

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY ALASKA
Fort Richardson, Alaska 99505-5000

United States Army Alaska Regulation 95-23

21 April 2004

Unmanned Aerial Vehicle

Flight Regulations

Summary. This regulation covers unmanned aerial vehicle (UAV) operations referred to by the Federal Aviation Administration as Remotely Operated Aircraft (ROA), air vehicle operator/crewmember (AVO) training and currency requirements, and flight rules for United States Army Alaska UAV systems.

Applicability. This regulation applies to all UAV systems and personnel assigned or attached to the United States Army Alaska including Department of Defense (DoD)/Department of the Army Civilians (DAC) and civilian contactors involved in the operation, training, standardization, and maintenance of such UAV systems.

Supplementation. Supplementation of this regulation is prohibited without prior approval from the USARAK Aviation Office, Attention: APVR-WPTM-AV.

Interim changes. Interim changes to this regulation are not official unless the Director of Information Management authenticates them. Users will destroy interim changes on their expiration dates unless superseded or rescinded.

Suggested Improvements. The regulation’s proponent agency is USARAK G3, Aviation Office. The USARAK Aviation Office invites users to send comments and suggested improvements on Department of the Army (DA) Form 2028 (Recommended Changes to Publications and Blank Forms) directly to APVR-WPTM-AV (Standards), Fort Wainwright, Alaska 99703-6360.

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Chapter 1

General

1-1. Purpose

This regulation establishes procedures, rules and responsibilities for the operation of UAVs within USARAK.

1-2. References

Required, related publications, 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. Waivers and delegation of Authority

The authority to grant waivers is stated in specific paragraphs of Army Regulation (AR) 95-23. Waivers that are required to be processed through the Federal Aviation Administration (FAA) should be coordinated/processed through the United States Army Aeronautical Services Agency (USAASA), as appropriate.

1-5. FAA Form 7711-1 Certificate of Waiver or Authorization (COA) renewal

The process for renewing the FAA Form 7711-1 Certificate of Waiver or Authorization should be initiated 90 days prior to its expiration date. The Department of the Army Regional Representative (DARR) is the point of contact for this process, Phone (907) 271-5366.

Chapter 2

Unmanned Aerial Vehicle (UAV) management

2-1. Personnel authorized to operate Army UAVs.

Personnel authorized to operate Army UAVs will be in accordance with AR 95-23 and local unit standard operating procedures (SOP).

2-2. Local flying area procedures.

For specific information on local flying area procedures refer to FAA Form 7711-1 Certificate of Waiver or Authorization with attachments dated February 11, 2004, or most current COA.

a. UAV operations. UAVs will only be operated in active Restricted Airspace except as provided in the current COA. Requests for UAV operations outside of Restricted Airspace and current COA parameters will be processed through the appropriate DARR for the specific FAA region.

b. Notices to Airman (NOTAMS). UAV operations will be reported to the Fairbanks Flight Service Station (FSS), or other appropriate FSS, prior to UAV operations in order to facilitate the posting of NOTAMS.

c. Land and airspace coordination. UAV land and/or airspace requirements will be coordinated with the appropriate Range Control scheduling office at least 30 days prior to any UAV operations. (Wainwright Range Control 353-1244, Richardson Range Control 384-6231). Range Control will pass UAV schedule to Eielson AFB 353 CTS Joint Scheduling Office (377-3005/1499).

d. Mission briefing and risk assessment. A mission briefing and risk assessment will be completed prior to each UAV mission as per AR 95-23 Appendix C and Technical Circular (TC) 1-210 chapter 5. The briefing form utilized will include the initials of the briefer who approved the mission and the assessed risk level of the mission. DA Form 5484-R (UAV Mission Schedule/Brief) may be used to meet the briefing requirements if modified to include the briefing officer's initials and risk level.

e. Briefing authority. UAV briefing officers will be designated in accordance with AR 95-23.

f. UAV lighting requirements. UAVs will have appropriate lighting as per AR 95-23. Blackout operations may be conducted in Restricted Airspace after proper coordination with the appropriate airspace managers (Eielson Range Control and Army Range Control), as available, and the UAV has entered its mission profile. The UAV will have appropriate lighting for all take-offs, landings, and when not in a mission profile.

g. Transponder requirements. Each UAV will have an operational transponder with altitude encoding capability. If Air Traffic Control (ATC) or Eielson Range Control is unable to receive the UAV's transponder, the mission will be canceled and the UAV returned for landing as soon as practicable.

