for the approach to be flown.
- (4) An alternate is not required if descent from en route minimum altitude for IFR operation, approach, and landing can be made in VFR conditions.

(5) Pilots may plan for a GPS-based instrument approach at either the destination or alternate, but not at both locations. This restriction does not apply to RNAV systems using TSO-C145/C146 equipment.

f. Alternate airfield selection.

(1) An airfield may be selected as an alternate when the worst weather condition for that airfield is forecast for ETA through one hour after ETA to be equal to or greater than—

(a) Ceiling 400 feet above the weather planning minimum required for the approach to be flown and visibility one mile (or metric equivalent) greater than the weather planning minimum required for the approach to be flown, or

(b) The descent from en route minimum altitude for IFR operation, approach, and landing can be made while maintaining the VFR cloud clearance and visibility requirements for the airspace flown.

(2) An airfield will not be selected as an alternate except per paragraph 5-2f(1)(b)—

- (a) If the approach procedure to be used at the alternate is shown not authorized in FLIP.
- (b) If radar is required for the approach procedure to be used at the alternate.
- (c) If the instrument approach NAVAIDs to be used are unmonitored.
- (d) If a Class B, C, D, or E surface area airspace does not exist or is not in effect at the airport to be used.

g. Minimum equipment required for flight. The minimum equipment required for flight is shown in table 5-2 in this regulation. Items listed in table 5-2 under the appropriate condition are considered the minimum for flight under that condition except the following:

(1) FW aircraft that have an FW project management office/USAACE, DES (ATZQ-ES) approved required equipment list or minimum equipment list, and/or the configuration deviation list will operate in accordance with those approved documents. These documents will also be used to determine the flight status of the aircraft.

(2) RW aircraft with a required equipment list or minimum equipment list published in the AMCOM approved aircraft operator's manual or AWR will operate in accordance with that list.

(3) Recognizing rapid fielding of modern equipment, PEO Aviation, in coordination with the Aviation Engineering Directorate, may substitute advanced replacement equipment for the items listed within table 5-2 provided they clearly annotate the item replaced and under what conditions it is required within the AMCOM approved aircraft operator's manual or by supplemental type certificate flight manual supplement, when required.

(4) In addition to paragraphs 5-2g(1) through 5-2g(3), minimum equipment and training requirements for Category II Instrument Landing System (ILS) approaches will be in accordance with FAR.

h. Weight and balance. The PC/AC will ensure—

(1) The accuracy of computations on the DD Form 365-4 (Weight and Balance Clearance Form F-Transport/Tactical).

(2) That a completed DD Form 365-4 is aboard the aircraft (Manned) or on file and available to the AC (Unmanned) to verify that the weight and center of gravity will remain within allowable limits for the entire flight. Several DD Forms 365-4 completed for other loadings also may be used to satisfy this requirement. In this case, the actual loading being verified must be within the extremes of the loading shown on the DD Forms 365-4 used for verification.

Table 5-1
Army visual flight rule weather minimums

Airspace Class	Flight visibility statute miles	Distance from cloud
A	Not applicable	Not applicable
B	3	Clear of clouds
C & D	3	500 ft below 1,000 ft above 2,000 ft horizontal
E less than 10,000 mean sea level (MSL)	3	500 ft below 1,000 ft above 2,000 ft horizontal
E at or above 10,000 MSL	5	1,000 ft below 1,000 ft above 1 statute miles horizontal
G (Rotary Wing)—1,200 ft or less above surface (regardless of MSL)		
Day	1/2	Clear of clouds
Night	1	Clear of clouds
G (Rotary Wing)—more than 1,200 ft above surface but less than 10,000 ft MSL		
Day	1	500 ft below 1,000 ft above 2,000 ft horizontal
Night	3	500 ft below 1,000 ft above 2,000 ft horizontal
G (Rotary Wing)—more than 1,200 ft above surface at or above 10,000 ft MSL		
Day and Night	5	1,000 ft below 1,000 ft above 1 statute miles horizontal
G (Fixed Wing)—less than 10,000 ft MSL		
Day and Night	3	500 ft below 1,000 ft above 2,000 ft horizontal
G (Fixed Wing)—at or above 10,000 ft MSL		
Day and Night	5	1,000 ft below 1,000 ft above 1 statute miles horizontal

**Table 5–2
Required equipment**

Required	Equipment ^{1, 2}	Day/Night ³	IMC ³	NVD ³
1. Heading indicator		X	X	X
2. Attitude indicator		X ⁸	X	X
3. Turn and slip indicator			X ⁵	
4. Airspeed indicator	X	X	X	X
5. Pressure altimeter	X	X	X	X
6. Vertical speed indicator ⁵		X	X	X
7. Magnetic compass ^{5, 12}	X	X	X	X
8. Fuel quantity indicator system	X	X	X	X
9. Clock and/or watch with seconds ¹²	X	X	X	X
10. Free air temp	X	X	X	X
11. Pitot heater			X	
12. Radar/Laser altimeter(s)		X ⁶		X ⁵
13. Automatic Flight Control Sys./Digital Automatic Stabilization Equipment/Flight Management Computer	X ¹⁰	X ^{6,10}	X ^{6,10}	X ¹⁰
14. Vertical gyros and indicators			X ⁷	
15. Flight Control Computer/Inertial Navigation System/Heading and Attitude Ref Sys	X	X	X	X
16. Standby flight instruments ^{5, 12}		X	X	X
17. Commo equipment	X	X	X	X
18. Nav equipment			X ⁹	
19. Surveillance: ADS–B, Mode C, or S	X ¹¹	X ¹¹	X	X ¹¹
20. Anticollision Lighting system	X	X	X	X
21. Position/Instrument light(s)		X		X
22. Landing/Search light ^{4, 12}		X		X
23. Flashlight ¹²		X		X

Notes:

¹ Equipment requirements designated in this table for flight in day, night, IMC, or using NVDs must be operational and is the minimum required by this regulation without any regard for mission requirements. Refer to applicable approved minimum equipment list or required equipment list/configuration deviation list and/or applicable aircraft operator's manual for additional or alternative requirements.

² Equipment required for an aircraft's operational mission is listed in DA Pam 738–751.

³ Items 1 through 6 must be operational at the flight station to be occupied by the PC for FW aircraft and operational at both pilot's stations in RW aircraft where provisions exist. All vacuum and electrical sources for the flight instruments must be operational. Aircraft utilizing Electric Flight Instrument Systems and/or Primary Flight Displays to display the data required must have backup system(s) that display and/or feed the required data that will be operational prior to departure. Failure of one of the displays or data feed systems in flight must be evaluated to determine the impact on mission and further flight.

⁴ The NVD Infrared light must be installed and operational for all NVD flights except Forward Looking Infrared aircraft. Failure of the light in flight must be evaluated to determine impact on mission and further NVD flight.

⁵ Installed, it must be operational. All Electronic Flight Instrument Systems-equipped FW aircraft must have an operational Standby Attitude indicator or Electronic Standby Instrument System in order to be dispatched for flight operations. An electronic turn indicator coupled with either an electronic or mechanical inclinometer on any display constitutes an operational turn and slip indicator. RW aircraft must have a magnetic compass or Electronic Standby Instrument System capable of displaying heading information.

⁶ Applies to water operations. A visible horizon and two or more highly visible stationary objects for cues on the water's surface must be present at the landing site.

⁷ Both Automatic Flight Control System and all components of both vertical gyros shall be operational.

⁸ Visible horizon may be substituted for attitude indicator for VFR flight.

⁹ Navigation systems used for IFR operations must comply with FAA and/or host nation requirements. Operating instructions and limitations defined in applicable operator's manuals, AWRs, or supplemental type certificates should be used to determine compliance.

¹⁰ Applies to AH–64E and AH–64D aircraft only.

¹¹ Refer to paragraph 2-14b(2)(j), when required to emit, only one aircraft in the formation must emit.

¹² For UAS installed equipment, it must be operational except item numbers 7, 9, 16, 22, and 23.

5–3. Departure procedures

All aviators/operators will comply with published nonstandard IFR takeoff minimums, departure procedures, and obstacle departure procedures in FLIPs.

- a. (Unmanned) Procedures will be in accordance with system technical manuals based on the mission, type, and design of the UAS.
- b. (Manned) The aviator flying the aircraft on takeoff who has logged 50 hours or more of actual weather time as PC has no Army takeoff minimums. Weather time flown in a simulator does not apply.
- c. (Manned) The aviator flying the aircraft on takeoff that does not meet paragraph 5–3b has the following minimums:
 - (1) Airplanes—ceiling 200 feet and either visibility 1/2 mile, RVR 2,400, or metric equivalent.
 - (2) Helicopters—ceiling 100 feet and either visibility 1/4 mile, RVR 1,200 feet, or metric equivalent.
 - (3) The RVR may be used when takeoff is made from the runway for which RVR is reported.
- d. SVFR flights within and departures from Class B, C, D, and E airspace are authorized provided the weather requirements of 14 CFR 91 or applicable host country flight regulations are met, and an appropriate ATC clearance is obtained. Army helicopter SVFR minima are 1/2 mile visibility and clear of clouds unless a higher minimum is required at the airfield.

5–4. En route procedures

- a. *Instrument meteorological conditions.* During IMC flight, all flight instruments, navigation, and communication equipment in the cockpit will be kept in the “on” position and immediately available for use.
- b. *Over-the-top flights.* Aircraft will not be flown above a cloud or fog layer under VFR for more than 30 minutes unless—
 - (1) The aircraft is equipped for IMC flight and not restricted from IMC flight.
 - (2) All IFR and requirements can be met for the remaining flight.
 - (3) (Unmanned) The UAS and crew are authorized to conduct IFR flight. Cloud clearance and visibility requirements will be in accordance table 5–1, class B airspace.
- c. *Communications.*
 - (1) *Instrument flight rules.* Reports and radio phraseology will conform to DOD and/or U.S. Government FLIP.
 - (2) *Visual flight rules.* Aviators will monitor appropriate frequencies and make position reports as required.
- d. *Holding.* Holding will be in accordance with DOD/U.S. Government FLIP and or approved commercial and/or non-U.S. Government approved procedures.
- e. *Over flying national security areas.* Aviators shall avoid overflight of national security areas below 2,000 feet AGL. Exceptions will be per instructions in DOD and/or U.S. Government FLIP.

5–5. Arrival procedures

- a. *Approach.*
 - (1) (Unmanned) Procedures will be in accordance with system technical manuals based on the mission, type, and design of the UAS.
 - (2) When an instrument approach is necessary, only approved DOD and/or U.S. Government and or approved commercial/non-U.S. Government approved procedures per paragraph 5–1b in this regulation will be flown. The Secretary of Defense has established limited waiver authority to this requirement for urgent, short notice humanitarian, contingency, medical evacuation, special access, and urgent State Department missions. The first O–8 flag officer in the chain of command with responsibility for mission risk assessment approval may waive the terminal instrument procedure review for the use of non-U.S. Government procedures for these missions case-by-case. When waived, the National Military Command Center and Commander, USAASA must be notified immediately.
 - (3) When published landing visibility minimums require conversion between RVR and miles or metric equivalent, the conversion table in DOD FLIP will be used. The RVR is the controlling visibility factor when published and reported for a runway. RVR, however, will not be used with a circling approach.
 - (4) Dual very high frequency omni-directional range (VOR) equipment requirements specified on approach charts do not apply to Army aircraft. Off-tuning from the approach aid to identify an approach fix is authorized. Dual VOR approach minimums apply.
 - (5) An approach may be initiated, regardless of ceiling and visibility.
 - (6) Category II ILS approaches in IMC are authorized when provisions of the FAR are met. The descent on category II ILS approaches is restricted to the highest decision height published for the procedure selected.
 - (7) Aircraft equipped with an enhanced visual system (EVS) may descend in accordance with FAR part 91.176 provided both pilots are current and qualified with installed EVS, and vertical guidance is available and utilized for the approach being flown.
 - (8) Practice hooded approaches may be made to the decision altitude or minimum descent altitude (MDA) when the aircraft has dual controls and a pilot without vision restriction is at one set of controls. In all other cases, hooded approaches may not be made lower than 500 feet AGL.

(9) SVFR flights within Class B, C, D, and E airspace are authorized provided the weather requirements of 14 CFR 91 or applicable host country flight regulations are met, and an appropriate ATC clearance is obtained. Army helicopter SVFR minimum is 1/2 mile visibility and clear of cloud unless higher minimum is required at the airfield.

b. Missed approach. The published missed approach procedure or other procedures as directed by ATC will be flown. Additional approaches may be flown provided fuel, including reserve, is adequate. An ATC clearance must be requested and approved before proceeding to another airfield. A change of flight plan will be made per DOD and/or U.S. Government FLIP if time permits.

c. Traffic patterns.

(1) Large (above 12,500 pounds) and turbine powered airplanes will be flown at 1,500 feet above the surface of the airport unless deviation required to maintain proper cloud clearance. Exceptions will be as prescribed in DOD and/or U.S. Government FLIP, approved commercial and/or non-U.S. Government approved procedures, or as directed by ATC.

(2) Helicopter traffic patterns at Army heliports and airfields are normally flown at 700 feet AGL. At other airports, helicopters will avoid the flow of airplane traffic.

d. Landing. An aircraft will not be flown below the published MDA, or an approach continued below the decision altitude unless the following exist:

(1) The approach threshold of the runway, or the approach lights or other markings, identifiable with the approach end of the runway or landing area, must be visible to the pilot.

