

Army Regulation 95–23

Aviation

Unmanned Aircraft System Flight Regulations

**Headquarters
Department of the Army
Washington, DC
7 August 2006**

UNCLASSIFIED

SUMMARY of CHANGE

AR 95-23

Unmanned Aircraft System Flight Regulations

This major revision, dated 7 August 2006--

- o Changes the Suggested Improvements paragraph: The responsibility for resolving comments and suggested improvements (DA Form 2028) was changed to the Commander U.S. Army Aviation Warfighting Center, ATTN: ATZQ-ESL Fort Rucker, Alabama 36362-5211 (Title Page).
- o Authorizes unmanned aircraft system crewmembers in to perform aircrew duties while in transition leave status (para 2-3).
- o Changes "Duty" and "Mission" symbols to align with AR 95-1 and Army flight records software (para 2-5).
- o Aligns UAS individual flight records with AR 95-1 requirements (para 2-7).
- o Changes paragraph on briefing officers to align with AR 95-1 and Army Vice Chief of Staff's memorandum (para 2-12).
- o Adds DA Form 2696-R (Operational Hazard Report) requirements and information on temporary flying restrictions due to exogenous factors (paras 3-9, 3-10).
- o Allows O-6 Commanders to grant "unit waivers" and "extensions" to ATP requirements during deployments (para 4-2).
- o Revises currency requirements (para 4-15).
- o Removes the similar unmanned aircraft requirements from the regulation and required similar unmanned aircraft to be identified in the appropriate ATM (para 4-17).
- o Revises instructor operator requirements (para 4-22).
- o Establishes requirements for ground unmanned aircraft system crewmembers (para 4-25).
- o Adds U.S. Army Aviation Commander's Conference and U.S. Army Aviation Center (para 4-27, 4-28).
- o Revises departure procedures (para 5-3).
- o Revises DA Form 7525 (UAS Mission Schedule/Brief) (app B).

Effective 7 September 2006


Aviation

Unmanned Aircraft System Flight Regulations

By Order of the Secretary of the Army:

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General, United States Army
Chief of Staff

Official:


JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army

History. This publication is a major revision.

Summary. This regulation covers unmanned aircraft system operations, unmanned aircraft crewmember training and currency requirements, and flight rules. It also covers Army unmanned aircraft system general provisions, training, standardization, and management of unmanned aircraft system resources.

Applicability. This regulation applies to the Active Army, the U.S. Army Reserve, and the Army National Guard/Army National Guard of the United States, systems and personnel, including Department of

Defense/Department of the Army civilians and civilian contractors, involved in the operation, training, standardization, and maintenance of such unmanned aircraft systems. During mobilization, chapters and policies contained in this regulation may be modified by the proponent.

Proponent and exception authority.

The proponent of this regulation is the Deputy Chief of Staff, G–3/5/7. The Deputy Chief of Staff, G–3/5/7 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 a direct reporting unit or field operating agency of the proponent 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 management control process.

This regulation contains management control provisions and identifies key management controls that must be evaluated.

Supplementation. Supplementation of this regulation and establishment of command 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 Commander, USAAWC, Attn.: ATZQ–ESL, Fort Rucker, AL 36362–5211.

Distribution. This publication is available in electronic media only and is intended for command levels A, B, C, D, and E for the Active Army, the Army National Guard of the United States, and the U.S. Army Reserve.

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Glossary

Chapter 1 General

1–1. Purpose

This regulation establishes procedures, rules, and responsibilities for—

- a.* Unmanned Aircraft Systems (UAS), and unmanned aircraft crewmember (UAC) training and standardization.
- b.* UAS aircrew training program (ATP).
- c.* UAS-related flight violations.
- d.* Command, control, operations, and use of Department of the Army (DA) UAS.
- e.* DA UAS Standardization Program.
- f.* UAS safety of flight (SOF) messages.
- g.* UAS weight and balance.

1–2. References

Required and related publications and prescribed and referenced forms are listed in appendix A.

1–3. Explanation of abbreviations and terms

Abbreviations and special terms used in this regulation are explained in the glossary.

1–4. Responsibilities

a. The Secretary of the Army, or authorized representative (unless otherwise stated in this regulation), has authority for final decisions in Army UAS operations, as established by the National Security Act of 1947, Title 10, Section 3062, United States Code (10 USC 3062), as amended.

b. The Assistant Secretary of Defense (Public Affairs) (OASD (PA)) will approve requests to engage in public demonstrations/static displays.

c. The Chief of Staff, Army (CSA) will approve Army-wide grounding of an entire mission, type, design, and series (MTDS) fleet of UAS. This authority also applies to SOF messages discussed in chapter 6.

d. The Office of the Deputy Chief of Staff, G–3/5/7 (DCS, G–3/5/7) has staff responsibility for Army UAS, including waiver authority.

e. The Deputy Chief of Staff, G–4 will approve—

- (1) SOFs and aviation safety action messages (ASAMs) as discussed in chapter 6.
- (2) UAS weight and balance as discussed in chapter 7.

f. The Commander, U.S. Army Aviation Warfighting Center and Fort Rucker (USAAWC & FR) will be responsible for:

(1) Preparing agency for this regulation.

(2) UAS training and standardization literature for all intelligence, surveillance, and reconnaissance (ISR) related UAS.

(3) U.S. Army UAS standardization and evaluation programs.

(4) Monitoring all UAS training evaluation and standardization.

(5) Performing UAS readiness management inspections, as appropriate.

g. The Commander, Aviation and Missile Command (AMCOM) will—

(1) Report UAS SOF/ASAM conditions and issue SOF/ASAMs covered in chapter 6. UAS SOF/ASAM reporting responsibility for those UAS still under procurement action (when system is under contract for procurement, but not yet formally fielded to U.S. Army organizations) and/or still under conditional fielding/release to U.S. Army organizations and under the management and/or responsibility of the program executive office (PEO) for Aviation, as exercised through its project manager (PM) for UAS, will be exercised by PEO Aviation and/or its PM UAS or a designated representative.

(2) Be the technical proponent for weight and balance (chap 7).

h. The Surgeon General will coordinate health hazard assessment and other medical aspects relating to UAS operations, including appropriate references to medical standards pertinent to UAS personnel documented in AR 40–501.

i. The Commanding General (CG), U.S. Army Materiel Command (AMC) will direct overall command activities involving weight and balance (chap 7).

j. The CG, U.S. Army Training and Doctrine Command (TRADOC), in coordination with appropriate Headquarters, Department of the Army (HQDA) agencies, will develop and recommend the doctrine, concepts, material requirements, and organization of Army UAS elements. The CG, TRADOC will—

(1) Develop training, standardization, and evaluation literature for UAS training programs (chap 4).

(2) Oversee the overall training of weight and balance (chap 7).

k. The CG, US Army Aviation Warfighting Center, Directorate of Evaluation and Standardization, will monitor UAS training evaluation and standardization, when and if appropriate.

l. The commanders of major Army commands (MACOMs) will—

- (1) Ensure proper maintenance of UAC individual flight records (para 2–7).
- (2) Monitor the Army UAS Standardization Program (para 4–26).
- (3) Oversee SOF messages (chap 6).

1–5. Management control evaluation checklist

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

b. Appendix D is the applicable management control evaluation checklist. Managers will use the checklist as daily guidance and will formally complete the checklist as scheduled by the HQDA functional proponents in the annually updated management control plan. The checklist will be used following the guidance specified in AR 11–2. Specifically, the checklist will—

- (1) Test whether prescribed controls are present, 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 those deficiencies.
- (5) Provide support for the commander’s annual statement on the adequacy of internal controls within the organization.

1–6. Deviations

a. Individuals may deviate from provisions of this regulation during emergencies to the extent necessary to meet the emergency.

b. Individuals who deviate from the provisions of this regulation, Federal Aviation Administration (FAA) regulations, or host country regulations must report details of the incident directly to their unit commander. The incident must be reported within 24 hours after it occurs.

c. Alleged violations of Federal Aviation Regulation (FAR) 91 (14 CFR 91), host country regulations, and/or U.S. Military aviation regulations will be treated in accordance with paragraph 2–11.

1–7. Waivers and delegation of authority

a. Authority to grant waivers is stated in specific paragraphs of this regulation. Authority granted to MACOMs per this regulation may be further delegated by the MACOM commander 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 to provisions in chapters 2 through 5 may only be granted by DCS, G–3/5/7 ATTN: DAMO–AV, 400 Army Pentagon, Washington, DC 20310–0400 and chapters 6 and 7 by HQDA G–4, ATTN: DALO–AV, 500 Army Pentagon, Washington, DC 20310–0500.

c. Waivers required to be processed through the FAA or a host nation should be coordinated/processed through the Commander, U.S. Army Aeronautical Services Agency (USAASA), as appropriate.

Chapter 2

Unmanned Aircraft System Management

2–1. Personnel authorized to fly/operate Army UAS

a. The following personnel may fly/operate Army UAS:

- (1) UACs who—
 - (a) Are members of the Active Army, Reserve Component, or Army National Guard or are civilian employees of the U.S. Army.
 - (b) Have complied with qualification, training, evaluation, and currency requirements of this regulation (chap 4) for the UAS to be flown/operated.
- (2) Civilian employees of Government agencies and Government contractors who have—
 - (a) Appropriate military or civilian certifications or ratings in the system(s).
 - (b) Written authorization from the owning MACOM or Commander, USAAWC.