h. Communication requirements. Voice communication will be established with ATC, Army Range Control, and Eielson Range Control (as available) prior to and during all UAV operations. Once flight operations have commenced, a voice communication check will be made every hour to verify the communication link. If the voice communication link with ATC, Army Range Control, and Eielson Range Control (as available) fails after flight operations have been established, every effort will be made to re-establish the link. If all efforts fail, the UAV will continue on the established flight plan and land per the flight plan schedule.

i. Noise abatement. Built-up and noise-sensitive areas will be avoided when selecting takeoff and landing profiles.

j. Multiple UAV operations. When operating two UAVs at a time, only one will be in the corridor specified in the current COA at any given time.

k. Chase aircraft operations. Chase aircraft support for the RQ-7A *Shadow 200* UAV may be necessary when operating in certain corridors. Chase aircraft will not be used for night operations. The purpose of the chase aircraft is to increase see-and-avoid safety criteria. Prior to any chase aircraft support of UAV operations, coordination will be made with the AVOs and the pilots flying the chase aircraft to conduct an aircrew briefing. As a minimum, the aircrew briefing will cover the following:

- (1) Mission overview.
- (2) Takeoff time and location.
- (3) Flight route (corridor).
- (4) Weather.
- (5) Communication procedures and frequencies, to include lost communication procedures.
- (6) Airspeeds and altitudes.
- (7) Separation criteria.
- (8) Break-off procedures.
- (9) Inadvertent Instrument Meteorological Condition (IIMC) procedures.
- (10) Actions to be taken in the event visual contact is lost with the UAV.
- (11) Return time.
- (12) UAV/aircraft link up location and procedures.

l. Allen Army Airfield. Allen Army Airfield will not be used for UAV operations as established in the 11 February 2004 FAA Form 7711-1 COA.

Chapter 3 Operations and Safety

Section I Use of Army UAVs

3-1. General

Army UAVs will be used for official purposes only. The only authorized class of missions designated for an Army UAV are Operational Use and, as appropriate, Special Use.

3-2. Operational Use missions

Operational Use missions include those missions required to accomplish the Army's mission and to maintain the combat readiness of UAV and ground units.

3-3. Special Use missions

Special Use missions require the approval of the Major Command (MACOM) commander unless delegated to a lower authority and are outlined in AR 95-23.

3-4. Prohibited missions

Prohibited missions include flights for personal use and as outlined in AR 95-23.

Section II Safety

3-5. Safety functions

Commanders will implement the mishap prevention program set up by AR 385-95, Army Aviation Accident Prevention.

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

Procedures for investigating and reporting UAV mishaps will be in accordance with AR 385-40. However, the final mishap report for UAV systems will be reported using DA Form 285.

3-7. Risk management

a. Commanders will integrate risk management into UAV mission planning and execution at every level. The risk management process begins at mission conception and continues until mission completion. The goal should be to eliminate hazards where possible and reduce residual risks to acceptable levels.

b. A mission briefing and risk assessment will be completed prior to each UAV mission as per AR 95-23 Appendix C and TC 1-210 Chapter 5. The briefing and risk assessment will take into consideration the level of see-and-avoid criteria needed to conduct safe operations outside of restricted airspace. For example, visual observers on the ground may be sufficient to safely see-and-avoid aircraft associated with operations in and out of Firebird Flight Landing Strip, while a chase aircraft may be needed to operate in and out of Donnelly Flight Landing Strip during the August and September time frame due to the increase of air traffic along the Richardson Highway.

3-8. UAV safety procedures

- a. No person will operate UAVs in a careless or reckless manner.
- b. UAV crewmembers are to be familiar with AR 40-8 and will observe the drug and alcohol standards set forth in AR 40-8 paragraph 4.
- c. Smoking is prohibited within 50 feet of a UAV or any associated UAV equipment to include the UAV launcher rail and ground control station (GCS).

3-9. Crew endurance

Commanders will design a crew endurance program tailored to their unit mission and include it in their SOP. AR 95-23 Table 3-1 may be used as guide for developing crew endurance duty periods.

**Section III.
UAV maintenance**

3-10. Maintenance Test Flights (MTFs)

- a. Maintenance test flights will be conducted per the appropriate UAV Technical Manual (TM) guidelines.
- b. UAV crewmembers performing maintenance test flights must be qualified and current per AR 95-23.

3-11. Maintenance Operational Checks (MOCs)

- a. Only authorized personnel will perform maintenance operational checks as outlined in AR 95-23.
- b. Commanders may authorize nonqualified personnel to start, operate, and stop mobile power units after proper training has been completed and written authorization documented per unit SOP.