(2) The aircraft must be in a position from which a safe approach to the runway or landing area can be made.

e. Closing flight plans. When the flight terminates, the PC will ensure the flight plan is closed as shown in DOD/U.S. Government FLIP.

f. Instrument flight rules, Global Positioning System approach, and missed approach procedures.

(1) Terminal RNAV/RNP procedures shall be retrieved by name from an approved database and will be flown in accordance with the AWR, Supplemental Type Certification, Operator's Manual and DOD FLIP.

(2) Pilots will verify the GPS begins to sequence when entering the terminal area and that the approach is armed (or system equivalent) prior to the initial approach fix and that course sensitivity on the course deviation indicator changes appropriately.

(3) If a receiver RAIM failure and/or status annunciation occurs or the GPS does not sequence to the "active approach" mode (or system equivalent) before the final approach fix, the pilot will request an alternate procedure. If passed the final approach waypoint, the pilot will climb to the missed approach altitude and execute the missed approach.

(4) The following apply to GPS approach minimums:

(a) Approach minimums in the Landing Minima categories will only be flown if the aircraft is equipped.

(b) Use of barometric vertical navigation decision altitude is not authorized with a remote altimeter setting. If local altimeter setting is not available, the approach will not be flown below the published MDA. Published DOD and/or U.S. Government FLIP minimum cold temperature restrictions apply. Circling from RNAV/RNP approaches may be accomplished if circling minimums are published.

(5) Upon missed approach, pilots will ensure the missed approach function has been appropriately activated on the GPS.

(6) The FAA National Aeronautical Charting Office copter missed approach procedures will be flown at 70 nautical miles per hour (KTS) or as published to ensure obstacle protection.

5-6. Emergency recovery procedures

Emergency recovery procedures will be developed as a contingency plan for inadvertent IMC. Recovery procedures will be developed using approved DOD and/or U.S. Government instrument approaches in the area of operations and should be coordinated with the servicing ATC. Planned use of non-DOD and/or U.S. Government instrument procedures for flight in IMC requires approval per paragraph 5-1 of this regulation. In locations without an approved DOD and/or U.S. Government approach or commercially developed approach, an emergency GPS recovery procedure will be developed per the approved aircrew training task. Emergency GPS recovery procedures developed per the aircrew training task are not authorized in the United States or U.S. territories without USAASA approval. For operations that exceed 90 days, emergency recovery procedures shall be submitted to USAASA for an FAA review and flight inspection. RNAV arrival procedures published in FAA or U.S. DOD FLIP may be authorized as an emergency recovery procedure for aircraft that are not certified for RNAV operations; the servicing ATC should be notified. Pending approval, these approaches will only be used in VMC or during an actual emergency. The first O-6 in the chain of command with mission risk approval authority must approve the emergency recovery procedure containing a non-approved instrument approach. This authority will not be further delegated. The risk associated with the recovery procedure will be mitigated through the mission approval process and further defined in unit standard operating procedures. Once DOD approved instrument approach procedures

(IAPs) are available, other approach procedures are no longer valid and will only be used in VMC. Manual entry of way-point data is permissible when using emergency GPS procedures.

5-7. Electronic flight bag

EFBs are portable off-the-shelf based computers, considered to be portable electronic devices with no aviation design, production, or installation approval for the device and its internal components. EFBs are not mounted to the aircraft, connected to the aircraft system for data, or connected to a dedicated power supply. Aircrews should be familiar with FAA Advisory Circular 120-76D.

a. Responsibilities.

(1) Commanders will—

(a) Establish a program to assure standardization, device content, accountability, crews are adequately trained, and redundancy exists if an EFB is used.

(b) Manage the configuration of government-owned EFBs and develop procedures to update devices and publications.

(c) Approve the use of personal devices that conform to all requirements.

(2) The PC is responsible for ensuring the crew complies with EFB policies and procedures.

(3) Aircrew members are responsible for ensuring that battery charge is sufficient and that required publications are updated to meet mission requirements.

b. Training.

(1) Initial training must be accomplished prior to use.

(2) Demonstration of proficiency to access/update, navigation of device and each approved application, procedures in case of device/app failure, basic battery conservation techniques, and security practices to protect against sensitive data loss will suffice for the requirements in paragraph 5-7c(1).

c. Requirements.

(1) Approved EFBs may be used to satisfy the FLIP and DA Pam 738-751 requirements of this regulation.

(2) Approved ADS-B “In” receivers may be used with EFBs (see paragraph 2-14b(2)(j)).

(3) The devices shall not be connected to aircraft power sources without an approved AWR.

(4) Approved power supplies may be used in flight.

(5) All official publications required for flight shall be current, accessible, and viewable on EFB prior to flight. Only publications required for flight are required to be current. Outdated versions of publications required for flight will not be stored on the EFB for any reason. Official publications not required for flight are permitted on the EFB for reference purposes and are not required to be current.

(6) Government-owned EFBs will only be connected to secure wireless networks configured with Wi-Fi Protected Access (WPA2) security. WPA2 internet sites require at a minimum a password to access. Connecting to unsecure “open” wireless networks, such as those found in retail establishments and airports, is specifically prohibited. Reference the Defense Information Systems Agency Wireless Security Technical Implementation Guide for Wi-Fi guidance.

(7) Prior to flight, make every effort to fully charge the device. EFB device battery levels must be at least 10 percent for each hour of total flight time, but not less than 50 percent.

(8) Aircrew will not use EFB display of own-ship position and moving map (if equipped) as a primary means of navigation.

(9) Aircrew will not use EFB display of weather data in flight (if authorized and equipped) as a primary means of weather avoidance.

(10) If operating without paper back-ups, a minimum of one EFB per pilot will be carried.

(a) EFBs shall use the same flight application to facilitate management between pilots.

(b) If operating in IMC conditions, and either EFB fails, the aircraft should exit IMC conditions as soon as practicable until either the inoperable EFB is restored or paper publications are on board the aircraft.

Chapter 6 Safety of Use

Section I

Safety of Flight Message and Aviation Safety Action Message

6–1. General

a. The SOF messages are electronically transmitted high priority notifications where a moderate to high initial risk determination (safety condition) has been made per AR 385–10 or an Army approved risk matrix. These high priority messages require an immediate action before the next operation.

b. ASAMs are electrically transmitted messages, which convey aviation maintenance, technical, or general aviation interest information where a low- to moderate-risk safety condition has been determined per AR 385–10 or an Army approved risk matrix. ASAMs are of a lower priority than SOF messages. These messages will not require immediate action and provide, to the fullest extent possible, mitigation of any operational impacts.

c. For specific information on SOFs, ASAMs, SOF funding, and the safety message process, see AR 750–6.

6–2. Authority

The CSA or VCSA is the high-risk acceptance authority for all fielded systems within the Army and can accept the risk associated with a material defect that causes the Armywide grounding or deadlining (not mission capable) of an entire mission design series equipment fleet or a majority of a fleet. This also applies to a portion of a fleet that if grounded or not mission capable will have negative impacts on mission requirements as determined before message release by the DCS, G–3/5/7 or their designated representative.

6–3. Exceptions to provisions of safety message

a. The CSA or VCSA may approve the return to operation for an entire mission design series equipment fleet or a majority of a fleet when the actions specified in a safety message will not reduce the risk level below a high level.

b. ACOM, ASCC, DRU commanders, or the DARNG may authorize temporary exception from safety and maintenance message requirements. Exceptions may only occur when combat operations or matter of life or death in civil disasters or other emergencies are so urgent that they override the consequences of continued operation.

c. ACOM, ASCC, DRU commanders, DARNG, or the Installation Management Command commander (grade O–8 or higher) may request exceptions (other than temporary for emergency situations as outlined above) from safety or maintenance message requirements from the AMC major subordinate command (MSC) with sufficient justification.

d. The commander of the applicable MSC is the approving authority for exceptions to safety and maintenance message provisions except for safety messages that result in fleet wide or a majority of a fleet grounding or not mission capable.

Section II

The Army Aviation Combat Assessment Program

6–4. Objective

Army and Joint agencies use combat damage and loss data for development and procurement decisions. The Survivability/Vulnerability Information Analysis Center maintains this data for DOD. This section standardizes the collection of combat damage data for manned and unmanned Army aviation platforms. The combat assessment process is separate and distinct from any other formal investigation. These assessments should not stop the command from initiating safety investigation until causal factors are determined.

6–5. Responsibilities

a. USAACE will—

(1) Manage the assessment and combat damage data collection and archive this data in the DOD combat damage database.

(2) Maintain the capability to collect and to analyze the data.

(3) Determine when a centralized aviation survivability development and tactics (ASDAT) team assessment is required and will assign subject matter experts based on a request from combatant command; HQDA; or the ACOM, ASCC, or DRU.

b. ACOM, ASCC, DRU commanders will—

- (1) Request ASDAT assessment team or trained personnel from other service component assessment team when available and assigned to the theater of operations.
- (2) Ensure damage to aircraft from weapons or weapons effects are recorded and submitted in accordance with this chapter.
- (3) Provide administrative and logistical support to the assessment team while in theater of operations.

6-6. Procedures

- a.* Centralized ASDAT team assessments should be conducted under the following circumstances:
 - (1) To evaluate the loss of an aircraft, death, or injury due to hostile action during aircraft operation.
 - (2) To determine the cause of damage or loss from an unknown weapon system.
 - (3) When weapons damage requires depot level repair as indicated by the platform Maintenance Allocation Chart.
 - (4) To assess the defeat or reduction in performance of the ASE systems or vulnerability reduction measures.
- b.* When ASDAT team or other service teams are not available for a centralized assessment, USAACE, DOTD (ATZQ-TD) will inform units to collect data and forward to USAACE.
- c.* Combat damage to aviation platforms not covered by paragraphs 6-6a(1) through 6-6a(4) is considered minor damage for this program. Data collection for minor damage incidents is conducted by the aviation maintenance organization and the unit AMSO, or personnel designated by the unit commander.
- d.* Unit AMSO will make every effort to identify the threat system(s) during data collection for minor damage incidents. When trained personnel from other service components (Joint Combat Assessment Team) are available, they may assist in data collection for damage incidents.
- e.* Combat damaged data will be forwarded to USAACE via secure internet protocol router network (SIPRNET) or other secure means without delay for evaluation. Detailed procedures for threat damage data collection, reporting format, and security measures may be found on the USAACE SIPRNET site/ASDAT team link available at <https://www.usaace.army.smil.mil>.
- f.* The management of combat data collection requirements should not impede the repair of aviation assets or cause organizations to incur undue risk during aircraft recovery operations.
- g.* Group 1 UAS (for example, Raven (RQ-11)) will not be assessed via this section. Combat damage to Group 2 through 5 systems (for example, Shadow (RQ-7B) and Gray Eagle (MQ-1C)) will be treated the same as manned aviation platforms.

Chapter 7 Weight and Balance

7-1. Weight and balance, general

This chapter provides weight and balance control system for operation of Army aircraft.

- a.* The CG, AMC supervises the direction of overall command activities involving aviation weight and balance.
- b.* The CG, TRADOC will monitor the overall training of aviation weight and balance. The CG, TRADOC will—
 - (1) Train operational unit weight and balance technicians in the following procedures:
 - (a)* Weighing aircraft.
 - (b)* Computing weight and balance.
 - (c)* Maintaining weight and balance records for Army aircraft.
 - (2) Train aviators, crewmembers, and operators in computing/verifying weight and balance.
 - (3) Train personnel to provide weight and balance services at support maintenance facilities.
- c.* The CG, AMCOM is the technical proponent for all U.S. Army aviation weight and balance. The CG, AMCOM will—
 - (1) Establish aviation weight and balance requirements and procedures in coordination with other Army agencies.
 - (2) Assist HQDA and AMC in the development of aviation weight and balance policy.
 - (3) Prepare and make technical data available on weight and balance.
 - (4) Procure and deliver weight and balance data for Army aircraft.
 - (5) Make engineering services available to assist service activities in solving weight and balance problems.
- d.* Commanders of installations and units that operate, maintain, repair, or modify Army aircraft will—
 - (1) Ensure effective application of these policies and procedures.
 - (2) Develop command directives to implement these policies and procedures.
 - (3) Appoint weight and balance technicians in writing.
- e.* PC/AC responsibilities for weight and balance are described in paragraph 5-2h.

7-2. Weight and balance technicians

a. To qualify as a weight and balance technician, an individual must satisfactorily complete the 15-series career management field Advanced Leadership Course, AMOC, or comparable weight and balance course approved by TRADOC. Comparable weight and balance courses are defined as formal or institutionalized training from other DOD service schools, FAA, and/or National Transportation Safety Board sanctioned or OEM specific training for a particular airframe. The contracting authority shall verify civilian contractor qualifications. The CG, AMCOM may approve equivalent training for civilian contractors that fulfill the intent of this paragraph.

b. If a weight and balance technician trained in accordance with paragraph 7-2a is not available in the unit, commanders may delegate the task.

c. Weight and balance technicians will—

(1) Prepare and maintain up-to-date and accurate individual aircraft weight and balance files as described in paragraph 7-4 for all aircraft under their jurisdiction.

(2) Perform required review of individual aircraft weight and balance files as described in paragraph 7-6 for all aircraft under their jurisdiction.

(3) Comply with weight and balance provisions of applicable modification work orders or TMs about aircraft modifications.

(4) Provide training and assistance in the use of weight and balance data and load adjuster devices, when applicable.

(5) Ensure aircraft under their jurisdiction are weighed per paragraph 7-7 of this regulation.