- (c) Necessary compliance with qualification, training, evaluation, and currency requirements of this regulation (chap 4), the provisions of AR 95–20, and the contract and/or statement of work for the UAS to be flown.
- (d) At a minimum, a medical flight physical as stated in paragraph 2–1*b* below or an FAA equivalent.
- (3) UAS crew members in other U.S. services who have—
 - (a) Complied with qualification, training, evaluation, and currency requirements of their service or of this regulation (chap 4) for the UAS to be flown.
 - (b) Written authorization from their service and the owning MACOM commander.
 - (c) At a minimum, a medical flight physical as stated in paragraph 2–1*b*, below.
 - (4) UACs of foreign military services who have—
 - (a) Completed the course of instruction prescribed by an FAA equivalent or their country’s aviation organization or service equivalent and have been awarded an appropriate UACs designation.
 - (b) Complied with qualification, training, evaluation, and currency requirements of their service or of this regulation (chap 4) for the UAS to be flown.
 - (c) Properly completed a foreign service disclaimer.
 - (d) Written authorization, including a disclaimer from their government absolving the U.S. Government from liability (unless a disclaimer is included under the provisions of an approved exchange program). The appropriate host MACOM must provide written authorization that will include, as a minimum, the purpose and duration of the authorization.
- (5) Personnel listed in 2–1*a*(1) through (4), above, who are not qualified or current to operate the UAS to be flown, after receiving training directly supervised by an instructor operator (IO) or standardization instructor operator (SO) who is qualified and current in the UAS to be flown.
- (6) Individuals receiving UAS crewmember instruction authorized by HQDA or USAAWC Directorate of Evaluation and Standardization (DES) designated agencies. These personnel may fly/operate Army UAS after training under an approved program of instruction or ATP.
 - b.* All personnel who hold the military occupational specialty (MOS) of an unmanned aircraft system operator or act as the unmanned aircraft operator (AO), mission payload operator (PO), mission commander (MC), or external operator (EO) for any Army UAS must meet the annual medical requirements documented in AR 40–501 regardless of assignment. All personnel stated above will undergo and successfully satisfy the requirements of at least a Class III Flight Duty Medical Examination as stated in AR 40–501. Failure to meet medical standards is grounds for disqualification for flying duties. This will result in reclassification action in accordance with AR 614–200.
 - c.* Personnel who have completed requirements of Appendix C, Manned Unmanned Teaming (MUM), of this regulation.

2–2. Personnel authorized to operate engines of Army UAS

Those authorized operate engines of Army UAS include—

- a.* Personnel authorized to fly/operate Army UAS listed in paragraphs 2–1*a*(1) through (4), above.
- b.* Other personnel who meet the requirements of paragraph 3–12, below.
- c.* Contractor personnel operating per AR 95–20 who are authorized to start and run up Army UAS under the provisions of the contract and procedures in accordance with the appropriate UAS operator’s manual.

2–3. Crewmembers prohibited from performing UAC duties

The following crewmembers are prohibited from performing UAC duties:

- a.* UACs in nonoperational UAC positions.
- b.* All UACs attending nonflying courses of instruction of more than 90 days duration. For reinstatement of qualification or currency requirements, refer to guidance in chapter 4, section I.
- c.* Those disqualified or temporarily suspended (including medical suspensions) or whose UAC status has been administratively terminated.
- d.* Crew members in an authorized leave status. Crewmembers in transition leave status may perform aircrew duties, without a waiver, if air crew duties are required for employment with the Reserve Components, contractors or other agencies working for the U.S. Government.

2–4. UAS operator and maintenance checklists

- a.* The publications and forms required by DA Pamphlet (Pam) 750–8 for all UAS-associated vehicles and ground support equipment and DA Pam 738–751 for UAS and UAS support equipment will be physically present for review by each UAC directly involved in the actual flight of the UAS prior to operation of any UAS.
- b.* UAC operator checklists will be used for all operations, from preflight through postflight/before leaving the UAS. While airborne, the use of the checklist will be accomplished to the extent that the mission requirements and safety will allow. During emergency situations, required checks may be accomplished from memory.

c. Checklists will be used when making maintenance operational checks, maintenance test flights, and daily inspections.

d. Only DA-approved and current UAC manuals and checklists will be used.

2-5. Logging flying time

An entry will be made on DA Form 2408-12 (Army Aviator's Flight Record) for each flight or simulated flight by all UACs indicating duties performed, mission, and flight condition. When recording flight time, use the following symbols:

a. *Duty.* Only one UAC occupying a UAS flight crew station may use any one of these symbols for any time period. Crewmembers of UAS instructing or evaluating from a non-crew member station will use the symbol for the duty being performed. Use the following symbols to record flight time when performing duties specified by the symbol:

- (1) AO: unmanned aircraft operator.
- (2) EO: external operator.
- (3) PO: mission payload operator.
- (4) IO: instructor operator.
- (5) SO: standardization instructor operator.
- (6) UT: unit trainer.

b. *Mission.* Use the following symbols to record flight time when performing duties specified by the symbol:

- (1) A: acceptance test flight.
- (2) C: combat mission directly against the enemy within a designated combat zone.
- (3) F: maintenance test flight.
- (4) S: service missions, other than A, C, F, D, R, T, or X.
- (5) R: relay mission.
- (6) D: imminent danger.
- (7) T: training flight for individual qualification, refresher, mission, or continuation.
- (8) X: experimental test flight.

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

- (1) D: day (between the hours of official sunrise and sunset).
- (2) N: night (between the hours of official sunset and sunrise).
- (3) S: simulator flight (flights conducted in an approved UAS synthetic flight training simulator/institutional mission simulator/other Army-approved UAS simulator).
- (4) W: weather. Flight of the air vehicle under instrument meteorological conditions that do not permit visual contact with the horizon or earth surface.

2-6. Computation of flying time

With the extended flight time capability of some UAS, flying hour computation for the UAS may differ from that of the UAS crewmembers. Flying time starts when a fixed wing 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 air vehicle has landed and the engines are stopped. However, flying hour computation for the individual crewmembers will be logged only for that portion of the in-flight operations during which the UAC is actually performing crew duty functions on the UAS and/or any of its mission/sensor systems.

2-7. Individual flight records

a. Each crewmember must present his or her individual flight records folder (IFRF) and individual aircrew training folder (IATF) to the new unit to which assigned/attached for ATP purposes within 14 calendar days after reporting for duty.

b. The flight experience and qualification data for each crewmember will be documented in the DA Form 3513 (United States Army Individual Flight Records Folder (IFRF)). DA Form 759 (Individual Flight Record and Flight Certificate—Army); DA Form 759-1 (Individual Flight Record and Flight Certificate—Army, Aircraft Closeout Summary); DA Form 759-2 (Individual Flight Record and Flight Certificate—Army, Flying Hour Work Sheet); and DA Form 759-3 (Individual Flight Record and Flight Certificate—Army, Flight Record and Flight Pay Work Sheet) are used to develop data for the permanent record. These forms are filed in the IFRF and become DA's permanent statistical, historical, and personnel flight records. Records are kept and distributed in accordance with FM 3-04.300 and the appropriate ATM. Commanders may authorize alternate means of maintaining flight records (DA Form 759 series) if use of the Automated Flight Records System is not practicable.

c. Flight records will be prepared and kept on file for—

- (1) Crewmembers in operational positions.
- (2) Crewmembers in nonoperational positions and those restricted or prohibited by statute from flying Army UAS.

These records will be kept in an inactive file either with operational crewmembers files or with military personnel records as specified by MACOM commanders.

(3) Other personnel authorized to take part in flights.

(4) Persons attending qualification training.

d. Commanders will keep and distribute required individual flight records for persons assigned or attached to their organization.

2-8. Local flying rules

a. Installation commanders having Army UAS assigned, attached, or tenant to their commands will prepare and publish local flying rules. Rules will include the use of tactical training and maintenance flight areas, arrival and departure routes, and airspace restrictions as appropriate to control UAS operations in their local flying areas.

b. Installation commanders may set altitudes based on noise abatement, fly-neighborly policies, or other safety considerations. These will be displayed in flight operations and provided to the USAASA for publication in the Department of Defense (DOD) flight information publication (FLIP). UACs will become familiar with and adhere to the appropriate published local area traffic pattern altitudes.

c. When UAS are authorized to operate in controlled airspace, Army air traffic control (ATC) facilities will use prescribed FAA separation procedures, when provided, for the category and type of flight being conducted. Separate FAA procedures have not been established for UAS nor have UAS been categorized for separation purposes.

d. Operations outside of special use airspace will be conducted in accordance with AR 95-2.

e. Requests for deviations from FAA Order 7610.4, chapter 12, to operate UAS outside of restricted areas will be processed through the appropriate DA Regional Representative (DARR) for the specific FAA region.

2-9. Special use airspace (SUA)

a. AR 95-2 sets Army policy and procedures for handling special use airspace (SUA) matters.

b. Operations in SUA will be conducted per instructions from the using agency.

c. In combat zones, airspace use, control, and management will be conducted per Joint Publication (JP) 3-52, in accordance with FM 3-52. Air traffic control services will be provided per FM 1-120.

d. Unless approval is granted in advance through the appropriate DARR, all UAS flights/operations will be conducted in the appropriate SUA, per AR 95-2. Any UAS flight operations not conducted in SUA must comply with AR 95-2 and FAA Order 7610.4.

e. Restricted areas established for the purpose of aircraft/unmanned aircraft operations may also be activated for UAS operations with prior coordination with appropriate agencies.

2-10. Unmanned aircraft system lighting requirements

a. Army UAS will be illuminated to at least the minimum standards required by the country in which the flight operations occur.

b. Unmanned aircraft anti-collision lights will be on when UAS engines are operating, except when there may be other hazards to safety.

c. Unmanned aircraft position lights will be ON between official sunset and sunrise.

d. UAS night lighting requirements will be prescribed in unit standing operating procedures and mission orders.

2-11. Flight violations

Policies and procedures for reporting and investigating alleged flight rules violations are—

a. *Violations.* Any violation of FAA, International Civil Aviation Organization (ICAO), host country, and/or any other pertinent aviation regulation will be reported. Any person witnessing or involved in a flight violation involving civil or military unmanned aircraft, will report the violation as soon as possible.

(1) Violations by military unmanned aircraft will be reported to one of the following:

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

(b) The DARR of the FAA region in which the alleged violation took place (see AR 95-2 for addresses).

(c) The Commander, USAASA, Fort Belvoir, VA 22060-5582.

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

(e) The 8th Army Air Traffic Control, U.S. Forces Korea, ATTN: 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) U.S. Army Criminal Investigation Command, in accordance with AR 195-2, if the violation results in significant property damage/destruction, serious injury, or death and is believed to have been caused by criminal acts or negligence.

(2) Violations by civil aircraft should be reported to one of the following:

(a) The Flight Standards District Office for the FAA region in which the alleged violation took place.

- (b) The FAA Communications Center, Washington, DC 20591.
- (c) The DARR of the FAA region in which the alleged violation took place (see AR 95–2 for addresses).
- (d) The Commander, USAASA, Fort Belvoir, VA 22060–5582.
- (e) The U.S. Army Aeronautical Detachment, Europe, if the incident took place in its area of responsibility (see AR 95–2 for addresses).
- (f) The 8th Army Air Traffic Control, U.S. Forces Korea, ATTN: 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).