**Chapter 4
Training**

**Section I
Training Program and Literature**

4-1. General

The UAV Aircrew Training Program (ATP) will be in accordance with TC 1-210 and the appropriate UAV Aircrew Training Manual (ATM).

4-2. Waivers to training requirements

Waivers to aircrew training requirements will be in accordance with AR 95-23.

4-3. Aircrew information reading files

Units will establish and maintain UAV Information Reading Files in accordance with AR 385-95 and TC 1-210. Assigned and/or attached AVO personnel will read and remain familiar with these files.

4-4. Aircrew training program

a. The UAV ATP standardizes AVO training and evaluations to ensure combat readiness.

b. The ATP outlined in the UAV ATM is mandatory for all AVOs assigned to operational flying positions in UAV units. The UAV ATP includes requirements for hours, tasks, iterations, simulator, readiness level (RL) progression, and the annual proficiency and readiness test (APART).

4-5. UAV AVO qualification/refresher training

UAV AVO qualification and refresher training requirements are outlined in AR 95-23 and the appropriate ATM.

4-6. Annual Proficiency And Readiness Test (APART)

UAV AVO APART requirements are outlined in AR 95-23, TC 1-210, and the appropriate ATM.

4-7. Failure to meet ATP requirements

When ATP requirements are not met, the commander will complete an investigation within 30 days of notification of the failure. After the investigation, the commander will take action as outlined in AR 95-23.

4-8. Aeromedical training

UAV AVOs will receive UAV-tailored aeromedical training per TC 1-210 and appropriate ATM.

4-9. Currency

UAV crewmembers will maintain UAV currency as outlined in AR 95-23.

Section II
Flight crewmembers

4-10. Flight crews

UAV unit commanders must establish, in writing, formal UAV flight crewmember qualification and selection programs. Programs will contain qualification and selection criteria and evaluation requirements. UAV flight crewmembers will be designated in writing by their unit commander, specifying the UAV duties and crew stations that they are authorized to occupy in accordance with TC 1-210. Flight crews will be evaluated during their APART period in each crew station at which they are authorized to perform duties.

4-11. Standardization

a. The UAV standardization program is designed to ensure a high degree of efficiency in accomplishing the combat mission of the UAV force.

b. Commanders will-

- (1) Implement standardization policies and procedures.
- (2) Ensure UAVs are operated according to standard procedures in the ATM and operators manual.
- (3) Designate instructors, examiners, evaluators, and unit trainer as appropriate.
- (4) Ensure that required training, tests, and flight evaluations are completed.
- (5) Review and approve policies and standardization programs.

Chapter 5

Flight Procedures and Rules

5-1. General

USARAK personnel engaged in the operation of Army UAVs will comply with applicable Federal Aviation Regulations (FAR), military regulations, Certificates of Authorization, Memorandums of Agreement, local regulations and procedures, and SOPs.

5-2. Preflight

- a. Fuel requirements. At takeoff, UAVs must have enough fuel to execute the mission and reach the designated landing area with a planned fuel reserve of 30 minutes during the day and 45 minutes at night.
- b. Flight weather planning. AVOs will obtain departure, enroute, and destination weather information before takeoff. A local weather briefing, Mission Execution Forecast (MEF) weather briefing or DD Form 175-1 weather briefing may be used to obtain weather forecasts. If the MEF is utilized, the controlling weather facility for the MEF will be called to verify the weather information prior to takeoff. If a military weather facility is not available, a weather report will be obtained by calling a Flight Service Station (FSS). If there is no weather reporting service for the area of operations, the AVO may use the area forecast. The following weather requirements apply:
 - (1) UAVs will not be flown into known or forecasted conditions that are prohibited by the UAV operators manual.
 - (2) Minimum departure, enroute, and arrival weather is 1000 foot ceiling and 3 miles visibility.
 - (3) Minimum operating distance from clouds is 500 below, 1000 feet above, and 2,000 feet horizontal when conducting flights at 10,000 feet mean sea level (MSL) and below.
 - (4) UAVs will maintain Visual Meteorological Conditions (VMC) and visual contact with the ground at all times.
- c. Notices to Airman (NOTAMS). NOTAMS will be checked by the AVO prior to flight to verify there is no conflict with the planned mission and to ensure their UAV mission has been placed in the NOTAMS.
- d. Publications. The appropriate flight publications will be available and current for the area of operations. Restricted Airspace vertical and lateral boundaries will be verified with the appropriate flight publications prior to conducting flight operations.
- e. Flight plans. A formal DD Form 175 flight plan is not required. However, the appropriate Flight Service Station will be notified with pertinent flight plan information prior to any UAV operation. Any delays, corridor changes, or extensions to UAV flights will be coordinated through the appropriate FSS, ATC, and Range Control office. The unit SOP will specify the requirements for a flight operation's log.