7-3. Aircraft weight and balance classifications

Army aircraft weight and balance classifications are stated in the appropriate operator's manual and are defined as follows:

a. *(Manned) Class 1 and (Unmanned) Class 1b.* Aircraft whose weight or center of gravity limits can sometimes be exceeded by loading arrangements normally used in tactical operations. Therefore, limited loading control is needed.

b. *(Unmanned) Class 1a.* UAS whose weight or center of gravity limits cannot be exceeded by loading arrangements normally employed in tactical operations and, therefore, need no loading control.

c. *Class 2.* Aircraft whose weight or center of gravity limits can readily be exceeded by loading arrangements normally used in tactical operations or those aircraft designed primarily for transporting troops and other passengers. Therefore, a high degree of loading control is needed. All aircraft whose weight and balance class is not stated in the operator's manual will be considered Class 2.

7-4. Aircraft weight and balance file

a. This file will contain all of the aircraft's weight and balance data. The aircraft designation and serial number will be noted on the file folder. Each aircraft will have its file that will usually be retained in the quality control office when an aircraft will be operated near its home station or similar single location. (Manned) When operating away from home station, the weight and balance file may be placed aboard the aircraft for transient purposes only. (Unmanned) A copy of the DD Form 365-4 will be on file at the launch and recovery site during all UAS launch and recovery operations. The file may be removed from the quality control office at the discretion of the local commander provided the following conditions are met:

(1) The file is located so that it is readily available for update in the event of removal or addition of aircraft equipment or other actions.

(2) (Manned) Duplicate copies of all DD Form 365-4 in the file are carried aboard the aircraft.

(3) (Manned) Local procedures are established to assure that duplicates of DD Form 365-4 carried aboard the aircraft are updated and remain valid.

b. The file will include the following forms and charts, which will be completed and retained in accordance with instructions of TM 55-1500-342-23:

(1) DD Form 365 (Record of Weight and Balance Personnel).

(2) DD Form 365-1 (Chart A-Basic Weight Checklist Record).

(3) DD Form 365-2 (Form B-Aircraft Weighing Record).

(4) DD Form 365-3 (Chart C-Basic Weight and Balance Record).

(5) Chart E (Loading Data and Special Weighing Instructions). The original Chart E placed in the weight and balance file by the aircraft manufacturer will be retained in the file until a revised Chart E is presented in the aircraft maintenance manual. Following publication of the Chart E in the maintenance manual, the Chart E in the aircraft file will no longer be required and will be destroyed locally.

(6) DD Form 365-4. Sufficient completed DD Forms 365-4 will be in the file, enabling the pilot to determine proper aircraft loading for any normal anticipated unit mission and verify that the weight and center of gravity will remain within allowable limits for the entire flight.

c. Electronic computer data sheets may be used instead of any of the DD Form 365-series (DD Form 365, DD Form 365-1, DD Form 365-2, DD Form 365-3, and DD Form 365-4) when information is identical to that required on the DD Form 365-series. Any computer data sheets which meet this requirement may be used. The Army Standard Automated System (Automated Weight and Balance System, version 9.2 or later) fulfills these requirements. The system program may be obtained from Commander, U.S. Army Research, Development, and Engineering Command (AMSRD-AMR-AE-A), Building 4488, Redstone Arsenal, AL 35898-5000 for nonstandard Army aircraft. The commercial equivalent of basic weight checklists, loading data, and weighting instructions may be substituted for DD Form 365-1 and Chart E. All of the above forms are available through normal publications supply channels.

7-5. Removal, addition, or relocation of aircraft equipment

When aircraft equipment that is part of aircraft basic weight is added to, removed from, or relocated within the aircraft because of maintenance or specific mission requirements, flight in this changed configuration will not be accomplished unless the weight and balance change is documented by one of the following methods:

a. Treating the additions, removals, or relocations as a permanent change by making entries on the DD Form 365-3 and establishing a new basic weight and moment. Also, if the change in basic weight or moment is beyond the limits stated in TM 55-1500-342-23, prepare a new DD Form 365-4 that reflects the new basic weight and moment to replace those in the weight and balance file.

b. If the changes are of a temporary nature, make entries in accordance with DA Pam 738-751.

7-6. Reviewing weight and balance file

a. All DD Forms 365-4 in the weight and balance file and all duplicate DD Forms 365-4 in the aircraft will be checked for accuracy in accordance with TM 55-1500-342-23. New forms must be prepared if changes are required. If no changes are needed, the DD Forms 365-4 will be re-dated and initialed in the date block to certify their currency.

b. In addition, all weight and balance records will, as a minimum, be reviewed every 12 months. The last day of the month is the final day for completing the review. For example, if the previous review was completed on 8 April, the next review must be completed by 30 April of the following year. This review must include a weight and balance inventory of the aircraft and the following statement entered on the DD Form 365-3: "Calculated weight and moment per inventory completed at." The date and adjusted basic weight and moment will accompany this entry.

7-7. Aircraft weighing

a. Each aircraft will be weighed when—

(1) Overhaul or major airframe repairs are accomplished.

(2) Modifications of one percent or greater of the aircraft's basic weight are applied.

(3) Any modifications or component replacements (including painting) have been made for which the weight and center of gravity cannot be accurately computed.

(4) Weight and center of gravity data records are suspected to be in error.

(5) The period since the previous weighing reaches 36 months for a (Manned) Class 1 and (Unmanned) Class 1b aircraft, or 24 months for Class 2 aircraft. The date due reweigh window shall follow TM 1-1500-328-23 requirements for a reoccurring special inspection.

b. The weight records supplied with a new aircraft may be used instead of an initial weighing. The technical proponent for weight and balance may approve alternate methods in lieu of weighing every new aircraft to establish the initial weight and center of gravity.

c. If these weighing requirements are not met, the aircraft status will change to red "x" until they are met.

d. Any maintenance facility providing weighing service will ensure that all aircraft weighing equipment under its jurisdiction is tested and certified for accuracy, according to specified technical manuals and at the intervals required.

e. The unit commander may request a 90-day deferment from weighing aircraft when operating in a combat theater. Send the commander's deferment request with a copy of the aircraft's weight and balance file to Commander, U.S. Army Research, Development, and Engineering Command (RDMR-AEA), Building 4488, Redstone Arsenal, AL 35898-5000 (email: usarmy.redstone.rdecom-amrdec.mbx.aea-aeromechanics@mail.mil).

Chapter 8 Aviation Life Support

Section I

Aviation Life Support Systems

8-1. Aviation Life Support Systems, general

This chapter establishes responsibilities, policies, and procedures governing ALSS.

- a. The CG, AMC, Project Manager, ALSE, is the DA focal point for all ALSE life cycle management.
- b. The CG, TRADOC is responsible for doctrine and training needs for ALSS.
- c. TSG will coordinate health hazard assessment for research, development, testing, and evaluation of medical materiel and related items; medical design criteria; and other medical aspects of nonmedical ALSE items.
- d. The ACOM, ASCC, DRU commander, or the DARNG will—
 - (1) Implement ALSS policies and procedures.
 - (2) Ensure proper training, budgeting, and availability of ALSE.
 - (3) Provide trained personnel for ALSE maintenance and inspection.
- e. Commanders at all levels will provide proper ALSE and related training commensurate with the mission and operational environment. Specific equipment requirements are delineated in section II of this chapter. Specific personnel and training requirements are delineated in section III of this chapter. ALSE maintenance requirements are delineated in section IV of this chapter.
- f. Aviation officers will have overall staff supervision of ALSS activities and coordination with staff sections and commanders on matters pertaining to ALSE and training.
- g. FSs and aeromedical advisors are responsible for—
 - (1) Physiological training of aircrew personnel.
 - (2) Medical aspects of survival training of aircrew personnel.
 - (3) Monitoring the fitting and use of ALSE by aircrew personnel.
- h. Aviation safety officers will monitor all aviation activities for commands to ensure the proper use of protective clothing and ALSE.
- i. Aviation life support officers (ALSOs) will be appointed on orders to assist, advise, and represent commanders in all matters pertaining to the ALSS. The ALSO will—
 - (1) Review, analyze, and develop procedures to ensure the planning, budgeting, and maintenance of an ALSS.
 - (2) Ensure training of aircrew personnel in the proper operation, use, and operator maintenance of survival equipment and the techniques of survival.
 - (3) Supervise the life support section and ensure that qualified personnel are available for conducting life support and survival training and maintenance of organizational-level ALSE.
 - (4) Keep a current file of regulations, procedures, and technical manuals pertaining to inspection, maintenance, and use of assigned life support equipment.
 - (5) Ensure units have adequate information and training before using new equipment or system changes.
 - (6) Ensure units encourage life support suggestions and the use of DA Form 2696.
 - (7) Report materiel deficiency for life support equipment failing to operate as designed.
 - (8) Participate as an ALSE member on the unit aviation safety council.
 - (9) Assist higher headquarters in standardizing the ALSS program.
- j. The ALSE technicians and specialists will be appointed to assist, advise, and represent the ALSO in all matters pertaining to ALSE. Specifically, ALSE technicians and specialists will—
 - (1) Establish a library of ALSE publications and ensure that the unit's pinpoint distribution account is updated to include ALSE publications and necessary forms.
 - (2) Ensure that all ALSE is maintained in a high state of readiness through inspecting, cleaning, fitting, testing, adjusting, and repairing.
 - (3) Maintain files on inspection, maintenance, expiration dates, and supply pertaining to ALSE.
 - (4) Participate as enlisted representatives at aviation safety meetings and conferences.
 - (5) Participate in local ALSE steering council meetings.
 - (6) Inspect all controlled drugs used in survival kits and vests.
- k. PCs will ensure that ALSE commensurate with the mission and the operational environment is available on the aircraft and that aircrew members and passengers are briefed on its use and location.

8–2. System description

a. The ALSS consists of components, techniques, and training required ensuring aircrews and their passengers' survival.

b. The ALSS is composed of three subsystems as follows:

(1) The environmental life support and protective subsystems such as oxygen equipment, aircrew support facilities, flight and specialized clothing, and miscellaneous personal accessories and equipment.

(2) The escape and descent life support subsystem components are provided to ensure safe and reliable escape and descent from disabled aircraft.

(3) Survival recovery life support subsystem aids survival, escape, evasion, and recovery of downed aircrews and their passengers in any global environment.

Section II

Aviation Life Support Equipment

8–3. Aviation life support equipment, general

ALSE will be used per unit standard operating procedures and this section.

8–4. Authorization for aviation life support equipment

Requirements and authorizations ALSE are identified in this regulation and in—

a. AR 71–32.

b. CTA 8–100, CTA 50–900, and CTA 50–909.

c. EM 0007.

d. Applicable MTOEs and TDAs.

8–5. Aircraft safety equipment

Safety equipment (for example, first aid kits, fire extinguishers, breakout knives, and fire axes) will be installed in Army aircraft per requirements of the appropriate operator's manual. Medical supplies will be updated, deleted, and extended according to EM 0007.

8–6. Oxygen system (Manned)

See TC 3–04.93 for restrictions on the use of oxygen. Approved oxygen systems will be used as follows:

a. *Unpressurized aircraft.* Oxygen will be used by aircraft crews and occupants for flights as follows:

(1) Aircraft crews.

(a) On flights above 10,000 feet pressure altitude for more than 1 hour.

(b) On flights above 12,000 feet pressure altitude for more than 30 minutes.

(2) Aircraft crews and all other occupants.

(a) On flights above 14,000 feet pressure altitude for any period of time.

(b) For flights above 18,000 feet pressure altitude, oxygen prebreathing will be accomplished by aircrew members.

Prebreathing may utilize either 100 percent gaseous aviator's oxygen from a high-pressure source or an onboard oxygen generating system that supplies at least 90 percent oxygen. Prebreathing will be for not less than 30 minutes at ground level and will continue while en route to altitude. In those extraordinary cases where mission requirements dictate rapid ascent, commanders may authorize shorter prebreathing times on a case-by-case basis, with the realization that such practice increases the risk of developing altitude decompression illness. Return to NORMAL OXYGEN (pressure demand regulator, gaseous oxygen-equipped aircraft) is authorized on descent below 18,000 feet pressure altitude, provided continued flight will not exceed this altitude.

b. *Pressurized aircraft.*

(1) In flight, if the cabin altitude exceeds 10,000 feet pressure altitude the provisions of paragraph 8–6a applies.

(2) As a minimum, a 10-minute emergency supply of oxygen will be available to all occupants when the aircraft is above 14,000 feet pressure altitude. Additional emergency oxygen will be on board when factors such as terrain, weather, or fuel consumption prevent descent to 10,000 feet cabin pressure altitude, in the event of depressurization.

(3) Above 25,000 feet pressure altitude, oxygen masks will be connected and readily available. Above flight level (FL) 350 the pilot flying will wear and use oxygen if the other pilot must leave the cockpit for any period of time. Above FL 410, one pilot will wear and use oxygen for the entire time spent above FL 410.

(4) If pressurization is lost in flight above 14,000 feet pressure altitude, the descent will be made immediately to a cabin pressure altitude of 10,000 feet or below. After that, the provisions of paragraph 8–6a applies.

8-7. Parachute requirements (Manned)

- a. Aviation personnel will wear parachutes on flights involving aerobatics.
- b. Commanders will determine if occupants need to wear parachutes in all other cases and publish policies in unit standard operating procedures.
- c. The provisions of 14 CFR 105 apply to all Army flights (except emergencies) where parachute drops of persons or things are made from an Army aircraft.
- d. If there is an accident involving the use of parachutes, reports must be submitted per AR 385-10 and TM 10-1670-201-23.