(3) Names of crewmembers of military unmanned aircraft 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 crewmembers of Army unmanned aircraft should direct such inquiries to the Commander, USAASA (see para 2–11a(1)(c)).

b. Information reported. To report an alleged violation, use a letter or memorandum format. Neither DA Form 2696 (Operational Hazard Report) nor DA Form 4755 (Employee Report of Alleged Unsafe or Unhealthful Working Conditions) is normally used to report flight violations. When reporting an alleged violation, as much information as possible should be given, to include—

- (1) Type and make of aircraft/unmanned aircraft.
- (2) Tail number.
- (3) Name of mission commander.
- (4) Unit assigned, if military.
- (5) Location where aircraft/UAS is based.
- (6) Description of alleged violation, including—
 - (a) Specific reference to regulations violated.
 - (b) 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 violation.
- (8) Names, addresses, and phone numbers of additional witnesses, if any.
- (9) Other pertinent information.

c. Investigation.

(1) Reports of alleged violations received from the FAA, ICAO, or a host country will be investigated under the provisions of AR 15–6.

(2) Commanders receiving a report of violations from sources other than those listed in paragraph 2–11c (1) above will first determine if it involves personnel or aircraft/UAS under their command and, if necessary, initiate an investigation under AR 15–6.

(3) Based on the outcome of the investigation, commanders will take appropriate administrative, judicial, or nonjudicial action.

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

(5) Under no circumstances will a report of investigation prepared under the provisions of this regulation be released outside of DOD, except in accordance with the Freedom of Information Act (FOIA) or Privacy Act, as implemented by AR 25–55 and AR 340–21. All requests for information under the FOIA or Privacy Act will be referred to the installation or unit FOIA/operations security coordinator for processing in accordance with AR 25–55 or AR 340–21.

2–12. Briefing officers

a. Briefing officers/NCOs will be designated in writing by commanders in the grade of lieutenant colonel or above. The Briefing officers/NCOs will be selected based on their level of experience and ability to effectively mitigate risk to the unmanned aircraft and crew. Experience is critical for briefing officers to identify hazards, assess hazards and develop controls for the crew which are key components of the risk management process. Once the briefing officer/NCO and crew have mitigated risk to the lowest level, the mission will be approved by the appropriate approval authority, in accordance with the unit’s standard operating procedures and local policies. Self-briefing is not authorized unless approved by the first officer in the grade of lieutenant colonel or above in the chain of command. Briefing officers/NCOs will be limited to the number needed to meet operational requirements.

b. The approval process for UAS operations involving the operation of unmanned aircraft engines with intent to fly involves three phases.

- (1) *Phase one.* The commander approves the flight schedule. This process ensures that commanders are involved

and aware of operations within their command. The commander considers the impacts of training, flight hours, crew mix and other unit activities that may affect these operations. This is not a detailed hazard and risk analysis for specific flight operations.

(2) *Phase two.* This phase includes detailed planning and risk mitigation with the briefing officer. This interaction between crew and briefer is paramount to identify, assess, and mitigate risk for a specific flight. Briefing officers/NCOs are responsible for ensuring that key mission elements are evaluated and briefed to the mission commander. If a crew member changes or the mission is delayed by more than 24 hours, the crew will be re-briefed. Mission briefing officers/NCOs will, at a minimum, ensure the following key areas are evaluated in the mission planning sequence:

(a) The flight is in support of an operational unit mission or has been authorized by the unit commander and that the crew is adequately informed about all details of the mission both tactical and administrative.

(b) Assigned UACs have been allocated adequate premission planning time and adequately planned to include performance planning, NOTAMS, and external coordination with any supported unit.

(c) Assigned UACs are qualified and current for the mission according to this regulation and the commander's flight crew qualification and selection program (chapter 4 section II), including, current on the aircrew reading file, and crew experience is appropriate for the mission.

(d) Forecast weather conditions for the mission meet the requirements of this regulation and local directives.

(e) UACs meet unit crew endurance requirements.

(f) Procedures in the commander's risk management program have been completed for the mission and risks are reduced to the lowest level possible.

(g) Required special mission equipment is maintained per published guidance.

(3) *Phase three.* The appropriate approval authority authorizes the flight operation. The approval authority reviews the mission validity, planning, and risk mitigation. The approving officer/NCO initials the risk assessment worksheet authorizing the flight and the briefing officer initials the DA Form 7525 (UAS Mission Schedule/Brief) indicating completion of the briefing. Copies of the DA Form 7525 and the risk assessment worksheet will be retained in unit files for at least 30 days.

2-13. Noise abatement

a. Noise-abatement policies will be disseminated by the Commander, USAASA.

b. UACs will participate in noise-abatement and fly-neighborly programs to minimize annoyance to persons on the ground.

c. Noise sensitive areas will be treated in accordance with the applicable FAR and local SOPs.

Chapter 3 Operations and Safety

Section I Use of Army UAS

3-1. General

Army UAS will be used for official purposes only. UAS use must comply with paragraph 3-2 and must not be prohibited by paragraph 3-4 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.

3-2. Operational use missions

a. Operational use missions include those missions required to accomplish the Army's mission and to maintain the combat readiness of UAS and supported units. These UAS missions are:

b. Actual or simulated tactical and/or combat operations.

c. UAC training.

d. Battle management.

e. Flight tests.

f. Friendly force coverage/force protection.

g. Intelligence collection/gathering.

h. Maintenance flights.

i. Research and development.

j. Special use (see para 3-3).

3-3. Special use missions

Unless specified, approval authorities for missions authorized in this paragraph are MACOM commanders. They may delegate approval authority not lower than installation commanders, U.S. Army Reserve Command (ARCOM) commanding generals or State Adjutants General. In addition to operational missions, Army UAS may be used for the following purposes:

- a.* Aerial demonstrations in support of civil or military official functions.
- b.* Static demonstrations not on a military installation, as performed in support of community relations' activities, will comply with AR 360-1.
- c.* Units assigned an aerial demonstration mission within the continental United States will comply with FAR 91. Aerial demonstrations not on a military installation will not be conducted until coordinated with the appropriate DARR. The DARRs are listed in AR 95-2, table 6-1, and in TB AVN 1-2144.
- d.* Units assigned an aerial demonstration mission outside the continental United States will comply with published MACOM, host nation, and ICAO regulations.
- e.* UAS support of community relations and public information, if approved, in accordance with AR 360-1.

3-4. Prohibited missions

- a.* Army UAS will not be used to conduct flights for personal use.
- b.* Army UAS operations will not be conducted outside of those areas identified in paragraph 2-9.
- c.* Army UAS will not be operated in a manner outside of the definition of public aircraft (49 USC 40102(a)(37)).

Section II Safety

3-5. Safety functions

Commanders will implement the mishap prevention program set up by AR 385-95.

3-6. Mishap reports, investigations, and release of information

- a.* Procedures for investigating and reporting UAS mishaps are prescribed in AR 385-40.
- b.* Policy and procedures for reporting casualties and notifying next of kin of personnel involved in accidents are prescribed in AR 600-8-1.
- c.* Requests for UAS mishap reports will be answered per AR 385-40.
- d.* Requests for information under the FOIA will be processed per AR 25-55.

3-7. Risk management

- a.* Commanders will integrate risk management into UAS mission planning and execution at every level. Chapter 6 of the UAS Aircrew Training Manual will be used as a guide for implementation of this program.
- b.* The risk management process begins at mission conception and continues until mission completion. The process is applied with the goal of eliminating hazards where possible and reducing residual risks to acceptable levels.
- c.* When possible, the hazard assessment step of the process should be documented by the mission developer/planner. TC 1-600, chapter 6, explains formalized assessments. File assessment documentation with the UAS mission briefing in accordance with FM 3-04.300.

3-8. Crew endurance management

- a.* 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 to trigger command decisions whether to accept those risks.
- b.* Commanders will design a crew endurance program tailored to their unit mission and include it in their standing operating procedures (SOP). AR 385-95 establishes guidance for crew endurance programs. Table 3-1 is provided as a guide for scheduling UAC duty periods.

**Table 3-1
Crew endurance guide**

1 Time Period Hours	2 Maximum Duty Period	3 Maximum Flight Time	4 Environmental Relative Factor
24	16	8	Day 1.0
48	27	15	Night 1.4
72	37	22	MOPP IV 3.1
168 (7 days)	288	90	
720 (30 days) (Peace)	72	37	
720 (30 days) (Mobilization)	360	140	

Notes:

¹ Example: The stress and fatigue experienced in 1 hour of night operations is equal to 1.4 hours of day standard operations. If a crew member conducts night operations in chemical mission-oriented protective posture (MOPP) IV, the larger factor (3.1) will be used. The flight time shown in column 3 will be adjusted by the factors in column 4.

c. Commanders should consider the advice of flight surgeons and safety personnel in designing their crew endurance programs.

3-9. DA Form 2696-R (Operational Hazard Report - OHR)

DA Form 2696-R will be used to notify commanders and safety councils of anything affecting the safety of Army unmanned aircraft or related personnel and equipment. The commander will investigate reported hazards and correct unsafe conditions. (see AR 385-95 for instructions on completing DA Form 2696-R).

3-10. Temporary Flying Restrictions Due to Exogenous Factors

For the implementation of temporary flying restrictions due to exogenous factors affecting UAC efficiency, commanders will refer to AR 40-8.

3-11. Maintenance flights

- a. Maintenance flights will be conducted per technical manual or appropriate UAS technical manual guidelines.
- b. Maintenance flights for UAS that have been provided to a contractor, as government-furnished equipment, will be flown/conducted consistent with the provisions of the contract between the government and the contractor.
- c. UAS crewmembers performing maintenance flights must be qualified and current.