5-3. Flight

- a. Takeoff. Five minutes prior to takeoff, FSS, ATC, Army Range Control, and Eielson Range Control (as available) will be notified of the impending UAV departure.
- b. After takeoff. Immediately after takeoff, ATC, Army Range Control, and Eielson Range Control (as available) will be called to verify a functional voice communication link and functional transponder link. FSS will be notified with actual takeoff time.
- c. Altitude restrictions. The following altitude restrictions apply:

(1) Minimum altitude for UAV operations, except for takeoff and landing, is 1,000 feet above ground level (AGL), parachute minimum deployment altitude, or minimum altitude for line of sight with ground data terminal (GDT), whichever is higher.

(2) Maximum altitude for UAV operations is 10,000 feet MSL. Operations above 10,000 feet MSL but below 14,000 feet MSL may be conducted if the weather visibility is forecast to be greater than 5 miles, the UAV is able to maintain a distance from clouds of 1,000 feet below, 1,000 feet above, and 1 mile horizontal and the mission has been approved by the first lieutenant colonel or above in the chain of command.

(3) Deviations from altitude restrictions are authorized for safety at the AVO's discretion.

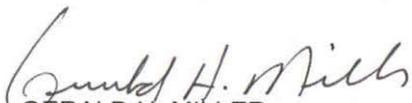
d. Landing. Fifteen minutes prior to departing the operational area, ATC, Army Range Control, and Eielson Range Control (as available) will be notified of intent to return for landing.

5-4. Post flight

The AVO will immediately notify ATC, FSS, Army Range Control, and Eielson Range Control (as available) when the UAV is safely on the ground and mission complete. If necessary, a post flight critique will be conducted with ATC, Range Control, or any other appropriate agencies when problems are encountered.

FOR THE COMMANDER

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DISTRIBUTION:
Post to USARAK publications web site.

Appendix A
References

Section I
Required Publications

AIM

Aeronautical Information Manual

AR 40-8

Temporary Flying Restrictions Due to Exogenous Factors. (Cited in para 3-8.)

AR 95-2

Air Traffic Control, Airspace, Airfields, Flight Activities, and Navigation Aids.

AR 95-23

Unmanned Aerial Vehicle Flight Regulation. (Cited in para 1-4, 2-1, 2-2, 3-4, 3-7, 3-9-11, 4-2, 4-5 thru 4-7, and 4-9)

AR 385-40

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

AR 385-95

Army Aviation Accident Prevention. (Cited in para 3-5, and 4-3.)

DA PAM 738-750

The Army Maintenance Management System (TAMMS).

DA PAM 738-751

Functional User' Manual for the Army Maintenance Management System-Aviation (TAMMS-A).

FAR 91

General Operating and Flight Rules.

FM 1-300

Flight Operations and Airfield Management.

TC 1-210

Commander's Guide. (Cited in para 2-2, 3-7, 4-1, 4-3, 4-6, 4-8, and 4-10.)

TM 1-1500-328-23

Aeronautical Equipment Maintenance Management Policies and Procedures.

FAA Order 7610.4

Special Military Operations.

Section II
Related Publications

A related publication is merely a source of additional information. The user does not have to read it to understand this regulation

AR 95-1

Flight Regulations.

AR 310-25

Dictionary of United States Army Terms.

FM 1-301

Aeromedical Training for Flight Personnel.

FM 34-25-2 (Draft)

Unmanned Aerial Vehicle Operations

Section III

Referenced Forms

DA Form 285

U.S. Army Accident Report. (Cited in para 3-6.)

DA Form 2028

Recommended Changes to Publications and Blank Forms. (Cited in Suggested Improvements.)

DA Form 5484-R [UAV]

Air Vehicle Operator Mission Schedule/Brief. (Cited in para 2-2.)

DD Form 175

Military Flight Plan. (Cited in para 5-2.)

DD Form 175-1

Flight Weather Briefing. (Cited in para 5-2.)

FAA Form 7711-1

Certificate of Waiver or Authorization (Cited in para 2-2.)

Federal Aviation Administration forms can be obtained from local Department of the Army Regional Representatives. See AR 95-2, Table 6-1.

Section IV

Related Forms

DA Form 759

Individual Flight Record and Flight Certificate.

DA Form 3513

Individual Flight Records Folder, United States Army.

DA Form 5484-R

Mission Schedule/Brief.