8-8. Protective clothing and equipment (Manned)

- a. Items of clothing for specific geographic areas as listed in the appropriate CTAs are also authorized when required by climatic conditions and approved by the appropriate ACOM, ASSC, DRU commander, or the DARNG.
- b. The following clothing and equipment will be approved for aviation use and worn in accordance with AR 670-1, DA Pam 670-1, and CTA 50-900 by all personnel while performing crew duties:
 - (1) Identification tags.
 - (2) Under layer clothing made of cotton, wool, nomex, or materials approved.
 - (3) Flight suit.
 - (4) Boots.
 - (5) Flight gloves.
 - (6) Flight helmet.
- c. The ACOM; ASSC; DRU commander; DARNG; or the CG, USAACE for flights at USAACE, may waive the requirements in paragraphs 8-8b(3) through 8-8b(6) for personnel assigned to flights that require other uniforms.
- d. All passengers will wear approved hearing protection devices, and passengers on tactical helicopter flights will wear protective military headgear (combat vehicle crewman approved ballistic helmet or flight helmet) as appropriate.

8-9. Protective masks (Manned)

- a. At least one pilot seated at the controls must wear a protective mask when fuzed items filled with toxic chemicals are carried in aircraft. Other members of the crew will have protective masks readily available.
- b. When incapacitating or toxic chemicals with no arming or fuzing systems are carried in an aircraft, the pilots need not wear a mask. It will be readily available.
- c. All personnel aboard will wear a protective mask when incapacitating or toxic chemicals are dispensed and until the chemical safety officer or other crewmember reports the aircraft is clear of the dispensed agent.
- d. Personnel who are not essential to the mission will not be carried in an aircraft with incapacitating or toxic chemicals on board.

8-10. Seat belts and restraints (Manned)

- a. The PC will ensure that—
 - (1) There are seats and seat belts installed for each person on the aircraft.
 - (2) Passengers can operate seat belts and, if installed, shoulder harnesses.
 - (3) Passengers are in seats and restrained by seat belts and, if installed, shoulder harnesses during takeoffs, landings, and turbulence.
 - (4) Patients on litters will be restrained by litter restraining straps during takeoffs, landings, and turbulence in accordance with the aircraft's operator's manual.
- b. See paragraph 2-15 for tactical operations that may be conducted without seats or seatbelts installed.

8-11. Survival equipment (Manned)

The commander will ensure that personnel are equipped with ALSE appropriate for the mission, topography, and climate in the area of operations.

- a. Commanders, O-6 or above, will identify the minimum survival equipment each individual will wear for the mission, topography, and climate in the area of operations. The following items are the mandatory minimum required personal ALSE for RW crews: first aid kit, extraction device, approved survival knife, fire starter, and signaling device. For all other additional supplemental equipment, the commander, at his discretion, may choose from those items listed in EM 0131 or EM 0250.
- b. Each helicopter member of the crew will be equipped with and wear a survival radio. For airplanes, a minimum of two survival radios will be carried at all times on board the aircraft. Emergency Locator Transmitter on Army aircraft should be operational before conducting flight operations.

c. Army aircraft will carry survival kits for all crewmembers for the mission, topography, and climate in the area of operations.

d. Commanders will provide the essential protective clothing and equipment required.

e. Ferry flight equipment will be per AMCOM ferry flight packet instructions. The command providing delivery aircrews must provide the proper ALSE.

f. Aircraft engaged in over-water flight will adhere to the following requirements:

(1) All personnel aboard Army aircraft flown beyond glide distance of shore in a single engine aircraft, or a multi-engine aircraft without single engine capability, will wear a life preserver. All other aircraft will have life preservers readily available. Water activated life preservers are prohibited.

(2) Life rafts sufficient for all persons on board (see TM 1-1500-204-23-1) are required on all Army aircraft during flights made more than 30 minutes flying time or 100 nautical miles from the nearest shoreline.

(3) Helicopter aircrews performing over-water operations that are required to wear life preservers per paragraph 8-11f(1) should be shallow water egress trainer (SWET) or modular egress training simulator (METS) (commonly referred to as dunker) qualified, current, and carry an approved emergency breathing system (EBS). Aircrews performing deck landing operations will be SWET or METS qualified, current, and carry an approved EBS. Initial qualification and recurrent training will be entered in the flight records during the annual closeout. Currency is defined as 4 years for this training, and this training should be completed at USAACE, U.S. Navy, U.S. Air Force, or U.S. Coast Guard accredited or certified facility.

(4) Aviation unit commanders will develop a policy for the wear of appropriate anti-exposure suits based on environmental conditions when any portion of the flight is over water, and ambient water temperature for any portion of the flight is 60 degrees Fahrenheit or below. This policy will be reflected in the risk assessment performed for the flight and will include as a minimum—

(a) Type and number of aircraft being flown.

(b) Altitudes to be flown.

(c) Availability of search and rescue.

(d) Types of anti-exposure suits available.

Section III

Personnel and Training Requirements

8-12. Aviation life support equipment maintenance personnel

Commanders having operational control of Army aircraft will provide personnel to perform required maintenance on ALSE. Commanders using personnel in a part-time capacity must adjust the number required to ensure that all required inspections and maintenance on ALSE is performed.

8-13. Training of aviation life support equipment maintenance personnel

a. Maintenance of ALSE will be performed only by trained, qualified personnel, either military or civilian.

b. ALSE maintenance personnel will be graduates of the U.S. Air Force C3AABR92230-000, U.S. Navy LSE C-602-2010, U.S. Army 860-ASI (H2 or Q2), or other courses of instruction approved by the USAACE.

c. Contract ALSE maintenance personnel maintaining commercial FW survival equipment must comply with paragraph 8-13a but are exempt from the school requirement in paragraph 8-13b.

8-14. Training for aircrews

Commanders will ensure that all aircrew personnel are adequately trained in the operation, use, and operator maintenance of ALSS.

Section IV

Aviation Life Support Equipment Maintenance Requirements (Manned)

8-15. Maintenance requirements

a. Commanders are required to establish and equip ALSE maintenance shops, staffed by qualified ALSE maintenance personnel on a full-time or part-time basis.

b. ALSE maintenance shops will be tailored to the needs of the aviation unit, activity, or facility based on the number of personnel on flight status serviced and the density and type of ALSE.

- c. ALSE maintenance shops may be consolidated where the pooling of personnel and equipment of resident units, activities, or flight facilities would be advantageous.
- d. Oxygen equipment maintenance shops will be established per TM 1-1500-204-23-1.

8-16. Inspection, maintenance, and repair

- a. Qualified ALSE maintenance personnel will accomplish inspection, maintenance, and repair of ALSE in accordance with either one or both of the following:
 - (1) The applicable TM, technical order, or Naval Air publication for the item of equipment involved.
 - (2) The procedures prescribed by responsible AMC agencies and USAACE.
- b. Deficiencies found in ALSE should be reported expeditiously under the Army Equipment Improvement Report and Quality Deficiency Report Program. Instructions for completing these reports are in DA Pam 738-751.

8-17. Storage and work areas

Criteria for ALSE storage and work areas will ensure that—

- a. ALSE maintenance shops provide adequate, clean, well-lighted work areas with proper storage, shelving, and security provisions.
- b. Shop storage areas possess the following features for survival equipment:
 - (1) A well ventilated, cool, and dry area that protects from pilferage, fire, dust, insects, rodents, and direct sunlight. Recommended temperature for storage is approximately 75 degrees Fahrenheit.
 - (2) Adequate air space between the floor and the equipment.
- c. Inspection and test areas for flotation equipment are smooth, nonabrasive, and free of sharp projections, oil stains, and spills.
- d. Storage and work area requirements are also stated in TM 55-1680-317-23&P, TM 1-1500-204-23-1, and TC 3-04.72.

Chapter 9 Nonstandard Aircraft

Section I

Acquisition and Use

9-1. Nonstandard aircraft acquisition and use, general

This chapter details classification, acquisition, and use of nonstandard aircraft.

- a. Aircraft classified as nonstandard by the Army are usually acquired from other Services or federal agencies and are not listed in AR 700-138, or were previously standard but no longer adhere to established criteria. These aircraft are used to fill operational requirements instead of standard Army aircraft. Army standard aircraft reconfigured or altered for special use (for example, testing, special mission, and modification) are not normally classified as nonstandard aircraft within the context of this regulation.
- b. Acquisition and use of nonstandard aircraft within the Army will occur when sufficient standard aircraft are not available to accomplish specific missions or operations. All other aircraft in the Army inventory, including aircraft obtained through the confiscated or excessed aircraft program, are nonstandard aircraft. Selected maintenance trainers, prototype, test bed, and aircraft procured in such a low density that treating them as standard aircraft would present a burden to the system, may be accounted for as nonstandard aircraft.

9-2. Approval of nonstandard aircraft

The following is DA policy concerning nonstandard aircraft:

- a. Requests for nonstandard aircraft will normally be approved only against a DA approved aircraft authorization when standard Army aircraft are not available. Nonstandard aircraft will be replaced when standard Army aircraft become available. When requests for nonstandard aircraft are approved by DA, AMCOM will take the necessary acquisition action. Requests for nonstandard aircraft will be forwarded through the ACOM, ASCC, DRU commander, or the DARNG to Commander, Aviation and Missile Command (AMSAM-OPS), Redstone Arsenal, Huntsville, AL 35898 for processing to Deputy Chief of Staff, G-8 (DAPR-FDV), 700 Army Pentagon, Washington, DC 20310-0700.
- b. Requests for authorization to obtain nonstandard aircraft will be transmitted per paragraph 9-2a, and include the following:
 - (1) Mission, type, design, and series of aircraft desired or UAS group and requirements of missions to be fulfilled.

- (2) Terms of the request: transfer or loan, nonreimbursable or reimbursable.
- (3) Budget program funds to be used for support of the aircraft and affirmation that funds will be made available in current and subsequent FY funding programs.
- (4) Any modification requirements, including minimum required equipment listed in table 5–2 of this regulation.
- (5) Full justification based on the essentiality of the aircraft to accomplish missions of the requesting command or activity.

c. All operating costs, less depot maintenance, and procurement of spare parts associated with the acquisition of nonstandard aircraft will be borne by the gaining command. The AMC, USAR, and ARNG are responsible for programming and budgeting for depot maintenance of nonstandard aircraft. Modification of nonstandard aircraft (in a nondevelopmental program) will normally be funded by the Army Procurement Appropriation (for the acquisition of modification kits) and by the Regular Army's depot maintenance program (for the installation of the kits.)

d. Requests for disposition instructions for nonstandard aircraft will be forwarded through command channels to DA. Serviceable and unserviceable economically repairable aircraft will be reassigned against other requirements or disposed of per AR 750–1 and TB 43–0002–3. Commands and activities relinquishing these aircraft will not normally be provided a replacement nonstandard aircraft. Aircraft considered uneconomically repairable will be reported to DA per TB 43–0002–3. Redistribution of nonstandard aircraft is not authorized unless approved by DA.

e. Commands and activities acquiring nonstandard aircraft will be required to provide support from their operating funds. Repair parts that are available in the DOD supply system may be procured through normal Army supply channels or cross-service agreements with other military Services. All other repair parts will be procured locally. All nonstandard aircraft maintenance requirements that are beyond the capability of the owning or supporting commands and activities will be accomplished by contract. (This paragraph is not applicable to aircraft maintained under the existing contractor logistics support contract administered by AMCOM.)

f. When upgrade modifications are made to a confiscated or excessed aircraft with a military equivalent, the modification will conform as closely as possible to its standard military counterpart provided an FAA type certificate or supplemental type certificate exists for that modification and AMCOM approval is obtained. Equivalent nonstandard aircraft may be included with their standard counterpart when a product improvement program is applied to the standard aircraft.

g. Expenditures in funds and man hours for alterations or reconfiguration will be held to a minimum. Initial requests to alter or reconfigure nonstandard aircraft when first delivered will be compiled into a single package and submitted through command channels to AMCOM for approval; they will contain detailed justification including scope of work to be performed. Subsequent requests will be treated in the same manner. Alteration or reconfiguration of loaned nonstandard aircraft must be consistent with any requirements in the specific loan agreement regarding the restoration of the aircraft to its original configuration.

h. All nonstandard aircraft will be reported on DA Form 1352 (Army Aircraft Inventory, Status and Flying Time)/(Unmanned) DA Form 7752 (UAS Inventory, Status, and Flying Time), per AR 700–138. Maintenance forms authorized by DA Pam 738–751 will be used as prescribed in the published Logistical Support Plan. Other forms may be utilized for local management purposes as desired. This requirement does not apply to group 1 UAS.

i. A DA FHP will not be published for nonstandard aircraft. Commanders will establish an annual FY FHP based on requirements and capability to support such a program. Utilization criteria prescribed in AR 71–32 will be the basis for justifying retention of nonstandard aircraft.

j. When more than one command owns a type of nonstandard aircraft, DCS, G–3/5/7 (DAMO–AV) will designate a proponent. The proponent will ensure compliance with the requirements outlined in this paragraph and ensure standardization of publications and training for the platform.

9–3. Logistical support

AMCOM will retain responsibility and designate a central point of contact for logistical support guidance, SOF matters, and technical guidance, including configuration control and equipment improvement report. AMCOM has fiscal and operational responsibility for aircraft obtained through the confiscated or excessed aircraft program from transfer from the courts and General Services Administration until delivery to the gaining unit. They will publish operating and maintenance guidance for these aircraft. The requirement for ACOM, ASCC, DRU, or the ARNG to furnish delivery crews does not apply to the initial delivery of confiscated or excessed aircraft.