3-12. Maintenance and operations check

- a. Only authorized personnel will perform maintenance and operational checks (MOCs) on UAS per DA Pam 750-8, DA Pam 738-751, TM 1-1500-328-23 (or current memorandum of agreement for newly acquired systems), and appropriate UAS technical manuals, as applicable.
- b. System qualified personnel who are authorized to start, run up, and taxi UAS or control stations for the purpose of maintenance operational checks and are not qualified per paragraph 2-1a(1) through (4) will—
 - (1) Undergo appropriate normal and emergency procedures training conducted by an instructor operator in the specific MTDS UAS for which the maintenance operational checks are to be performed.
 - (2) Be evaluated semiannually by an instructor operator on all functions they are required to perform.
 - (3) Have written authorization from the commander. This authorization must specify the operations and checks permitted and be posted in their individual aircrew training folder and the maintenance office.

**Section III
Army UAS Performance Records**

3-13. Requests for performance records

The policy for handling requests from the services for authority to establish performance records by military UAS is prescribed in DODI 5410.19. It authorizes periodic official demonstrations of military UAS for the purposes of establishing new performance such as speed and endurance records.

3–14. Purpose of performance records

The following policies apply to the use of Army UAS for the purpose of performance records.

a. Only service UAS will become eligible to establish new performance records. These UAS will be eligible 6 months after the first UAS 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 OASD (PA), for approval or disapproval, after coordination—

(1) By OASD (PA), within DOD.

(2) With other appropriate departments of the Government (for example, FAA, Department of Transportation).

(3) With the National Aeronautics Association.

c. Requests in paragraph b, above, will be accompanied with a description of the specific UAS, full justification of the purpose of the record attempt, flight plans, and information supporting the attempt.

d. Requests by MACOMs for authority to establish performance records by military UAS will be submitted to HQDA (DAMO–FDV), Washington, DC 20310–0460, at least 60 days prior to any proposed record establishment attempt.

Chapter 4 Training

Section I Training Program and Literature

4–1. General

The UAS ATP will be in accordance with the appropriate UAS Aircrew Training Manual (ATM).

4–2. Waivers to training requirements

a. Unit waivers to primary ATP requirements may be granted only by the following:

(1) Commanders of MACOMs.

(2) Commander, U.S. Army Reserve Command.

(3) Chief, National Guard Bureau (CNGB).

(4) Commanders (O6) and above may grant unit waivers and/or extensions, up to 180 days, to ATP requirements for units under their command during operational deployments.

b. Individual waivers to primary UAS ATP requirements may be granted by the first commander, O5 or above, in the individual's chain of command.

c. Waivers will state the specific requirement that is to be waived.

4–3. Publications

Operator's manuals and checklists are the primary references governing the operation of a specific UAS. ATMs, field manuals, technical manuals, and training circulars will be used as required. When differences exist between other publications and this regulation, this regulation has precedence. DA Form 2028 (Recommended Changes to Publications and Blank Forms) recommending changes to these publications will be submitted through the UAS unit commander to the proponent of the manual.

4–4. Aircrew information reading files

Units will establish and maintain UAC training and information reading files in accordance with AR 385–95 and TC 1–600. Assigned and/or attached UAC personnel will read and remain familiar with these files. Reading files should include but are not limited to the following publications: appropriate operators' manuals, AR 385–95, AR 95–23, AR 95–2, TC 1–600, AR 40–8, local policy letters, and unit and facility SOPs.

4–5. Aircrew training program (ATP)

a. The UAS ATP standardizes UAC training and evaluations to ensure combat readiness.

b. The ATP outlined in the ATM is mandatory for all UAC assigned to operational flying positions in UAS units as specified in ATMs. The ATP includes requirements for hours, tasks, and iterations identified in appropriate ATMs; UAS simulator; readiness level (RL) progression; and the annual proficiency and readiness test (APART). UACs assigned or attached to another service will meet the training program requirements of that service. DA civilian UACs will be trained and evaluated as specified in writing by the commander as necessary to meet the requirements of their military support job description.

c. The unit commander may excuse an UAC scheduled for retirement or separation from active duty from all ATP

requirements. The UAC may be excused beginning no sooner than 6 months before scheduled retirement or separation date. However, UACs who are excused are prohibited from performing further UAC flight duties.

4-6. UAC qualification/refresher training

a. Qualification training.

(1) Formal training at other DA designated training bases may be conducted upon receipt of approval by HQDA G3, ATTN: DAMO-AV. ARNG specific requests will be routed through CNGB, ATTN: NGB-AVN-O to DAMO-AV.

(2) Unless otherwise approved by HQDA (DAMO-AV), local transition training will not be conducted when a formal DA qualification course exists. Exceptions may be granted on an as required basis by HQDA (DAMO-AV), in which case training will be in accordance with an appropriate MACOM approved program of instruction.

(3) To ensure standardization throughout the Army UAS community, flight training will be conducted using the training and evaluation requirements prescribed in the appropriate UAS ATM.

(4) Training an UAC in a UAS category other than that in which he or she is qualified to fly/operate, is permitted only in a formal school course (DA Pam 351-4).

(5) Those UACs who successfully complete qualification training conducted by the Army or other U.S. military service will be awarded an additional MOS or additional skill identifier (see AR 611-1).

(6) A statement of completed UAS and/or UAS qualification, such as day camera, electro-optical/infrared sensor, synthetic aperture radar (SAR), or airborne standoff minefield detection system (ASTAMIDS), will be entered into the UAC's individual aircrew training folder (IATF) and IFRF. The personnel officer will include the statement in the member's military personnel records.

b. Refresher training. When an UAC has not flown within the past 180 days, he or she will receive refresher training prescribed in the appropriate UAS aircrew training manual (ATM). The gaining command is responsible for the refresher training, except for crewmembers assigned to overseas commands for duty in an operational UAS flying position.

4-7. Annual proficiency and readiness test

a. The annual proficiency and readiness test (APART) will be conducted and documented in accordance with the appropriate ATM. The APART is given to each RL 1 and Department of the Army Civilian (DAC) UAC within the APART period. For DAC UACs, individual components of the APART may be accomplished in any calendar quarter designated by the commander.

b. UACs who fail to meet APART standards will be processed in accordance with paragraph 4-10 of this regulation.

4-8. Emergency procedures training

Training in emergency procedures will be conducted per the appropriate ATM. A qualified IO or SO who is current in that MTDS of UAS will be present and in a position to gain immediate access to the required controls/console.

4-9. Hands-on performance test

Each UAC must successfully complete periodic hands-on performance tests conducted by an IO or SO as applicable, per the appropriate ATM. Hands-on tests are:

a. Standardization flight evaluation. The flight consists of flight maneuvers and/or procedures conducted in each UAS group (para 4-15) an UAC is required to operate. The evaluation will—

(1) Be conducted as described in the appropriate ATM.

(2) Be conducted by a designated IO or SO to establish initial qualification in a UAS series and once each year during the APART.

(3) The first commander, O5 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 (except for those EO duties requiring actual takeoff and landing performance evaluation).

b. Proficiency flight evaluation. The evaluation is administered to any UAC in an operational flying position in any UAS series group (para 4-15) or UAS he or she is required to operate. The evaluation will be conducted—

(1) At the discretion of the commander.

(2) At the direction of HQDA.

(3) By an IO or SO per the appropriate ATM.

(4) To determine an individual's proficiency and/or currency.

(5) To determine which phase of training is appropriate for entry into or continuing in the ATP.

(6) No-notice evaluations may be written examinations, oral examinations, UAS flight evaluations, or compatible UAS simulator evaluations.

c. Post-mishap flight evaluation. This flight evaluation is administered to a crewmember to determine his or her ability to perform required duties following a UAS mishap. Crewmembers performing crew duties involved in a Class A or B mishap will be suspended from flight duties until successful completion of an evaluation. The evaluation will be conducted in the same MTDS UAS in which the mishap occurred. Crewmembers performing crew duties involved

in a Class C mishap may be suspended from flight duties and required to successfully complete a flight evaluation at the discretion of the commander. An IO or SO will conduct the evaluation in accordance with the appropriate ATM (see AR 40-501 for medical release requirements prior to flight).

d. 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 upon the recommendation of the flight surgeon or appropriate medical authority. The evaluation of flight duties will be conducted by an IO or SO in accordance with the appropriate ATM.

4-10. Failure to meet ATP requirements

a. When ATP requirements are not met, the commander will investigate. The commander will complete the investigation within 30 days of notification of the failure. After investigating, the UAS unit commander will—

(1) Take one of the following actions:

(a) Authorize the UAC up to a 30-day extension to complete the requirements.

(b) Request a waiver of requirements per paragraph 4-2*b*.

(2) Enter restrictions imposed and extensions granted into the UAC's IATF.

(3) Enter extensions and waivers for the UAC into that operator's IFRF.

(4) Restrict the UAC from performing MC duties in the UAS until ATP requirements are successfully completed.

b. For primary UAS, if additional time is not granted, or if requirements are not met within the authorized period, the commander will suspend the UAC from further UAC duties. Commanders must then either request a waiver per paragraph 4-2*b* or, initiate proceedings for MOS reclassification.

c. An UAC who fails a hands-on performance test will be restricted from performing the duty for which evaluated. The restriction will apply to all UAS with similar operating and handling characteristics as listed in paragraph 4-15. Restrictions will be listed in the operator's IATF and will remain in effect until successful completion of a re-evaluation.

(1) When the failure is in the UAC's primary UAS, the commander must:

(a) Redesignate the individual to the appropriate RL.

(b) Authorize additional training if necessary.

(c) For AO, PO or EO, re-evaluate or impose a temporary suspension from flying duties.

(d) For other qualified UACs, re-evaluate or remove the individual from UAC duties.

(2) When the failure is in an UAC's additional or alternate UAS, the commander must:

(a) Redesignate the individual to the appropriate RL.

(b) Authorize additional training if necessary.

(c) Re-evaluate, retrain or restrict the UAC from performing duties in that UAS.

4-11. UAS simulator training requirements

a. Annual training requirement minimums will be in accordance with the appropriate ATM.

b. UAS simulators are listed in Table 4-1.

Table 4-1
UAS synthetic fight training system

Designation: Hunter Institutional Mission Simulator (IMS)
Compatible unmanned aircraft: RQ-5A/B, MQ-5 Hunter

Designation: Pioneer Operational flight trainer
Compatible unmanned aircraft: RQ-2A Pioneer

Designation: Predator Operational Flight trainer
Compatible unmanned aircraft: RQ-1A

Designation: Shadow Ground Control Station (w/ imbedded simulator)
Compatible unmanned aircraft: RQ-7A/B

Designation: Shadow Institutional Mission Simulator (IMS) / Portable IMS
Compatible unmanned aircraft: RQ-7A/B

4-12. Aeromedical training

UAC will receive aeromedical training per FM 3-04.301 and the appropriate ATM.

4-13. Deck landing operations training

a. If deck landing operations are contemplated/anticipated, UAS flight crewmembers must complete deck landing

qualification and be current in accordance with the most current Army/Air Force Deck Landing Operations Memorandum of Understanding (MOU) prior to conducting naval deck landing operations.

b. Units may obtain a copy of the most current Army/Air Force Deck Landing Operations MOU by writing to HQDA (DAMO-AV), Washington, DC 20310-0460.

4-14. Aircraft survivability equipment/electronic warfare training

UAS commanders in tactical units, with an aircraft survivability equipment/electronic warfare training (ASE/EW) capability will establish programs to train crewmembers on the operation and effectiveness of ASE against electronic threats. The training will be administered and evaluated per the appropriate ATM.

4-15. Currency

a. To be considered current, a AO must:

(1) Perform as a AO every 60 consecutive days in a launch and recovery and 1 hour of flight operations of the UAS, or a compatible simulator.

(2) Perform as a AO every 120 consecutive days in a launch and recovery and 1 hour of flight operations of the UAS.

b. To be considered current an EO must conduct one take-off and landing and 30 minutes of local flight time, encompassing touch and go landings and simulated emergencies, every 30 consecutive days.

c. An UAC whose currency has lapsed must complete a proficiency flight evaluation per the appropriate ATM. Simulators may not be used to re-establish currency.

d. An UAC who is not current as a AO will not perform duties as a MC.

e. Night currency requirements will be per the appropriate ATM.

f. PO currency requirements will be per the appropriate ATM.

g. In areas where extreme environmental conditions may preclude safe operation of UAS for periods exceeding 120 consecutive days, authorization for use of compatible simulators for maintaining AO currency up to 180 days may be granted by:

(1) Commanders of MACOMs.

(2) Commander, U.S. Army Reserve Command.

(3) Chief, National Guard Bureau.

4-16. Similar UAS

Currency in one series UAS will satisfy the requirement for all UAS within the series or group; separate currency is required for all other UAS. Series UAS with similar operating and handling characteristics are listed in the appropriate Aircrew Training Manual.

Section II

UAS Flight Crewmembers

4-17. Unmanned Aircraft Crewmembers

UAS unit commanders must establish, in writing, formal UAS flight crewmember qualification and selection programs. Programs will contain qualification and selection criteria and evaluation requirements. UAS instructor operators and safety personnel will aid commanders in the selection process. UAS crewmembers will be designated in writing by their unit commander, who will specify the UAS duties and crew stations that the UACs are authorized to occupy in accordance with TC 1-600. Flight crews will be evaluated during the APART period in each flight control crew station at which they are authorized to perform UAC duties.

4-18. Unmanned Aircraft Operator

The AO controls and/or monitors the actual flight of the UAS from within a GCS, LRS, portable GCS, or similar device. This is normally done through the use of a monitor and not by direct visual contact with the UAS.

4-19. External Operator

The EO is the UAS crewmember responsible for the actual takeoff and landing of unmanned aircraft not incorporating an automatic takeoff and landing system.

4-20. Mission commander

The MC is responsible for control over all flight operations from pre-mission planning through debriefing. The UAS unit commander will designate mission commanders in writing. The MC will be—

a. Responsible and have final authority for operating, servicing, and securing the UAS he or she commands.

b. Selected for each flight or series of flights.

c. Qualified and current in the UAS mission, type, design, and series.

- d. Listed in the flight plan or unit operations log.
- e. Responsible for crew briefings.
- f. Briefed by a commander-designated briefing officer before each mission and perform a brief-back.

4-21. Mission Payload Operator

The PO is responsible for operation of the payload sensor.

4-22. Instructor Operator

- a. The IO will train and evaluate UACs in accordance with the appropriate ATM.
- b. IOs must be designated in writing by the unit commander and be qualified and current in the UAS to be flown.
- c. To become qualified as an IO an UAC must be qualified as an MC and successfully complete one of the following:
 - (1) A DA IO course in the UAS mission, type, design and series in which IO duties are to be performed.
 - (2) An IO equivalency evaluation administered by an standardization instructor operator (SO) selected by USAAWC DES, in the UAS mission, type and design in which IO duties are to be performed. Commanders will coordinate with DES (ATZQ-ES) Fort Rucker, prior to submitting request for equivalency evaluation to DAMO-AV.
 - (3) In the absence of a DA IO qualification course for the UAS, an additional IO qualification will be conducted locally.
- d. UAS with test flight procedures published in an appropriate ATM will be test flown by qualified maintenance IOs.
- e. Qualified maintenance IOs must be designated, in writing, by unit commanders. They must be qualified and current in the UAS to be flown and meet standardization requirements of the appropriate ATM.
- f. Maintenance qualified IOs must comply with procedures in the appropriate UAS MTF manual.
- g. Contractor maintenance operators will be qualified in accordance with the provisions of AR 95-20.

4-23. Standardization Instructor Operator

- a. The SO will primarily train and evaluate IOs and other SOs. SOs have technical supervision of the unit Standardization Program as specified by the unit commander. The SO is the commander's technical advisor; advises the commander on all levels of UAS standardization within the command; and assists the commander to develop, implement, evaluate, and manage the unit's ATP.
- b. IOs will be designated in writing as SOs by the unit commander and be qualified and current in the UAS to be flown/operated. Commanders may authorize SOs to instruct and evaluate from any designated crew station.

4-24. Unit Trainer

The UAS unit commander may appoint unit trainers (UTs) to conduct specialized training to assist in unit training programs. UTs are prohibited from conducting emergency maneuvers or emergency procedures training. UTs are also prohibited from evaluating ATM base and special tasks. Commanders may authorize UTs to instruct from the AO, PO, or, if appropriate, EO stations. 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 per the appropriate ATM and current in the UAS being flown/operated.

4-25. Requirements for UAS ground crewmembers

- a. UAS Ground crewmembers perform duties on the UAS that are essential to specific phases of the flight mission. They will be—
 - (1) Designated in writing by the UAS unit commander.
 - (2) MOS and ASI qualified to perform specific UAS operations.
 - (3) Trained to perform their duties in accordance with the appropriate ATM, systems technical manuals, and unit training SOP.
- b. UAS ground crewmembers that are authorized to start, run up, taxi, launch, and conduct recovery operations will—
 - (1) Undergo appropriate normal and emergency procedures training conducted by an instructor operator.
 - (2) Be evaluated semi-annually by an instructor operator on all functions they are required to perform.
 - (3) Have written authorization from the commander. This authorization must specify the tasks to be performed and will be posted in their individual aircrew training folder.

Section III Standardization

4-26. UAS Standardization Program

a. The UAS Standardization Program is designed to ensure a high degree of efficiency in accomplishing the combat mission of the UAS force. This will be achieved by command supervision, employment of standard UAC tasks, use of standard publications, and maintenance of a disciplined UAC force by administration of frequent tests and flight evaluations.

b. Commanders will—

- (1) Implement standardization policies and procedures.
- (2) Ensure that Army UAS are operated according to standard procedures in ATMs and operator's manuals.
- (3) Designate instructors, examiners, evaluators, and unit trainers in support of installation standardization committees.
- (4) Ensure that required training, tests, and flight evaluations are completed.
- (5) Review and approve policies of standardization programs.

4-27. U.S. Army Aviation Commander's Conference

a. Mission. Army aviation commanders meet annually to recommend general policy for implementing the U.S. Army Aviation Standardization Program. They review issues affecting the capability of commanders to perform missions with aviation assets.

b. Composition. The conference chairman is the Commander, USAAWC. Membership consists of aviation unit commanders (06 and above), MACOM aviation officers, and other persons designated by the chairman.

c. Direction and control.

(1) Commanders will meet in formal session at least annually at the call of the chairman. Approved conference minutes will be forwarded to members for further distribution to subordinate aviation units.

(2) The chairman will carry out functions relating to the standardization program on a continuing basis and will monitor tasking requirements resulting from the commander's conference. Activities are subject to review by the full membership at the next regular meeting.

(3) Funds for travel, per diem, and overtime, if needed, will be provided by the member's parent organization.

d. Correspondence. Issues to be presented at the annual conference will be addressed to: Commander, U.S. Army Aviation Warfighting Center, ATTN: ATZQ-TD, Fort Rucker, AL 36362-5214. Other standardization and training issues requiring resolution throughout the year should be sent to Commander, U.S. Army Aviation Warfighting Center, ATTN: ATZQ-ES, Fort Rucker, AL 36362-5214 as problems arise.

4-28. U.S. Army Aviation Warfighting Center

The USAAWC is the proponent agency for the U.S. Army Aviation Standardization Program. In addition to the responsibilities listed in paragraph 1-4, the USAAWC will—

a. Act as reviewing agency for Army UAS training, standardization, and technical publications to ensure that they are standardized, accurate, and do not duplicate each other per AR 34-4. This is accomplished by the Director of Evaluation and Standardization (DES),(ATZQ-ESL), Fort Rucker, through continuous review and coordination with users and proponents.

b. In coordination with MACOMs, conduct active assistance and evaluation programs for UAS training. Frequency for the conduct of these programs is 18-24 months. This includes evaluations conducted by DES, (ATZQ-ES) Fort Rucker, to assess standardization and proficiency of UACs throughout the Army as directed by HQDA.

c. Advise HQDA and MACOMs of the status of UAS standardization activities. DES will also provide information about implementing UAS standardization policies and procedures Army-wide.

d. Develop and recommend changes to general policy guidance for the U.S. Army Unmanned Aircraft Systems Standardization Program.

Chapter 5 Flight Procedures and Rules

5-1. General

Army personnel engaged in the operation of Army UAS will comply with applicable—

- a.* FARS.
- b.* ICAO regulations.
- c.* U.S. Federal, state, and local laws and regulations; and host country regulations, laws, and rules.

- d. Military regulations and, where applicable, the law of armed conflict.
- e. DOD FLIPs.
- f. Local flight regulations and procedures
- g. UAS operator's manuals, checklists, and SOPs.