Section II

Training and Standardization

9-4. Waiver authority

Nonstandard aircraft training and standardization requests for waivers will be forwarded through the appropriate ACOM, ASCC, DRU, or the ARNG to DCS, G-3/5/7 (DAMO-AV) for approval on paragraphs 9-5 through 9-9.

9-5. Technical publications

a. Technical literature for specific nonstandard aircraft will be made available through normal publications channels to the units using the aircraft. Operator's manuals, checklists, maintenance manuals, and related publications for nonstandard aircraft will be obtained from existing factory stocks or from the military Service supplying the aircraft. The using unit will update these publications with changes from the manufacturer or the military service supplying the aircraft.

b. Commands will also prepare new or revised technical literature for nonstandard aircraft not supported by official publications or when they wish to modify official publications. These publications will be coordinated with AMCOM, where possible, and submitted through the ACOM, ASCC, DRU, or the ARNG through USAACE, DES (ATZQ-ES), to the DCS, G-3/5/7 (DAMO-AV), for approval.

9-6. Training and standardization publications

a. Training and aviation flight standardization literature for specific nonstandard aircraft will be made available through normal publications supply channels to the units using the aircraft. If possible, the training and aviation flight standardization program will apply to the operation of nonstandard aircraft. The policy in this paragraph applies except when established procedures cannot be followed because of extremely low aircraft density or short duration of aircraft use (less than 6 months).

b. The POI will be approved by USAACE before they can be used. Organizations will submit POIs through the ACOM, ASCC, DRU, or the ARNG to U.S. Army Aviation Center of Excellence, Directorate of Training and Doctrine (ATZQ-TD), Fort Rucker, AL 36362-5211. ATMs will be submitted through the ACOM, ASCC, DRU, or the ARNG to U.S. Army Aviation Center of Excellence, Directorate of Evaluation and Standardization (ATZQ-ES), Fort Rucker, AL 36362-5211 for review, then submitted to DOTD for approval.

9-7. Qualification training

The ACOM, ASCC, DRU, or the ARNG aviation standardization committee will develop nonstandard aircraft training in accordance with AR 350-1. The POI and flight training guide will be approved by USAACE before they can be used. Organizations will submit POIs through the ACOM, ASCC, DRU, or the ARNG to U.S. Army Aviation Center of Excellence, Directorate of Training and Doctrine (ATZQ-TD), Fort Rucker, AL 36362-5211. Personnel receiving a nonstandard aircraft qualification in support of Security Cooperation Operations will be submitted through ACOM, ASCC, DRU, or the ARNG and approved by DCS, G-3/5/7 (DAMO-AV) before the start of training.

9-8. Flight evaluations

When IP/IOs or SP/SOs are not available to administer flight evaluations in nonstandard aircraft, the installation or area aviation standardization committee will request support. The ACOM, ASCC, DRU, or the ARNG aviation standardization committee, other installation area committees, or the CG, USAACE, may provide support. If support cannot be provided, the area commander, whose installation aviation standardization committee has jurisdiction, may authorize the flight evaluation to be made in an aircraft of similar design, operation, and flight characteristics. The commander may request a waiver of the evaluation requirements.

9-9. Qualification requirements for instructor pilots/instructor operators

a. The ACOM, ASCC, DRU, or the ARNG aviation standardization committee, in coordination with the USAACE, DES (ATZQ-ES), will help establish the content of IP/IO training in nonstandard aircraft for which no IP/IO training program exists. The proposed POI will be approved by USAACE before they can be used. Organizations will submit through the ACOM, ASCC, DRU, or the ARNG to U.S. Army Aviation Center of Excellence, Directorate of Training and Doctrine (ATZQ-TD), Fort Rucker, AL 36362-5211.

b. When an SP/SO is not available to administer a flight evaluation in the aircraft in which an IP/IO designation is sought, the evaluation may be conducted in another aircraft in the same category. The examinee must be qualified and current in the aircraft used for the evaluation.

Chapter 10

The Army Flying Hour Program

10–1. The Army flying hour program, general

The Army FHP defines the resource requirements to operate standard aircraft in combat, combat support, and support aviation units in the Regular Army, ARNG, and USAR. The Army FHP Manager, DCS, G–3/5/7 (DAMO–TRO), Army Analytics Division is the action officer for the Army FHP.

10–2. Development of flying hour program requirements

The DCS, G–3/5/7 (DAMO–TR) is the office of primary responsibility and serves as the validation and approval authority for the aviation training strategy which determines home station training resourcing levels for the FHP. The DCS, G–3/5/7 (DAMO–TRO) uses flying hour requirements provided by the Aviation Training Resource Model to build the FHP. The Deputy Assistant Secretary of the Army for Cost and Economics (DASA–CE) provides cost rate data to calculate FHP costs by mission design series. Changes to aviation resourcing or the aviation training strategy must be adjudicated through the Training General Officer Steering Committee (TGOSC) process for the Training Programming and Evaluation Group and approved by the DCS, G–3/5/7 (DAMO–TR).

a. Operational tempo requirements. Operational tempo (OPTEMPO) is an index that measures RW aircraft operations in MTOE aviation units. Crew OPTEMPO (hours per crew per month) is the metric that HQDA uses to establish and measure aviation training levels.

(1) *Training strategy.* The Army programs MTOE unit RW flying hour requirements according to a Combined Arms Training Strategy derived average crew OPTEMPO. The OPTEMPO training strategy enables Army MTOE units to achieve and maintain a specified RL. The number of authorized pilots, categorized by flight activity category estimates, determines the specific requirements for each unit. Due to the mix of aircraft and pilots within each command, the training strategy OPTEMPO varies by the ACOM, ASCC, DRU, ARNG, and component.

(2) *Simulator offsets.* Crew OPTEMPO training strategies include authorized SFTS offsets to live hour training requirements.

b. Table of distribution and allowances nonoperational tempo rotary wing requirements. The crew OPTEMPO metric does not apply to TDA units. Crew training and mission support operations determine the flying hour requirements for RW operations in TDA units. The Army FHP manager reviews RW TDA execution and emerging operational requirements annually to determine future requirements.

c. Flight school requirements. The flying hours required to fully implement the student curriculum POI and programmed student loads determine the USAACE requirements. Student loads are determined by the Structured Manning Decision Review process.

d. Fixed wing requirements. The life cycle contractor support contract hours established by PEO Aviation in coordination with DCS, G–3/5/7 (DAMO–TRO) determine FW FHP requirements.

e. Aircraft cost factors. The DASA–CE develops aircraft costing data (cost factors) in support of the FHP. Cost factors for aircraft without contractor logistic support contracts include cost projections for petroleum, oil, and lubricants; consumable repair parts; and depot level repairable parts. Cost factors for aircraft with contractor logistic support contracts only include petroleum, oil, and lubricant costs.

10–3. Flying hour program management

a. Army flying hour program manager. The Army FHP manager, DCS, G–3/5/7 (DAMO–TRO) centrally manages the Army FHP and will issue specific management guidance to the ACOM, ASCC, DRU, and ARNG and USAR FHP managers during the year of execution. The annual FHP execution guidance within the OPTEMPO management instructions memorandum issued by the DCS, G–3/5/7 (DAMO–TR) augment this regulation.

b. Flying hour program funding migration restrictions. Funding migration and/or flying hour adjustments within the ACOM, ASCC, DRU, or ARNG are subject to specific Army Budget Office rules and migration restrictions. Flying hour funding is managed by budget activity and aviation OPTEMPO funds cannot be used for non-aviation requirements without prior HQDA approval. During the year of execution, the ACOM, ASCC, DRU, or ARNG FHP managers may adjust the OPTEMPO flying hour allocation and funding as needed between aircraft within the sub-activity groups in Activity Group 11 but must submit a record of these adjustments to the Army FHP manager. However, any adjustment of FHP funds between sub-activity groups in Activity Group 11 requires notification of the Army Budget Office and the Army FHP manager. Refer to the annual OPTEMPO management instructions for further specified guidance. No adjustments are permitted to the total FW aircraft life cycle contractor support hour generated by the allocations specified in paragraph 10–2d. The annual OPTEMPO and/or FHP management instructions memorandum will contain additional guidance on flying hour adjustments.

c. Unprogrammed unit and/or aircraft transfers between an Army Command, Army service component command, or direct reporting unit. When an unprogrammed transfer of aircraft occurs between an ACOM, ASCC, or DRU during the year of execution, the losing ACOM, ASCC, or DRU will transfer to the gaining command flight hours and/or funding equivalent to the number of full months the aircraft are lost to the command. The FHP manager of the losing command must notify the DCS, G-3/5/7 (DAMO-TRO) when a transfer occurs, identify the unit, and specify the number of hours and amount of funding transferred to the gaining command.

d. Exception to migration policy. The VCSA is the approval authority for FHP migrations outside the policy outlined in paragraphs 10-3a through 10-3c. The VCSA may delegate approval authority to the DCS, G-3/5/7. Requests for exception to this policy must include the source of the funds to be migrated, the impact of the migration on the approved training strategy, and how the migrated funds will be used. The ACOMs, ASCCs, or DRUs may submit requests for exception to policy to DCS, G-3/5/7 (DAMO-TRO). The Commander, AMCOM must approve increases to the total FW aircraft life cycle contractor support hours.

e. Monthly execution projections. In accordance with the OPTEMPO management instructions memorandum, the ACOM, ASCC, DRU, or ARNG, and USAR FHP managers will submit monthly execution projections to DCS, G-3/5/7 (DAMO-TRO) no later than 10 October annually. The TRADOC projection must include and identify reimbursable flying hours. Unless the Army FHP manager has authorized a deviation due to an approved migration request or other action that reduces the total number of hours allocated to the ACOM, ASCC, DRU, or ARNG FHP, the execution strategy must project the execution of the total ACOM, ASCC, DRU, or ARNG FHP program.

f. Execution reviews. In accordance with appropriation law and United States Code, all programs and appropriation accounts are required to perform an execution review, and the FHP utilizes the monthly Army performance review (MAPR) to account for execution of resourced flying hours. DCS, G-3/5/7 (DAMO-TRO) processes and compiles monthly execution data reported through the Logistics Support Agency into the MAPR. The MAPR is the primary execution data used by the DCS, G-3/5/7 to gauge aviation execution throughout each FY. ACOM, ASCC, DRU, and ARNG FHP managers can view MAPR execution data through the Training Resource Management Information System. FHP managers are responsible for ensuring the accuracy of monthly execution feeder data reported to Logistics Support Agency and notifying the Army FHP manager if there is a discrepancy in the processed MAPR data. The MAPR period begins on the 16th calendar day of each month and ends on the 15th calendar day of the following month (for example, October MAPR includes hours executed from 16 September to 15 October).

g. Funding reviews. The FHP is also measured by the major command in dollars executed to determine if the existing program and readiness goals are being met. DOD and Army policy documents and memorandums, including the Army Planning Guidance Memorandum, the Command Program Guidance Memorandum, and the Army Resource Framework set requirements prioritization and execution review guidance annually. ACOM, ASCC, DRU, or ARNG and USAR receive FHP funding through two management decision evaluation packages (MDEPs), FHP and CNA (counter-narcotics flight hours). Commands that receive CNA funding must annotate and track discreet CNA execution to comply with execution review guidance. FHP funds not executed in an FY cannot be restored to the following FY. The Army FHP manager reviews execution on a quarterly basis and presents programmatic corrections during MDEP review and takes into account emerging FHP requirements within the TGOSC process.

Appendix A

References

The following references are available on the Army Publishing Directorate website (<http://armypubs.army.mil>) unless otherwise stated. DOD directives, issuances, and forms are available from the Office of the Secretary of Defense website (<http://www.esd.whs.mil/DD/>). Technical publications are available from Logistics Support Activity website (<https://www.logsa.army.mil/>).

Section I

Required Publications

ADP 5-0

The Operations Process (Cited in para 3-15a.)

AR 15-6

Procedures for Administrative Investigations and Boards of Officers (Cited in para 2-13c(1).)

AR 25-55

The Department of the Army Freedom of Information Act Program (Cited in para 2-13c(5)(c).)

AR 40-501

Standards of Medical Fitness (Cited in para 2-1b.)

AR 71-32

Force Development and Documentation (Cited in para 8-4a.)

AR 95-2

Air Traffic Control, Airfield/Heliport, and Airspace Operations (Cited in para 2-9b.)

AR 95-20

Contractor's Flight and Ground Operations (Cited in para 2-1a(2)(c).)

AR 385-10

The Army Safety Program (Cited in para 3-14a.)

AR 570-4

Manpower Management (Cited in para 2-3a.)

AR 600-105

Aviation Service of Rated Army Officers (Cited in para 2-1a.)

AR 600-106

Flying Status for Nonrated Army Aviation Personnel (Cited in para 2-1a.)

AR 700-138

Army Logistics Readiness and Sustainability (Cited in para 9-1a.)

AR 750-1

Army Materiel Maintenance Policy (Cited in para 9-2d.)

AR 750-6

Army Equipment Safety and Maintenance Notification System (Cited in para 1-23a.)

CTA 8-100

Army Medical Department Expendable/Durable Items (Cited in para 8-4b.)

CTA 50-900

Clothing and Individual Equipment (Cited in para 8-4b.)

CTA 50-909

Field and Garrison Furnishings and Equipment (Cited in para 8-4b.)