5-2. Preflight

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

a. *Planning.* UACs will evaluate UAS performance, mission/sensor equipment capabilities and limitations, departure airfield/airport, en route, lost link route, and approach data and weather conditions, Notices to Airmen, appropriate FLIPs or DOD publications, and requirements for and availability of special use airspace and/or positive control areas approved for UAS use.

b. *Fuel requirements.* At takeoff, UAS must have enough fuel to execute the mission and reach the destination airfield/airport or alternate, if applicable, and have a planned fuel reserve per the appropriate technical manual.

c. *Flight weather planning.* MCs will obtain departure airfield/airport, en route, destination airfield/airport, and alternate airfield/airport (if required) weather information before takeoff. The following weather requirements apply:

- (1) *Flight into icing conditions.* UAS will not be flown into known or forecast severe or moderate icing conditions.
- (2) *Flight into turbulence.* UAS will not be intentionally flown into known or forecast extreme turbulence or into known severe turbulence. UAS will not be intentionally flown into forecast severe turbulence unless MACOM commanders have established clearance procedures and—

- (a) Weather information is based on area forecasts.
- (b) Flights will be made in areas where encountering severe turbulence is unlikely.
- (c) Flights are for essential training or essential missions only.
- (d) Flight approval authorities are specified.
- (e) Flights are terminated or depart turbulence if severe turbulence is encountered.

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

(4) *Destination weather.* Destination weather must be forecast to be equal to or greater than visual flight rules (VFR) minimums at estimated time of arrival (ETA) through 1 hour after ETA. When there are intermittent weather conditions, predominant weather will apply.

(5) *Area forecast.* If there is no weather reporting service, the UAC may use the area forecast.

(6) *Weather briefing.* Local commanders will establish policies specifying when DD Form 175-1 (Flight Weather Briefing) is required to be filed (with DD Form 175 (Military Flight Plan) if and when required for UAS). Weather information for DD Form 175-1 will be obtained from a military weather facility. If a military weather facility is not available, the MC will obtain a weather forecast in accordance with DOD FLIPs. Automated or computer-based systems may be used to obtain weather information if the system is approved by USAASA and the commander establishes a program to ensure UAS crewmembers are thoroughly familiar with the system in use.

d. *Flight plan.* UAS will not be flown unless a flight plan (military or civil) has been filed or an operation's log completed. Local commanders will establish policies specifying the flight plan or operations log to be used.

5-3. Departure procedures

a. All UACs will comply with published VFR takeoff minimums, unless the UACs and UAS to be flown are qualified and have met all requirements for IFR flight.

b. Flights within and departures from other than special use airspace are authorized provided the weather requirements of FAR 91 or applicable host country flight or ICAO regulations are met and an appropriate civil aviation authority is obtained.

c. UAS flights outside of special use airspace require prior FAA or host nation approval.

5-4. Rocket-assisted take-off procedures

a. RATO launches, for those systems incorporating such capabilities, will be conducted in accordance with the appropriate UAS technical manuals and local SOPs.

b. Appropriate firefighting equipment will be on hand and in proper operational condition.

5-5. En route procedures

a. *Communications.* UAS crewmembers will establish and maintain two-way communications with appropriate civil/military air traffic control agencies in accordance with FAR 91, host nation, and/or ICAO regulations.

b. *Minimum safe en route altitude.* Outside of special use airspace, minimum safe en route altitude will be in accordance with FAR 91, host nation, and/or ICAO regulations.

5-6. Arrival procedures

a. *Traffic patterns.* Depending upon the traffic pattern airspeed of the UAS involved, UAS will be flown at the

published traffic pattern altitude as established by the airfield of intended landing. Exceptions will be as prescribed in FLIPs or as directed by ATC.

b. Landing. A UAS will not be flown below the designated minimum safe altitude established for that system by the local SOPs for the airfield of intended landing, or as directed by ATC, unless the UAS is in a position from which a safe approach to the runway or landing area can be made.

c. Closing flight plans. If a flight plan is required, the MC will ensure the flight plan is closed when the flight terminates.

5–7. Use of airports, heliports, and other landing areas

a. UACs may operate Army UAS at airports and heliports classified as military, Federal Government, or public, but only if the facility is suitable for operations and necessary special use airspace (see para 2–9) provisions have been implemented (AR 95–2).

b. Commanders may authorize the use of other temporary landing areas off military reservations and Government leased training areas. They must first 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 DARR or host nation aviation agency (AR 95–2).

c. The installation or field training exercise commander will set policies on the use of UAS landing sites on military reservations and field training areas.

d. In the event of emergency conditions necessitating landing at other than approved landing facilities, UACs should be aware that they may be charged for use of private facilities on public airports.

Chapter 6

Safety Messages Safety of Flight (SOF) Message and Aviation Safety Action Message (ASAM)

6–1. General

a. SOF messages pertain to any defect or hazardous condition, actual or potential, where a high risk safety condition or select medium risk safety conditions exist as determined in accordance with AR 385–16.

b. ASAMs pertain to any defect or hazardous condition, actual or potential, where a low risk safety condition or select medium risk safety conditions exist as determined in accordance with AR 385–16. ASAMs convey maintenance, technical or general information, which will not require risk-mitigating actions, performed before the next flight and/or ground operations.

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

6–2. Exception to provisions of safety message

a. MACOM commanders may authorize temporary exception from safety 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 air vehicle operation.

b. Requests for waivers are submitted through the requesting units MACOM, to the Commander, AMCOM (AM-SAM-SF-A, Safety Office). To expedite processing of waiver requests, contact the Safety POC in the message for assistance.

c. The Commander, AMCOM, will staff request for waivers for messages that affect fleet wide groundings and those referred for ASAT coordination through Army G–4 before approval.

d. The Commander, AMCOM, is the approval authority for waivers to provisions of safety messages.

Chapter 7

Weight and Balance

7–1. General

UAS will be within weight and balance limitations, as specified in the appropriate operator's manual. This chapter provides a weight and balance control system for operation of Army UAS.

7–2. Aircraft weight and balance classifications

Army aircraft weight and balance information necessary for the control of weight and balance is contained in TM 55–1500–342–23 Army Aviation Maintenance Engineering Manual. Unmanned aircraft weight and balance classifications are stated in the appropriate UAS operator's manual. Loading control will be accomplished by adhering to the

system configurations designed for the particular UAS/sensor equipment and documented in the system's operator's manual.

7-3. Unmanned aircraft system weighing

- a.* Each unmanned aircraft will be weighed when—
 - (1) Overhaul or major airframe repairs are accomplished.
 - (2) Any modifications or component replacements (including painting) have been made for which the weight and center of gravity cannot be accurately computed.
 - (3) Weight and center-of-gravity data records are suspected to be in error.
 - (4) The period since the previous weighing reaches 36 months for a Class 1 unmanned aircraft and 24 months for a Class 2 unmanned aircraft. The last day of the month is the final day for reweighing.
- b.* The weight records supplied with a new unmanned aircraft may be used in lieu of an initial weighing.
- c.* If these weighing requirements are not met, the unmanned aircraft's status will change to RED "X" until they are met.
- d.* Any maintenance facility providing weighing service will ensure that all unmanned aircraft weighing equipment under its jurisdiction is tested and certified for accuracy according to specified technical manuals and at the intervals required.

Appendix A References

Section I Required Publications

AR 15-6

Procedures for Investigating Officers and Boards of Officers (Cited in para 2-11.)

AR 25-55

The Department of the Army Freedom of Information Act Program (Cited in paras 2-11c, 3-6d.)

AR 34-4

Army Standardization Policy (Cited in para 4-28a.)

AR 40-8

Temporary Flying Restrictions Due to Exogenous Factors (Cited in paras 3-10, 4-4.)

AR 40-501

Standards of Medical Fitness (Cited in paras 1-4g, 2-1b, 4-9c.)

AR 95-2

Air Traffic Control, Airspace, Airfields, Flight Activities, and Navigation Aids (Cited in paras 2-8a, 2-9, 2-11, 3-3c, 4-4, 5-7.)

AR 95-20/DCMA INST 8210.1/AFJI 10-220/NAVAIRINST 3710.1E

Contractor's Flight and Ground Operations (Cited in paras 2-1a, 2-2c, 4-22c.)

AR 195-2

Armed Services Procurement Manual (Cited in para 2-11a.)

AR 340-21

The Army Privacy Program (Cited in para 2-11c.)

AR 360-1

The Army Public Affairs Program (Cited in paras 3-3c, 3-3b.)

AR 385-16

System Safety Engineering and Management (Cited in para 6-1.)

AR 385-40

Accident Reporting and Records (Cited in para 3-6.)

AR 385-95

Army Aviation Accident Prevention (Cited in paras 3-5, 3-8b, 3-9, 4-4.)

AR 611-1

Military Occupational Classification Structure Development and Implementation (Cited in para 4-6a.)

DA Pam 750-8

The Army Maintenance Management System (TAMMS) User's Manual (Cited in paras 2-4a, 3-12a.)

DA Pam 738-751

Functional Users Manual for the Army Maintenance Management System-Aviation (TAMMS-A) (Cited in paras 2-4a, 3-12a.)

FAA Order 7610.4

Special Military Operations (Cited in paras 2-8e, 2-9d.)

FM 1-120

Army Air Traffic Services Contingency and Combat Zone Operations (Cited in para 2-9c.)

FM 3-04.300

Flight Operations Procedures (Cited in paras 2-7b, 3-7c.)

FM 3-52

Army Airspace Command and Control in a Combat Zone (Cited in para 2-9c.)

JP 3-52

Joint Doctrine for Airspace Control in the Combat Zone (Cited in para 2-9c.)

TB AVN 1-2144

Army Aviation Flight Information Bulletin (Cited in para 3-3c.)

TM 55-1500-342-23

Army Aviation Engineering Manual for Weight and Balance (Cited in para 7-2.)

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 10-25

United States Army Logistics Integration Agency (USALIA)

AR 25-11

Record Communications and the Privacy Communications System

AR 70-62

Airworthiness Qualification of U.S. Army Aircraft Systems

AR 95-1

Flight Regulations

AR 95-27

Operational Procedures for Aircraft Carrying Hazardous Materials

AR 140-1

Mission, Organization, and Training

AR 335-15

Management Information Control System

AR 570-4

Manpower Management

AR 700-138

Army Logistics Readiness and Sustainability

AR 750-1

Army Materiel Maintenance Policy

AR 750-6

Ground Safety Notification System

CTA 50-909

Field and Garrison Furnishings and Equipment (Available at <https://webtaads.belvoir.army.mil/usafmsa>.)

CTA 50-970

Expendable/Durable Items (Available at <https://webtaads.belvoir.army.mil/usafmsa>.)

DA Pam 611-21

Military Occupation Classification and Structure

FM 3-04.301

Aeromedical Training for Flight Personnel (Available at <http://www.train.army.mil/>.)

FM 3-04.508

Maintaining Aviation Life Support Equipment (ALSE) (Available at <http://www.apd.army.mil/>.)

Supply Bulletin (SB) 8-75

Series Army Medical Department Supply Information (Available at <http://www.usamma.army.mil/publish/publications.html>.)

Technical Bulletin (TB) 43-0002-3

Maintenance Expenditure Limits for Army Aircraft (Available at <https://www.logsa.army.mil/etms/online.htm>.)

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 1 (Available at <https://www.logsa.army.mil/etms/online.htm>.)

TM 1-1500-328-23

Aeronautical Equipment Maintenance Management Policies and Procedures (Available at <https://www.logsa.army.mil/etms/online.htm>.)

TM 10-1670-201-23

Organizational and Direct Support Maintenance Manual for General Maintenance of Parachutes and Other Airdrop Equipment (Available at <https://www.logsa.army.mil/etms/online.htm>.)

TM 38-250

Preparing Hazardous Materials for Military Air Shipment (Available at <https://www.logsa.army.mil/etms/online.htm>.)

Section III**Prescribed Forms**

Unless otherwise indicated, DA forms are available on the APD web site (www.apd.army.mil) and DD forms are available on the OSD web site (www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm).

DA Form 7525

UAS Mission Schedule/Brief. (Prescribed in para 2-12 and app B.)

Section IV**Referenced Forms****DA Form 11-2-R**

Management Control Evaluation Certification Statement (Available through normal forms supply channels.)

DA Form 759

Individual Flight Record and Flight Certificate—Army

DA Form 759-1

Individual Flight Record and Flight Certificate—Army, Aircraft Closeout Summary

DA Form 759-2

Individual Flight Record and Flight Certificate – Army, Flying Hour Work Sheet

DA Form 759-3

Individual Flight Record and Flight Certificate – Army, Flight Record and Flight Pay Work Sheet

DA Form 2028

Recommended Changes to Publications and Blank Forms

DA Form 2408-12

Army Aviator's Flight Record

DA Form 2696-R

Operational Hazard Report

DA Form 3513

United States Army Individual Flight Records Folder (IFRF) (Available through normal forms supply channels.)

DA Form 4755

Employee Report of Alleged Unsafe or Unhealthy Working Conditions

DD Form 175

Flight Plan, Military

DD Form 175-1

Flight Weather Briefing

Appendix B**Instructions for completing DA Form 7525 (UAS Mission Schedule/Brief)**

The briefer is responsible for ensuring that all key mission elements noted on DA Form 7525 have been briefed per paragraph 2-12b and documenting completion of the briefing on DA Form 7525. Mission briefings may be in the form of a 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 brief (see fig B-1, DA Form 7525 completed by the LRS MC, and fig B-2, DA Form 7525 completed by the tactical operations center MC). *Note.* Mandatory items for all flights are marked with an *.

B-1. Page 1

- a. * *DATE.* Enter the mission date in YYYYMMDD format.
- b. * *UAS TAIL#.* Enter UAS tail numbers for the primary and backup UAS.
- c. * *LRS MC NAME.* Enter the name of the MC for the launch and recovery site GCS.
- d. * *LRS AO NAME.* Enter the name of the AO at the launch and recovery site GCS.
- e. * *EO PRI/SEC.* Enter the name of the primary and secondary External Operator.
- f. * *NRCM.* Enter name(s) of ground crew members performing LRS duties.
- g. * *MSN GCS MC.* Enter the name of the MC for the mission site GCS.
- h. * *MSN GCS AO.* Enter the name of the AO for the mission site GCS.
- i. * *MSN GCS PO.* Enter the name of the PO for the mission site GCS.
- j. * *FLT COND.* Enter code(s) for flight condition.
- k. * *MSN.* Enter code(s) for mission profile.
- l. * *ETD/ETE.* Enter estimated time of departure and estimated time en route.
- m. * *RAV.* Enter the risk assessment value, and calculated risk level for mission based on unit risk management program.
- n. * *MC INITIALS (LRS and MSN MC).* The mission commanders at both the LRS and/or TOC locations will complete and initial receipt and understanding of the mission schedule/brief information.
- o. * *BRIEFER INITIALS.* Initials of the commander or a qualified briefing officer/NCO, with designated risk management authority, constitute authorization for the flight. (Initials indicate that the chain of command has briefed all key mission elements, that risk management procedures have been completed and that identified risk has been reduced to the lowest acceptable level).
- p. *MS. MISSION STATUS.* Indicate whether the mission was completed as briefed, not completed as briefed, changed, or canceled. Enter required remarks on back of form.

B-2. Page 2

- a. * *DATE.* Enter the mission date in YYYYMMDD format.
- b. * *UAS TAIL#.* Enter UAS tail numbers for the mission UAS.

c. * *REMARKS. Enter pertinent information regarding mission completion.*

B-3. Notes

a. DA Form 7525 will be used to document the completion of required briefings. As a minimum it will be maintained on file for the time period specified in this regulation.

b. DA Form 7525 is provided for the commander's use. Unit developed forms may be used as long as all mandatory items are covered.

c. Information contained on DA Form 7525 does not relieve UAS crewmembers from the requirement to know and adhere to applicable regulations, SOPs, and policies.

d. Supporting and supported unit commanders will coordinate and designate command relationships to execute mission briefings when aircrews are separated from their parent unit.

Appendix C Manned Unmanned Teaming

C-1. Purpose

The provisions contained in this Appendix cover Manned Unmanned (MUM) teaming. It is intended to govern the operation of unmanned aircraft systems by Army Aviation crewmembers that have a 2000 series task requiring MUM operations.

C-2. Personnel authorized to perform MUM operations

a. The following criteria qualify personnel to fly/operate UAS from another airborne platform.

(1) MUM team members that have completed an Army approved MUM POI (program of instruction) on the UAS-MTDS/ Army aircraft combination being utilized.

(2) Are assigned to an organization that is assigned a MUM teaming mission which is reflected as 2000 series tasks in the crewmembers IATF.

b. UAS crewmembers in other U.S. services that have—

(1) Complied with qualification, training, evaluation, and currency requirements of their service or of this regulation for the UAS to be flown.

(2) Written authorization from their service and the owning MACOM commander.

(3) At a minimum, a current flight physical as stated in paragraph 2-1 of this regulation.

c. 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 MACOM or Commander, USAAWC for units undergoing training at Fort Huachuca or Ft. Rucker.

(3) Necessary compliance with qualification, training, and evaluation requirements of this regulation, and the contract and/or statement of work for the UAS to be flown.

C-3. Currency

MUM team members that have performed 1 hour of MUM teaming, from the aircraft/UAS MTDS combination or approved simulator, at the respective levels of control, in the last 180 days.

C-4. MUM UAS Control levels

a. *Level I.* Reception of the secondary product. MUM team members must be familiar with the operation of the remote video terminal or comparable device. No currency requirements.

b. *Level II.* Direct data receipt. MUM team members must have received training approved by the Battalion Commander on the data receipt terminal being utilized. No currency requirements.

c. *Level III.* Payload control, direct data receipt. MUM team members must meet the requirements of Level II control and have completed an Army approved POI on the sensor package being manipulated from their aerial platform and meet the currency requirements listed in paragraph C-3, above.

d. *Level IV.* Flight control, payload control, direct data receipt, weapons system operations. MUM Team members exercising Level IV control must meet the requirements of Level III control and have completed an Army approved POI on the UAS being utilized. This POI will include training on any payload installed on the UAS and any weapons being fired to include laser designation systems.

e. *Level V.* Level V UAS control is only authorized by MUM team members when performing an emergency procedure.

C-5. Flight and Training Records.

- a. IATF will contain a task list with the 2000 series tasks the MUM team member is authorized to perform.
- b. The flying experience and qualification data for each MUM team member will be documented in the DA IFRF and IATF.

Appendix D Management Control Evaluation Checklist

D-1. Function

The function covered by this checklist is the administration of the management control process.

D-2. Purpose

The purpose of this checklist is to assist assessable unit managers and Management Control Administrators (MCAs) in evaluating the key management controls outlined below. It is not intended to cover all controls.

D-3. Instructions

Answers must be based on the actual testing of key management controls (document analysis, direct observation, sampling, simulation, and so on). Answers that indicate deficiencies must be explained and corrective action indicated in supporting documentation. These key management 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-R (Management Control Evaluation Certification Statement).

D-4. Test Questions

- a. *HQDA only.*
 - (1) Are standardized aviation safety, standardization, and utilization regulations and procedures published by a DA proponent?
 - (2) Is safety-of-flight information prepared and sent to the field in a timely manner?
- b. *User.*
 - (1) Are airports, heliports, and landing areas approved for flight operations?
 - (2) Are local flying rules in agreement with Federal, DOD, and DA policies?
 - (3) Are applicable safety regulations and special-use airspace operation guidance followed?
 - (4) Are violations of safety and special-use airspace guidance reported and investigated by appropriate personnel per Federal, DOD, and DA guidance?
 - (5) Are Army UAS unmanned aircrafts used for official purposes prescribed in AR 95-23?
 - (6) Are aircrew training programs carried out per applicable Army guidance to include flying hours and synthetic flight training?
 - (7) Are personnel who do not meet proficiency requirements restricted from flight duty?
 - (8) Is UAS life support equipment available and maintained in accordance with applicable guidance?
 - (9) Has the airspace been approved for UAS operations?
- c. *Reserve component.* Are additional flight training periods managed in accordance with applicable policies and regulations?

D-5. Supersession

This checklist replaces the checklist for administration of the management control process published in AR 95-23, date 14 May 2004.

D-6. Comments

Help to make this a better tool for evaluation management controls. Submit comments to HQDA, ATTN: DAMO-RQ, 400 Army Pentagon, Washington D.C. 20310-0400.