DA Pam 738-751

Functional User's Manual for the Army Maintenance Management System - Aviation (Cited in para 2-5a.)

TB 43-0002-3

Maintenance Expenditure Limits for Army Aircraft and UAS (Cited in para 9-2*d*.)

TC 3-04.11

Commander's Aviation Training and Standardization Program (Cited in para 3-15*a*.)

TC 3-04.72

Aviation Life Support System Management Program (Cited in para 8-17*d*.)

TC 3-04.93

Aeromedical Training for Flight Personnel (Cited in para 4-13.)

TM 1-1500-204-23-1

Aviation Unit Maintenance (AVUM) and Aviation Intermediate Maintenance (AVIM) Manual for General Aircraft Maintenance (General Maintenance and Practices), Volume 11 (Cited in para 5-1*e*.)

TM 1-1500-328-23

Aeronautical Equipment Maintenance Management Procedures (Cited in para 4-27*c*.)

TM 55-1500-342-23

Organizational, Intermediate and Depot Maintenance Aircraft Weight and Balance (Cited in para 7-4*b*.)

14 CFR 91

General Operating and Flight Rules (Cited in para 3-4*a*(7).) (Available at <https://www.gpo.gov/fdsys/search/home.action>.)

14 CFR 105

Parachute Operations (Cited in para 3-4*a*(7).) (Available at <https://www.gpo.gov/fdsys/search/home.action>.)

Section II

Related Publications

A related publication is a source of additional information. The user does not have to read it to understand this regulation.

AR 5-11

Management of Army Models and Simulations

AR 5-22

The Army Force Modernization Proponent System

AR 11-2

Managers' Internal Control Program

AR 15-39

Department of the Army Intergovernmental and Intragovernmental Committee Management Program

AR 25-22

The Army Privacy Program

AR 25-30

Army Publishing Program

AR 40-3

Medical, Dental, and Veterinary Care

AR 200-1

Environmental Protection and Enhancement

AR 215-1

Military Morale, Welfare, and Recreation Programs and Nonappropriated Fund Instrumentalities

AR 350-1

Army Training and Leader Development

AR 360-1

The Army Public Affairs Program

AR 525-15

Software Reprogramming for Cyber Electromagnetic Activities

AR 600–8–4

Line of Duty Policy, Procedures, and Investigations

AR 611–1

Military Occupational Classification Structure Development and Implementation

AR 638–8

Army Casualty Program

AR 670–1

Wear and Appearance of Army Uniforms and Insignia

AR 700–15

Packaging of Materiel

Army Directive 2017–05

Secretary of the Army Policy for Travel by Department of the Army Senior Officials

ATP 3–04.7

Army Aviation Maintenance

ATP 3–04.64

Multi Service Tactics, Techniques, and Procedures for the Tactical Employment of Unmanned Aircraft Systems

ATP 5–19

Risk Management

DA Pam 385–30

Risk Management

DA Pam 385–40

Army Accident Investigations and Reporting

DA Pam 385–90

Army Aviation Accident Prevention Program

DA Pam 670–1

Guide to Wear and Appearance of Army Uniforms and Insignia

DA Pam 750–8

The Army Maintenance Management System (TAMMS) User's Manual

DODD 4500.56

DOD Policy on the Use of Government Aircraft and Air Travel

DODD 4515.12

DOD Support for Travel of Members and Employees of Congress

DODD 5030.61

DOD Airworthiness Policy

DODD 5410.18

Public Affairs Community Relations Policy

DODI 4500.43

Operational Support Airlift (OSA)

DODI 4515.13

Air Transportation Eligibility

DODI 5410.19

Public Affairs Community Relations Policy Implementation

EM 0007

FEDLOG

EM 0131

Clothing and Individual Equipment

EM 0250

Interactive Electronic Technical Manual for Air Warrior

FAA Advisory Circular 120–76D

Authorization for Use of Electronic Flight Bags (Available at https://www.faa.gov/regulations_policies/faa_regulations/.)

FAR

Federal Aviation Regulations (Available at https://www.faa.gov/regulations_policies/.)

FM 1–564

Shipboard Operations

JP 3–52

Joint Airspace Control (Available at http://dtic.mil/doctrine/new_pubs/jp3_52.pdf.)

TC 3–04.8

Individual Flight Records Folder Management

TC 3–04.9

Commander’s Aviation Mission Survivability Program

TC 3–04.16

Airfield Operations

TC 3–04.62

Small Unmanned Aircraft System Aircrew Training Program

TC 21–24

Rappelling

TM 10–1670–201–23

Organizational and Direct Support Maintenance Manual for General Maintenance of Parachutes and Other Airdrop Equipment

TM 55–1680–317–23&P

Aviation Unit and Aviation Intermediate Maintenance Manual with Repair Parts and Special Tools List for Army Aircraft Survival

USTRANSCOM Instruction 10–19

Operational Support Airlift Procedures (also known as OSA Remote User’s Guide) (Available at <https://www.ustrancom.mil/>.)

14 CFR

Aeronautics and Space (Available at <https://www.gpo.gov/fdsys/search/home.action>.)

5 USC 552

Freedom of Information Act (Available at <https://www.gpo.gov/fdsys/search/home.action>.)

5 USC 552a

Privacy Act (Available at <https://www.gpo.gov/fdsys/search/home.action>.)

10 USC 18505

Reserves traveling for inactive-duty training: space-required travel on military aircraft (Available at <https://www.gpo.gov/fdsys/search/home.action>.)

31 USC 1344

Passenger carrier use (Available at <https://www.gpo.gov/fdsys/search/home.action>.)

Section III**Prescribed Forms**

The following forms are available on the Army Publishing Directorate website (<http://armypubs.army.mil>) unless otherwise stated. DD forms are available from the Office of the Secretary of Defense website (<http://www.esd.whs.mil/directives/forms/>).

DA Form 5484

Mission Schedule/Brief (Prescribed in para 2-6a.)

Section IV

Referenced Forms

DA Form 11-2

Internal Control Evaluation Certification

DA Form 1352

Army Aircraft Inventory, Status, and Flying Time

DA Form 2028

Recommended Changes to Publications and Blank Forms

DA Form 2408-12

Army Aviator's Flight Record

DA Form 2696

Operational Hazard Report

DA Form 7752

UAS Inventory, Status, and Flying Time

DD Form 365

Record of Weight and Balance Personnel

DD Form 365-1

Chart A-Basic Weight Checklist Record

DD Form 365-2

Form B-Aircraft Weighing Record

DD Form 365-3

Chart C-Basic Weight and Balance Record

DD Form 365-4

Weight and Balance Clearance Form F-Transport/Tactical

Appendix B

Risk Assessment Worksheets

Use of RAW is required during the mission approval process and is employed by the commander to identify elements of a mission that could or should be mitigated or must be elevated to the next higher level of command for their visibility and acceptance. Commanders will develop RAWs that meet their specific unit's requirements using the guidelines below and in ATP 5–19. RAWs do not internalize the entire risk management process but provide a systematic and tangible representation of the risk. However, do not allow the tools to become the overriding concern of the risk management process.

B–1. Development

No matrix can include all of the hazards of every mission, nor does a single matrix apply to all units. Army aviation strives for standardization, but risk assessment is unique to every command and every mission set.

a. Commanders must determine the content and associated risk levels on their RAW based upon their knowledge of the unit's mission essential task list, assigned personnel and equipment, and balance this against their personal experience and guidance from their commander (see table B–1). Simply adding the numbers up and finding the right level of command to accept the risk based on paragraph 2–14 is not risk management.

b. Commanders must consider some basic principles when they develop their RAW:

(1) The Army standard risk assessment matrix includes four levels of risk: low, moderate, high, and extremely high, along with the severity and probability an event will occur. Paragraph 2–14 establishes minimum risk acceptance levels that are used as tools to elevate certain factors to particular levels of command for visibility of these factors and the decision to accept or require mitigation and/or reduction.

(2) Each element of the RAW represents a specific hazard which in the assessment process is translated into a risk. Use caution because one element of the RAW may be assessed at a higher value then diluted or overlooked if the overall mission assessment is a lower value. Independently these factors on the RAW may indicate one level of risk, but because of the combined effect of these crew-error accelerator profiles, they should be added together to elevate overall risk to a higher level or appropriately mitigated.

(3) As they develop their RAW, commanders should review the unit mission essential task lists and consider the factors that affect their unit's ability to conduct those mission essential task list tasks. Then they can decide which of these factors they want to initiate risk reduction and/or acceptance and which they feel should be approved above or below them. The battalion or brigade commander may retain risk mitigation or acceptance for certain accelerator factors by simply marking these items causing the overall risk to become moderate or high; for example, if the battalion commander wants visibility on every urgent medical evaluation, the commander has the RAW indicate these missions as moderate. However, if the commander feels the field grade company commander should be able to approve these in the case of life or limb, the commander grants a mitigation that only the field grade commander can apply that allows the commander to reduce the risk to low if he contacts the battalion commander as soon as possible.

(4) Finally, all factors placed on the RAW must be judged against the Army standard risk assessment gauge to ensure the commander's specified level of risk matches a given probability and severity using the standard risk assessment matrix (see table B–1). For example, if the battalion commander has designated all urgent medical evaluations as moderate to retain oversight of these missions at their level but moves to a new area where the severity becomes critical and likely to happen, the commander must adjust the RAW to reflect a high level of risk and elevate approval to the brigade commander or determine a way to mitigate this risk back to moderate.

B–2. Final mission approval

Initialing, signing, or documenting verbal approval on the DA Form 5484 and/or RAW are all acceptable methods of recording approval of the appropriate authority in the mission approval process. Additionally, during bonafide absences of the battalion or higher commander, this commander may authorize their field grade deputy commander (O–5), executive officer, S–3, or air ambulance company commander (O–4) to provide final mission approval as long as they meet the training requirements of paragraph 2–14 of this regulation and notify the commander as soon as possible.

Table B-1**Standard risk assessment matrix**

Severity	Probability of Occurrence				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Moderate	H	M	M	L	L
Negligible	M	L	L	L	L

E = Extremely High, H = High, M = Medium, L = Low

Appendix C

Instructions for Completing Department of the Army Form 5484

C-1. Guidance

The briefer is responsible for ensuring that all key mission elements noted on the DA Form 5484 have been briefed per paragraph 2-14 of this regulation and documenting completion of the briefing on the DA Form 5484. Mission briefings may be in the form of an air mission commander's brief, a detailed operations order, or locally developed briefing formats, as long as all the minimum mandatory items are covered. The mission brief may be accomplished by telephonic or other means, provided all key elements are addressed and recorded by both parties to the front side.

a. Front side.

- (1) Item 1: Date.
- (2) Item 2: AC number—enter aircraft tail number.
- (3) Item 3: Enter the name of the PC/AC, seat designation, and if appropriate, designation as air mission commander.
- (4) Item 4: Enter the name of the pilot/operator and seat designation.
- (5) Item 5: Crewmembers—enter the names of nonrated personnel (if flying on the aircraft).
- (6) Item 6: Enter authorized flight condition codes for the mission as described in paragraph 2-6.
- (7) Item 7: Mission—enter the assigned mission number and/or title (that is, 3-02-01/air assault, MTF, contact APART, and so forth).
- (8) Item 8: Enter estimated time of departure and estimated time en route.
- (9) Item 9: PC/AC's initials. (Initials are the PC/AC's acknowledgment that he has been briefed by the qualified briefing officer on key elements of the mission.)
- (10) Item 10: Initials of a qualified briefing officer. (Initials of the briefing officer along with the air mission commander or PC/AC indicates that step two of the briefing process has been completed per paragraph 2-14b(2) of this regulation.)
- (11) Item 11: Risk assessment value—calculated risk level for mission based on unit risk management program.
- (12) Item 12: Mission status, to be completed by the PC/AC at the end of the mission using the following codes:
 - (a) Mission completed as briefed (MC).
 - (b) Mission not completed as briefed, see remarks on the back of the schedule (NC).
 - (c) Canceled (CXL).
- (13) Remarks: for local use as desired, continue on the back, if required.

b. Back side. The back of DA Form 5484 will be used to document important mission status remarks (for example, 9 Nov 19, MSN 03-09-19, mission canceled by S-3, 1/20 Arty, initials M.S.).

C-2. Configuration of briefing

DA Form 5484 will be used to document the completion of required briefings. As a minimum, it will be maintained on file for the period specified in this regulation.

C-3. Use

DA Form 5484 is provided for the commander's use. The unit developed forms may be utilized as long as all mandatory items are covered.

C-4. Regulations, standard operating procedures, and policies

The information contained in the DA Form 5484 does not relieve aircrew members from the requirement to know and adhere to applicable regulations, standard operating procedures, and policies.

C-5. Command relationships

Supporting and supported unit commanders will coordinate and designate command relationships to execute mission briefings when aircrews are separated from their parent unit.

Note. Mandatory for all flights.

Appendix D

Small Unmanned Aircraft System Utilization

D-1. Purpose

The purpose of this appendix is to establish regulatory guidance for small unmanned aircraft systems (SUAS) (group 1) operations. UASs designed for use by other than MOS-qualified unmanned AOs and categorized as group 1 (0.55 to 20 pounds) are to be governed by provisions of this appendix and this regulation. SUAS ATP, training, qualification, and currency will be according to the appropriate MTL. All SUAS operator personnel will receive familiarization training in airspace structure and airspace management and/or coordination and will comply with paragraph 2-11 of this regulation. Only this appendix and specifically cited references of this regulation are intended to control SUAS operations.

D-2. Army small unmanned aircraft systems personnel

The following personnel may fly and/or operate Army SUASs:

- a. The operators who—
 - (1) Are members of the Regular Army, USAR, ARNG, or Civilian employees of the U.S. Army.
 - (2) Have complied with qualification, training, evaluation, and currency requirements of this appendix for the UAS to be flown and/or operated.
 - (3) Meet the medical standard as outlined in AR 40-501 (but are not required to maintain a class IV physical).
- b. Civilian employees of government agencies and government contractors who have—
 - (1) Appropriate military or civilian certifications or ratings in the system(s).
 - (2) Written authorization from the owning ACOM, ASCC, DRU, ARNG, or CG, U.S. Army Maneuver Center of Excellence (MCOE).
 - (3) Necessary compliance with qualification; training approved by MCOE; evaluation and currency requirements of this regulation; the provisions of AR 95-20; and the contract and/or statement of work for the UAS to be flown.
- c. The operators in other U.S. services and/or USSOCOM who have—
 - (1) Complied with qualification; training approved by MCOE; evaluation; and currency requirements of their Service or of this regulation for the UAS to be flown.
 - (2) Obtained written authorization from their Service and the senior MC (no lower than O-5).
- d. The operators of foreign military services who have—
 - (1) Complied with qualification; training approved by MCOE; evaluation; and currency requirements of their Service or of this regulation for the UAS to be flown.
 - (2) Properly completed a Foreign Service disclaimer.
 - (3) Obtained written authorization, including a disclaimer from their government, absolving the U.S. Government from liability. The appropriate host ACOM, ASCC, DRU, or ARNG must provide written authorization which includes the purpose and duration of the authorization.

D-3. Small unmanned aircraft systems training program

The SUAS ATP will be established and operated in accordance with the appropriate MTL.

D-4. Currency

- a. Currency requirements will be according to the appropriate ATP.
- b. The operator whose currency has lapsed must complete a PFE according to the appropriate ATM. Simulators may not be used to reestablish currency.
- c. Night currency requirements will be according to the appropriate ATP.
- d. In areas where extreme environmental conditions may preclude safe operation of UAS for periods exceeding 120 consecutive days, authorization for the use of compatible simulators for maintaining AO currency up to 180 days may be granted by—
 - (1) Commanders of ACOMs, ASCCs, DRUs, and USSOCOM.
 - (2) Commander, U.S. Army Reserve Command.
 - (3) Director, Army National Guard.

D-5. Semi-annual proficiency and readiness test

The semi-annual proficiency and readiness test measures an operator's proficiency and readiness. Conduct in accordance with TC 3-04.11.

D-6. Small unmanned aircraft systems aircrew training program waivers and extensions

a. These authorities may grant unit waivers and/or extensions to SUAS ATP requirements detailed in paragraphs D-3, D-4, D-5 and D-9 to units under their authority:

(1) ACOM, ASCC, DRU, ARNG, and USSOCOM. This authority will not be delegated below the first general officer in the chain of command.

(2) DARNG.

b. The first commander, O-6 or above, in the individual's chain of command or the state Army aviation officer for ARNG operators may grant individual waivers to aircraft ATP requirements.

D-7. Airspace usage

a. SUAS operations will be conducted in accordance with paragraph 2-11 and applicable FAA UAS and SUAS orders. If ground observers are required see 14 CFR 91.17 for more information.

b. When the qualifications listed in this appendix are met, the FAA agrees to provide access to the National Airspace System for DOD UAS outside restricted areas and warning areas as follows:

(1) All categories of DOD UAS operations conducted wholly within Class D airspace that has as associated DOD-controlled, non-Joint-use airfield provided operations are not conducted over populated areas or within airspace covered in 14 CFR 91.215(b)(2).

(2) The DOD UASs that weigh 0.55 pounds to 20 pounds, under the following conditions:

(a) Operations are conducted within Class G airspace below 1,200 feet AGL (not applicable to airspace identified by 14 CFR 91.215(b)(2) over military bases, reservations, or land protected by purchase, lease, or other restriction).

(b) The UAS remains within the clear visual range of the operator or a certified observer in immediate contact with the operator to ensure separation from other aircraft.

c. The DOD will make sure that the UAS remains more than 5 miles from any civil use airport or heliport. The DOD components operating under this paragraph will notify the FAA of the proposed operation in advance and publish NOTAMs as required to alert nonparticipating aircraft of the operation. For non-recurring operations, notification will be accomplished, and NOTAM published, no later than 24 hours in advance. For recurring operations (for example, training) standing "blanket" notifications and/or standing NOTAMs should not be used.

D-8. Minimum crew requirements

The minimum crew to operate a SUAS will be a qualified operator unless specifically stated otherwise in the operator's manual.

D-9. Certification of operators and master trainers

Personnel that complete the approved master trainer (MT) course and are designated by the first O-6 in the chain of command are authorized to certify new operators at their home station. The SUAS operator and MT course qualification courses will be conducted at TRADOC-approved locations. The product or project manager (PM) may implement equipment and upgrade training.

a. To become qualified as an MT, an operator must complete one of the following:

(1) A DA approved MT course.

(2) An MT equivalency evaluation administered by an MT selected by MCOE in the SUAS in which MT duties are to be performed. Commanders will coordinate with DES before submitting a request for equivalency evaluation through the chain of command to DCS, G-3/5/7 (DAMO-AV).

b. Operators can be authorized to conduct MT duties in accordance with TC 3-04.62.

c. Upon completion of the DA approved MT qualification course or equivalency evaluation, O-5 commanders with organic SUAS assets may appoint MTs as unit aircrew training managers.

d. MTs must be current, qualified, and mission qualified in the system in which they will be performing their duties.

D-10. Nonstandard small unmanned aircraft systems with a non-tactical mission

Group 1 UAS procured per chapter 9 of this regulation for non-tactical missions, for example, Corps of Engineers dam inspections, research and academic activities within Army research laboratories, RDECOM, military academies, or public affairs events, are exempt from the qualification, evaluation, and currency requirements of this regulation. Owning organization is responsible for safe operations and compliance with applicable FAA circulars.

Appendix E

Soldier Borne Sensor Utilization

E-1. Purpose

The purpose of this section is to establish regulatory guidance for the Soldier Borne Sensor (SBS), also known as nano/cargo pocket UAS. The SBS is designed to be operated by any Soldier of any MOS with no formal training. Personnel operating SBS will not be required to receive any familiarization training in airspace and airspace management due to the small size/weight and low operating altitude of the SBS. This appendix does not preclude local commands from requiring such training. SBS is defined as an unmanned aircraft weighing less than 0.55 pounds, flying at or below 100 feet AGL, and flying at or less than 30 knots.

E-2. Army Soldier Borne Sensor personnel

SBS may be flown/operated by any person in the Regular Army, U.S. Army Reserve, or Army National Guard or Civilian employees of the U.S. Army.

- a.* There is no formal qualification training required to operate SBS. SBS is a self-taught system.
- b.* Government contractors may operate the SBS with written authorization from the owning Army commander/director or government civilian equivalent.
- c.* Personnel in other U.S. services and/or USSOCOM may operate Army SBS with written authorization from the owning Army commander/director or government civilian equivalent.
- d.* Personnel from a foreign military service must obtain written authorization, including a disclaimer from their government absolving the U.S. Government from liability. The appropriate host Army commander/director or government civilian equivalent must provide written authorization.

E-3. Soldier Borne Sensor training program

There is no ATP or formal training program associated with SBS.

E-4. Soldier Borne Sensor currency

There are no currency requirements for SBS.

E-5. Proficiency and readiness test

There is no proficiency and readiness test, or similar evaluation, required for SBS.

E-6. Airspace usage

- a.* The SBS will operate at or below 100 feet AGL.
- b.* The SBS will not operate beyond 1 1/2 kilometers from the control station.
- c.* The SBS will not interfere with manned or unmanned aviation operations.
 - (1) The SBS will not operate within 15 miles of an airport unless coordination is made with the airport controlling authority/control tower.
 - (2) SBS will comply with appropriate FAA regulations and orders.
- d.* The SBS will not be flown near personnel in a way that could cause injury to personnel if a malfunction occurred.

E-7. Minimum crew requirements

There are no minimum crew requirements associated with the SBS.

Appendix F

Internal Control Evaluation

F–1. Function

The function of this evaluation is the administration of the internal control process as required by AR 11–2.

F–2. Purpose

The purpose of this evaluation is to assist assessable unit managers and internal control administrators in evaluating the key internal controls listed in paragraph F–4. It is intended as a guide and does not cover all controls.

F–3. Instructions

Answers must be based on the actual testing of key internal controls (for example, document analysis, direct observation, sampling, simulation, other). Answers that indicate deficiencies must be explained and corrective action indicated in supporting documentation. These key internal controls must be evaluated at least once every 5 years. Certification that this evaluation has been conducted must be accomplished on DA Form 11–2 (Internal Control Evaluation Certification Statement).

F–4. Test questions

These test questions are for HQDA only, unless otherwise stated.

- a. Are standardized aviation safety, standardization, and utilization regulations and procedures published by a DA proponent?
- b. Is SOF information prepared and sent to the field promptly? (User.)
- c. Are airports, heliports, and landing areas approved for flight operations?
- d. Are local flying rules in agreement with federal, DOD, and DA policies?
- e. Are applicable safety regulations and special use airspace operation guidance followed?
- f. Are violations of safety and special use airspace guidance reported and investigated by appropriate personnel per federal, DOD, and DA guidance?
- g. Are the policies, procedures, and transportation eligibility requirements for OSA established in DODI 4500.43 and DODD 4515.13 being followed?
- h. Are the procedures for OSA prescribed in AR 95–1 and the OSA–A guide being adhered to?
- i. Are ATPs carried out per applicable Army guidance to include flying hours and synthetic flight training?
- j. Are personnel who do not meet proficiency requirements restricted from flight duty?
- k. Is nonstandard aircraft acquisition, training, standardization, and use conducted according to appropriate federal, DOD, Army, and local guidance?
- l. Is ALSE available and maintained in accordance with applicable guidance?
- m. Are additional flight training periods managed per applicable policies and regulations? (RC only.)

F–5. Supersession

This evaluation replaces the evaluation for the administration of the internal control process previously published in AR 95–1, dated 11 March 2014.

F–6. Comments

Help to make this a better tool for evaluation of internal controls. Submit comments to the Deputy Chief of Staff, G–3/5/7 (DAMO–AV), 400 Army Pentagon, Washington, DC 20310–0400.

Glossary

Section I

Abbreviations

AASA

Administrative Assistant to the Secretary of the Army

AC

aircraft commander

ACOM

Army command

ADP

Army doctrine publication

ADS-B

automatic dependent surveillance-broadcast

AGL

above ground level

ALSE

aviation life support equipment

ALSO

aviation life support officer

ALSS

Aviation Life Support Systems

AMC

U.S. Army Materiel Command

AMCOM

Aviation and Missile Command

AMOC

Aviation Maintenance Officers Course

AMSO

aviation mission survivability officer

AO

aircraft operator

APART

annual proficiency and readiness test

AR

Army regulation

ARMS

Aviation Resource Management Survey

ARNG

Army National Guard

ASA (FM&C)

Assistant Secretary of the Army (Financial Management and Comptroller)