Glossary

Section I Abbreviations

AIRF

Aircrew Information Reading File

AMC

Army Materiel Command

AMCOM

Aviation and Missile Command

AO

unmanned aircraft operator

APART

annual proficiency and readiness test

AR

Army Regulation

ARNG

Army National Guard

ASAM

aviation safety action message

ASAT

Army Safety Action Team

ASE/EW

Aircraft survivability equipment electronic warfare

ASTAMIDS

airborne standoff minefield detection system

ATC

air traffic control

ATM

aircrew training manual

ATP

aircrew training program

CFR

Code of Federal Regulations

CG

commanding general

CNGB

Chief, National Guard Bureau

CSA

Chief of Staff, Army

CTA

common tables of allowances

DA

Department of the Army

DAC

Department of the Army Civilian

DA Pam

Department of the Army Pamphlet

DARR

Department of the Army Regional Representative

DCD

Directorate for Combat Development

DCS, G-3/5/7

Deputy Chief of Staff, G-3

DCS, G-4

Deputy Chief of Staff, G-4

DES

Director of Evaluation and Standardization

DOD

Department of Defense

EO

external operator

ETA

estimated time of arrival

ETD

estimated time of departure

ETE

estimated time en route

FAA

Federal Aviation Administration

FAR

Federal Aviation Regulation

FLIP

flight information publication

FM

field manual

FOIA

Freedom of Information Act

FR

Fort Rucker

GCS

ground control station

HQDA

Headquarters, Department of the Army

IATF

individual aircrew training folder

ICAO

International Civil Aviation Organization

IFRF

Individual Flight records Folder

IMC

Instrument meteorological conditions

IO

instructor operator

IRR

individual ready reserve

ISR

intelligence, surveillance, and reconnaissance

JP

joint publication

LRS

launch and recovery site

MACOM

major Army command

MC

mission commander

MOC

maintenance and operations check

MOPP

mission-oriented protective posture

MOS

military occupational specialty

MOU

memorandum of understanding

MPA

military pay and allowance

MPU

mobile power unit

MTDS

mission, type, design, and series

MTF

maintenance test flight

MTOE

modified table of organization and equipment

MUM

manned- unmanned

NGB

National Guard Bureau

NOTAM

Notice to Airman

OASD(PA)

Office of the Assistant Secretary of Defense (Public Affairs)

PEO

program executive office(r)

PO

mission payload operator

POI

program of instruction

PM

program/project manager

RL

readiness level

SAR

synthetic aperture radar

SOF

safety of flight

SOP

standing operating procedure

SO

standardization instructor operator

SUA

special use airspace

TDA

table of distribution and allowances

TM

technical manual

TOC

tactical operations center

TRADOC

U.S. Army Training and Doctrine Command

TUAV

tactical unmanned aerial vehicle system

UAC

unmanned aircraft crewmember

UAS

unmanned aircraft system

USAAWC

U.S. Army Aviation Warfighting Center

USAASA

U.S. Army Aeronautical Services Agency

USAF

United States Air Force

USASC

U.S. Army Safety Center

UT

unit trainer

VFR

visual flight rules

Section II**Terms****Aeronautical information manual**

A manual that provides the aviation community with basic flight information and ATC procedures for use in the National Airspace System of the United States. It also contains items of interest to operators and aircrew members concerning health and medical facts, factors affecting flight safety, a operator/controller glossary of terms used in the Air Traffic Control System, and information on safety, accident, and hazard reporting.

Air traffic

Aircraft/air vehicles operating in the air or on an airport surface, exclusive of loading ramps and parking areas.

Aircrew Training Manual (ATM)

A publication that contains Army training requirements for Army flight crewmembers and programs for qualification, refresher, mission, and continuation training in support of the aircrew training program (ATP), including unmanned aerial vehicle system crewmembers training programs.

Aircrew Training Program (ATP)

Army aviation aircrew standardized training and evaluation program.

Army aircraft/unmanned aircraft

Aircraft/unmanned aircraft under the jurisdiction of the Department of the Army.

Army aviation standardization

The use of uniform tested procedures and techniques to attain a high level of readiness and professionalism in the operation and employment of Army aircraft/unmanned aircraft. This is achieved through standardized publications and training literature, a disciplined instructor operator force, tests, flight checks, and command supervision. Standardization includes aviator cockpit, performance, aircrew teamwork, tactics, maintenance, and safety. For UAS, standardization includes external operator/external air vehicle crewmember performance, air vehicle crewmember/air vehicle operator, and mission payload operator performance, aircrew teamwork, tactics, maintenance, and safety.

Army Safety Action Team (ASAT)

Standing committee that meets on call to address HQDA-level Safety of Flight and Safety of Use issues, provide coordinated recommendations to the Office of the Chief of Staff, Army, and expedite corrective actions to maximize readiness, safety and training. See AR 385-16 for specific objectives, membership, and procedures.

Aviation Safety Action Messages

Electrically transmitted messages that convey maintenance, technical or general interest information where a low to medium risk safety condition has been determined per AR 385–16. ASAMs are of a lower priority than SOF messages.

Catastrophic failure

Any failure that leads to the loss of the UAS(s).

Command/staff aviation officer

A special staff aviator designated by the commander to provide advice or manage aviation assets, aviation standardization, and aviation safety.

Controlled airspace

A generic term that covers the different classification of airspace (Class A, Class B, Class C, Class D, and Class E airspace) and defined dimensions within which air traffic control service is provided to instrumented flight rules flights and to VFR flights in accordance with the airspace classification (see the Aeronautical Information Manual).

Crewmember

Includes all flight and ground crewmembers, and others who perform aircrew duties as listed in this regulation.

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 place of origin.

External Operator (EO)

The UAS crewmember who, in the absence of full automatic takeoff and landing systems, visually controls the UAS flight path, generally during takeoff and/or landing.

Flight crew station

A station in an air vehicle that a flight crewmember occupies to perform his/her flight duty, for example, operator stations specified in operator's manuals. For UAS, a station associated with the in-flight operation of a UAS at which flight controls may be used to control air vehicle flight; for example, air vehicle operator, external operator, or mission payload operator stations specified in the operator's manual.

Flight crewmember

Any instructor pilot, flight examiner, pilot, copilot, flight engineer/mechanic, flight navigator, weapon systems operator, bombardier navigator, radar intercept operator, sensory system operator, boom operator, crew chief, loadmaster, remotely operated aircraft operator, unmanned aircraft system operator, defensive/offensive system operator, and other flight manual handbook identified crewmember when assigned to their respective crew positions to conduct a military flight or any flight under the contract. For UAS, a AO, EO, IO, MC, PO or SO assigned to duty during the in-flight operation of an aircraft.

Flight surgeon

A medical officer that is a graduate of an approved military course of aviation medicine. References to flight surgeons include aeromedical physician's assistant.

Ground crewmember

The status assigned to soldiers who have duties directly related to the preparation, launch, recovery and/or maintenance of UAS and/or their mission payload systems, but not the in-flight mission.

Installation

For Army Aviation Standardization Program purposes, continental United States active component posts, camps, or stations; ARNG States; Army Reserve Commands; overseas corps, divisions, independent regiments, groups, and brigades. For other than standardization purposes includes Reserve Component facilities.

Instructor operator (IO)

A UAS crewmember who conducts training and evaluation of UACs and UAS unit trainers in designated UAS and promotes safety among aircrew members. Training and evaluation include air vehicle operation, qualification, unit employment, visual flight, and crew performance.

Maintenance

The inspection, overhaul, repair, preservation, and/or the replacement of parts, but excludes preventive maintenance.

Maintenance and operations check (MOC)

Systems check made on the ground through engine run-up and taxiing. Checks made using auxiliary power or testing equipment to simulate, insofar as possible, actual conditions under which the system is to operate. These checks are made to ensure that air vehicle systems or components disturbed during an inspection or maintenance have been repaired or adjusted satisfactorily.

Mission commander (MC)

The designated individual tasked with the overall responsibility for the operation and safety of the UAS mission.

National Airspace System (NAS)

All of the airspace above the surface of the earth over the United States and its possessions.

Night

The time between the end of evening nautical twilight and the beginning of morning nautical twilight converted to local time.

Operational flying

Flying performed by qualified 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 qualified members of the RC not on extended active duty is operational flying.

Remotely operated aircraft

FAA terminology for unmanned aircraft vehicle systems

Restricted area

Airspace designated in FAR 1 within which the flight of aircraft/air vehicles, while not prohibited, is subject to restriction(s).

Safety of flight (SOF) messages

Electrically transmitted messages pertaining to any defect or hazardous condition, actual or potential, that can cause personal injury, death, or damage to aircraft/air vehicles, components or repair parts where a medium to high risk safety condition has been determined per AR 385-16.

Special use airspace (SUA)

Airspace designated by the FAA with specific vertical and lateral limits, established for the purpose of containing hazardous activities or activity that could be hazardous to nonparticipating aircraft/air vehicles. Limitation on nonparticipating aircraft/air vehicles may range from absolute exclusion to complete freedom of use within certain areas, depending upon activity being conducted.

Standardization instructor operator

A qualified instructor operator designated by the commander, in writing, to supervise unit standardization programs. Primarily trains and evaluates other SOs and IOs.

Traffic pattern

The traffic flow that is prescribed for aircraft/air vehicles landing at, taxiing on, or taking off from an airport or airfield.

Training mission

Missions flown for flight qualification, refresher, or proficiency/currency training; ATP requirements, and authorized training exercises.

Unit trainer (UT)

A UAS crewmember designated to instruct in areas of special training to assist in unit training programs and achieve established training standards.

Unmanned aircraft crewmember (UAC)

Flight and/or ground individuals who perform duties controlling the flight of an unmanned aerial vehicle or the

operation of its mission equipment as well as preparation, launch, recovery and/or maintenance that is essential to the operation of the UAS.

Unmanned aircraft operator (AO)

The AO controls and/or monitors the actual flight of the UAS from within a GCS, LRS, portable GCS, or similar device.

Unmanned Aircraft System

Unmanned aircraft system, includes platform, sensors, communication gear, launcher, landing system, ground control station.

UAS control station

A flight deck without external flight environment clues (no direct visual contact with the UAS) used for control of UAS.

Section III

Special Abbreviations and Terms

This section contains no entries.

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