ASAM

aviation safety action message

ASCC

Army service component command

ASDAT
aviation survivability development and tactics

ASE
aircraft survivability equipment

ASI
additional skill identifier

ATC
air traffic control

ATEC
Army Test and Evaluation Command

ATM
aircrew training module

ATP
aircrew training program

ATRRS
Army Training Requirements and Resources System

ATSD (PA)
Assistant to the Secretary of Defense for Public Affairs

AWR
Airworthiness Release

CAB
Combat Aviation Brigade

CAFRS
Centralized Aviation Flight Records System

CCWO
command chief warrant officer

CE
crew chief

CFR
Code of Federal Regulations

CG
Commanding General

CNA
counter-narcotics activities

CNGB
Chief, National Guard Bureau

CONUS
continental United States

CP
co-pilot

CSA
Chief of Staff, Army

CTA
Common Tables of Allowances

CVR
cockpit voice recorder

DA
Department of the Army

DAC
Department of the Army Civilian

DAFIF
Digital Aeronautical Flight Information File

DAR
Department of the Army representative

DARNG
Director, Army National Guard

DASA–CE
Deputy Assistant Secretary of the Army for Cost and Economics

DCS
Deputy Chief of Staff

DD Form
Department of Defense Form

DES
Directorate of Evaluation and Standardization

DOD
Department of Defense

DODD
Department of Defense Directive

DODI
Department of Defense Instruction

DOS
Directorate of Simulation

DOTD
Directorate of Training and Doctrine

DRU
direct reporting unit

DSC
digital source collector

EBS
emergency breathing system

EFB
electronic flight bag

ETA
estimated time of arrival

EVS
enhanced visual system

FAA
Federal Aviation Administration

FAR
Federal Aviation Regulation

FCF
functional check flight

FCP
functional check pilot

FDR
flight data recorder

FE
flight engineer

FHP
flying hour program

FI
flight instructor

FL
flight level

FLIP
flight information publications

FM
field manual

FOIA
Freedom of Information Act

FORSCOM
U.S. Army Forces Command

FRIES
Fast Rope Insertion Extraction System

FS
flight surgeon

FTIP
Foreign Terminal Instrument Procedures

FW
fixed wing

FY
fiscal year

GFA
graphical forecast for aviation

GPS
Global Positioning System

HNAL
Host Nation Acceptance List

HQDA
Headquarters, Department of the Army

I/O
simulator instructor/operator

IAP
instrument approach procedure

IATF
individual aircrew training folder

ICAO
International Civil Aviation Organization

IE

instrument examiner

IFR

instrument flight rules

IFRF

individual flight records folder

ILS

Instrument Landing System

IMC

instrument meteorological conditions

IO

instructor operator

IP

instructor pilot

JALIS

Joint Air Logistics Information System

JP

Joint publication

KTS

nautical miles per hour

MAPR

monthly Army performance review

MBO

mission briefing officer

MCOE

U.S. Army Maneuver Center of Excellence

MDA

minimum descent altitude

MDEP

management decision evaluation package

ME

maintenance test pilot evaluator

METS

modular egress training simulator

MILAIR

military aircraft

MO

flight medic

MOS

military occupational specialty

MP

maintenance test pilot

MSC

major subordinate command

MSL

mean sea level

MT
master trainer

MTF
maintenance test flight

MTL
master task list

MTOE
modified table of organization and equipment

NAVAID
navigational aid

NOTAM
notice to airmen

NVD
night vision device

OCONUS
outside the continental United States

OCPA
Office of the Chief of Public Affairs

OEM
original equipment manufacturer

OPTEMPO
operational tempo

OSA
operational support airlift

OSA–A
Operational Support Airlift–Activity

PC
pilot-in-command

PEO
Program Executive Office

PFE
proficiency flight evaluation

PM
program manager

PO
payload operator

POI
program of instruction

PUJC
priority, urgency, justification, and category

RAIM
Receiver Autonomous Integrity Monitoring

RAW
risk assessment worksheet

RC
Reserve Component

RDECOM

Research, Development, and Engineering Command

RL

readiness level

RNAV

area navigation

RNP

required navigational performance

RVR

runway visual range

RW

rotary wing

SBS

Soldier Borne Sensor

SECARMY

Secretary of the Army

SFTS

synthetic flight training system

SI

standardization instructor

SIPRNET

secure internet protocol router network

SO

standardization instructor operator

SOF

safety of flight

SP

standardization instructor pilot

SPIES

Special Patrol Insertion Extraction System

SSCA

Service Secretary Controlled Aircraft

STABO

short tactical airborne operations

STACOM

standardization communication

STAR

standard terminal arrival routes

SUAS

small unmanned aircraft systems

SVFR

special visual flight rules

SWET

shallow water egress trainer

TB

technical bulletin

TC
training circular

TDA
table of distribution and allowances

TERPS
Terminal Instrument Procedures

TGOSC
Training General Officer Steering Committee

TM
technical manual

TRADOC
U.S. Army Training and Doctrine Command

TSG
The Surgeon General

TSO
technical standard order

UAS
unmanned aircraft systems

USAACE
U.S. Army Aviation Center of Excellence

USAASA
U.S. Army Aeronautical Services Agency

USAR
U.S. Army Reserve

USC
United States Code

USSOCOM
U.S. Special Operations Command

UT
unit trainer

VCSA
Vice Chief of Staff of the Army

VFR
visual flight rule

VMC
visual meteorological condition

VOR
very high frequency omni-directional range

XP
experimental test pilot

Section II

Terms

Acceptance flight

A flight made to accept a contractor-produced aircraft or one on which a contractor or Army Depot has performed maintenance or contract modification before return to the operational inventory. It can also be a flight made by the receiving unit upon transfer of aircraft between components and units.

Active Duty Guard and Reserve

Guard members and Reservists on full-time active duty for periods of 180 days or more to provide full-time support to the Reserve Components.

Aerobatic flight

Intentional maneuvers involving an abrupt change in an aircraft's altitude, abnormal attitude, or abnormal acceleration not needed for normal flight. These flights do not include a maneuver that conforms to the helicopter flight manual such as combat maneuvering or a tactical or training maneuver when part of an approved training exercise.

Aircrew duty

Any duty related to the operation of an aircraft and defined by the duty symbols of paragraph 2-6a.

Aircrew training manual

A publication that contains approved aircrew training task for individual, tactical, mission, maintenance, instructor, and leader tasks.

Aircrew training program

Training program used by U.S. Army aviation units designed to ensure standardized training and evaluation requirements.

Airland

Move by air and disembark, or unload, after the aircraft has landed or while an aircraft is hovering. An airland operation includes infiltration/exfiltration techniques which do not require additional special equipment for either the aircraft or the passenger including, but not limited to, parachutes, ladders, hoists, SPIES/FRIES, and amphibious operations.

Airplane

An engine-driven FW aircraft heavier than air that is supported in flight by the dynamic reaction of the air against its wings.

Alleged violations

Those infractions of applicable FAA, ICAO, and host country flight regulations that create an unsafe condition or result in an incident or accident.

Armed Forces

The Army, Navy, Air Force, Marine Corps, and Coast Guard, including their ACs, RCs, and members serving without component status.

Army aviation disaster, search, and rescue unit

A temporarily organized unit employed during an emergency. The unit equips, supplies, safeguards, maintains, and operates Army aircraft during a disaster, air search, or rescue.

Army aviation flight standardization

Includes all aspects of the ATP and aviator cockpit performance, aircrew teamwork, tactics, maintenance, and safety. Standardization achieved through the publications and training of standardized literature, a disciplined instructor pilot/operator force, written test, flight checks, and command involvement and supervision of the ATP.

Army aviation standardization

The use of uniform established procedures and techniques to attain a high level of readiness and professionalism in operation and employment of Army aircraft.

Army aviator

An aeronautical designation awarded to members of the U.S. Army by the SECARMY or designated officers.

Army National Guard

That part of the organized militia of the several states and territories, Puerto Rico, and the District of Columbia, active and inactive, that is a land force; is trained, and his its officers appointed, under the sixteenth clause of Section 8, Article I, of the Constitution of the United States; is organized, armed, and equipped wholly or partly at Federal expense; and is federally recognized, regardless of duty status.

Army National Guard of the United States

The reserve component of the Army all of whose members are members of the Army National Guard, regardless of duty status.

Aviation officer

An Army or DAC aviator who commands an aviation unit or is a member of a commander's staff and advises or supervises Army aviation functions.

Bonafide absence

Periods of time the commander is unavailable and a decision is required before they are reached.

Cabin attendant

A member of the aircrew, primarily to ensure cabin safety and comfort of passengers.

Casualty evacuation

Evacuation of injured Soldiers or civilians and is used to denote the emergency evacuation of injured personnel from a war zone. The casualty evacuation aircraft are not equipped with specific lifesaving equipment or specially trained medical staff. Their primary purpose is to ferry personnel from the battlefield to the nearest appropriate medical facility available as quickly as possible.

Category (of aircraft)

Aircraft designated as either airplane or helicopter synonymous with type.

Category II operations

Concerning the operation of aircraft, means a straight-in ILS approach to the runway of an airport under a Category II ILS instrument approach procedure issued by the administrator or other appropriate authority.

Chain of command

Personnel in documented leadership positions with responsibility for the health and welfare of assigned personnel, control, and accountability of Army equipment and mission accomplishment. When used for final mission approval authority, it includes such positions as platoon leaders, commanders, directors, supervisors, and so on that meet the definition.

Civil aircraft

Aircraft other than public aircraft.

Code of Federal Regulations

14 CFR 91 contains Federal Air Regulations Part 91.

Command/staff aviation officer

A special staff officer designated by the commander to provide advice or manage aviation assets, aviation standardization, and aviation safety.

Crewmember

Status assigned to Soldiers who perform duties aboard an aircraft and are essential to the operation of the aircraft. They work with rated aviators under the team concept and according to the principles of aircrew coordination training. This term can be used to infer some/all rated and nonrated personnel that perform flight duties. This status can also be used in reference to UAS operators and maintainers that perform flight duties and maintenance on UAS systems.

Cross-country flight

A flight extending beyond the local flying area or within the local flying area which is planned to terminate at a place other than the location of origin.

Department of the Army Civilian pilot (Department of the Army Civilian aviator)

A civil service employee who holds appropriate qualifications and who must comply with this regulation and other DA aviation-related regulations.

Dunker

A simulation device used to train aircrews which can be abruptly lowered into the water in a controlled environment to replicate an aircraft ditching emergency. These devices provide the capability of comfortable cockpit or cabin reconfigured that replicates various army planes. Also referred to as a SWET or METS.

Emergency breathing system

A device such as a helicopter emergency egress device used to supply oxygen to a person after ditching.

Flight crew station

A station in aircraft that a flight crewmember occupies to perform their flight duty; for example, pilot stations specified in operator's manuals.

Flight surgeon

The medical officer who has graduated from an approved military course in aviation medicine. References to FSs do not include aeromedical physician's assistant.

Graphical forecast for aviation

Formerly known as area forecast. A weather message product of the National Weather Service in the United States. Encompasses the weather conditions over a large regional area and is considered one of the better sources of information for en route weather.

Helicopter

A rotorcraft that, for its horizontal motion, depends principally on its engine-driven rotors.

Infiltration/exfiltration

RW aircraft infiltration/exfiltration includes, but is not limited to, those skill sets required to successfully conduct: rappel, FRIES, SPIES, stabilized body operations, ladder, helocast, hoist, air assault, and airland operations.

Installation

For U.S. Army Aviation Standardization Program purposes, the term includes AC forts, posts, camps, or stations with Army aircraft resident; ARNG individual states; and Army Reserve commands. For other than standardization purposes include RC facilities.

Large aircraft

An aircraft of more than 12,500 pounds maximum certificated takeoff weight.

Maintenance operational check

Systems check made on the ground through engine run-up and taxiing. Checks made using auxiliary power or testing equipment to simulate, in so far as possible, actual conditions under which the system is to operate. These steps are done to ensure that aircraft systems or components disturbed during an inspection or maintenance have been repaired or adjusted satisfactorily.

Master task list

Listing of training and evaluation requirements which specify aviation training needs for U.S. Army flight crewmembers in support of the ATP.

Modular egress training simulator

A simulation device used to train aircrews, which can be abruptly lowered into the water in a controlled environment, to replicate an aircraft ditching emergency. These devices provide the capability of comfortable cockpit or cabin reconfigured that replicates various Army aircraft. Also referred to as a dunker or SWET.

National Airspace System

The airspace above the surface of the earth over the United States and its possessions.

Noncrewmember

Status assigned to Soldiers whose duties directly relate to the in-flight mission of the aircraft but are not essential to the operation of the aircraft.

Nonrated personnel

An officer or enlisted Soldier who has not been awarded the aeronautical rating of Army aviator or FS, or a Soldier with an aeronautical rating (aviator or FS) who is no longer in aviation service.

Nonstandard aircraft

Aircraft used to fill operational requirements instead of standard Army aircraft. Army standard aircraft reconfigured or altered for special use (for example, testing, special mission, and modification) are not normally classified as nonstandard aircraft within the context of this regulation.

Officer

Both commissioned or warrant officers unless otherwise specified.

Operational flying

Flying performed by rated personnel primarily for mission support or training while serving in assignments in which basic flying skills normally are kept current while performing assigned duties. All flying by rated members of the RC not on extended active duty is operational flying.

Operational tempo

Hours flew per crew per month in MTOE RW aircraft assigned to ACOM, ASCC, DRU, and ARNG.

Parachute

A device used or intended to be used to retard the fall of a body or object through the air.

Passenger

Any occupant of the aircraft not performing an aircrew duty and logging flying time under paragraph 2–6. Passengers on Army aircraft authorized by chapter 3 of this regulation. Do not enter passenger names on the DA Form 2408–12.

Patient

A sick, injured, wounded, or other person requiring medical and/or dental care or treatment to include personnel receiving medical care for training.

Public aircraft

Aircraft operated by or on behalf of the U.S. Government, a state, the District of Columbia, a territory or possession of the United States, or a political subdivision of one of these governments. Exceptions for commercial purposes used to carry an individual other than a crewmember or a qualified noncrewmember, or not used exclusively for the U.S. Government.

Qualified for aviation service

A volunteer aviation status requisite to entitlement for operational flying.

Rated personnel

Aviators and officers described in this regulation and AR 600–105.

Shallow water egress trainer

A simulation device used to train aircrews, which can be abruptly lowered into the water in a controlled environment, to replicate an aircraft ditching emergency. These devices provide the capability of comfortable cockpit or cabin reconfigured that replicates various Army aircraft. Also referred to as a dunker or METS.

Standardization instructor pilot

A qualified IP designated by the commander, in writing, to perform standardization duties.

Synthetic flight training system

A group of high-fidelity instrument and visual flight simulators capable of providing basic, advanced, and tactical training in either manual or automated modes.

Tactical environment (actual)

An active theater or area of combat operations.

Tactical environment (simulated)

An operational area established for training and simulated combat operations.

Training mission

Mission flights for qualification or refresher training, ATP requirements, and authorized training exercises.

Unit trainer

A pilot or crewmember designated to instruct in areas of special training to assist in unit training programs and achieve established training goals.

Unmanned aircraft systems groups

The UAS group system establishes the foundation for joint UAS terminology. It provides a common reference to compare UAS. UAS are grouped based on the physical and performance characteristics of weight, operating altitude, and airspeed. UAS groups are determined without regard for payload, mission, command relationship, or Service. All UAS fall into one of five groups. See ATP 3–04.64 for more information.

Weather forecaster

Any person approved by the U.S. Air Force or U.S. Navy Air Weather Services, or by the National Weather Service, to forecast aviation weather for flight planning.

Section III**Special Abbreviations and Terms**

This section contains no entries.

UNCLASSIFIED

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