Glossary

Section I
Abbreviations

AAF
Army Air Field

AIM
aeronautical information manual

ASO
aviation safety officer

DES
Directorate of Evaluation and Standardization

EP
external pilot

ERS
emergency recovery system

ETA
estimated time of arrival

ETD
estimated time of departure

FLIP
flight information publication

GPS
global positioning system

IP
instructor pilot

LRS
launch and recovery station

MC
mission commander

ME
maintenance test flight evaluator

MP
maintenance test pilot

MPO
mission payload operator

MPU
mobile power unit

RPA

remotely piloted aircraft

simulator

synthetic flight training system

SOF

Safety of Flight

SP

standardization instructor pilot

SUA

special use airspace

TSM UAV

TRADOC System Manager for Unmanned Aerial Vehicle

USAAVNC

U.S. Army Aviation Center

USARPAC

U.S. Army – Pacific

UT

unit trainer

VFR

visual flight rules

WX

Weather

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 (NAS) of the United States. It also contains items of interest to pilots and aircrew members concerning health and medical facts, factors affecting flight safety, a pilot/controller glossary of terms used in the Air Traffic Control System, and information on safety, accident, and hazard reporting.

Air Vehicle

An engine-driven fixed-wing aircraft heavier than air, remotely operated by personnel on the ground, that is supported in flight by the dynamic reaction of the air against its wings.

Air Vehicle Control Station

A flight deck on the ground without external flight environment clues, i.e., no direct visual contact with the UAV, used for control of a UAV(s).

Air Vehicle Crewmember

An individual who performs duties controlling the flight of an unmanned aerial vehicle or the operation of its mission equipment that is essential to the operation of the UAV (i.e., an air vehicle operator/internal pilot, an external pilot, flight engineer, and/or a mission payload operator).

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 crewmembers training programs.

Aircrew Training Program (ATP)

Army aviation aircrew standardized training and evaluation program.

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, including unmanned aerial vehicles. This is achieved through standardized publications and training literature, a disciplined instructor pilot force, tests, flight checks, and command supervision. Standardization includes aviator cockpit, performance, aircrew teamwork, tactics, maintenance, and safety. For UAVs, standardization includes external pilot/external air vehicle crewmember performance, air vehicle crewmember/air vehicle operator, and mission payload operator performance, aircrew teamwork, tactics, maintenance, and safety.

Catastrophic Failure

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

Category (of Unmanned Aerial Vehicles)

Unmanned aerial vehicles designated as close range, endurance, extended range/multi-purpose, high altitude, medium altitude, medium range, micro, mini, short range, tactical, or vertical- takeoff/landing.

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 IFR flights and to VFR flights in accordance with the airspace classification. [See the Aeronautical Information Manual (AIM)]

Crewmember (UAV only)

A person assigned to perform duties during the operation of an air vehicle during flight time.

External Pilot

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

Flight Crew Station

A station in an aircraft that a flight crewmember occupies to perform his/her flight duty, for example, pilot stations specified in operator's manuals. For UAVs: A station associated with the in-flight operation of a UAV at which flight controls may be used to control air vehicle flight; for example, air vehicle operator, external pilot, 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/piloted aircraft operator, unmanned aerial vehicle 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 **UAVs**: An air vehicle operator, external pilot, or mission payload operator assigned to duty during the in-flight operation of an air vehicle.

Flight Termination System

A controllable parachute or automatic preprogrammed course of action used with UAV systems to terminate flight in case of a critical failure.

Flight Time

The time from the moment the aircraft [manned and unmanned] first moves under its own power for the purpose of flight until engine shutdown.

Instructor Pilot (IP)

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

Internal Pilot

An UAV crewmember who operates the AV from within a control station that exercises complete control over the air vehicle.

Maintenance Operational Check (MOC)

Systems check made on the ground through engine runup 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 aircraft systems or components disturbed during an inspection or maintenance have been repaired or adjusted satisfactorily.

Mission Commander

The UAV's mission commander is the designated individual tasked with the overall responsibility for the operation and safety of the UAV mission.

Night

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

Nonrated Crewmember (UAV only)

The status assigned to soldiers who have duties directly related to the preparation and maintenance of UAVs and/or their mission payload systems, but not the in-flight mission; duties that either supplement or are not/cannot be performed by the UAV system's assigned rated crewmembers.

Post-Flight Inspection

The set of manufacturer recommended systems and components functional tests to be performed following any launch or engine run-up to determine performance of systems and determine conditions, if any, necessitating repair/maintenance.

Pre-Flight Inspection

The set of manufacturer recommended systems and components functional tests to be performed prior to any launch or engine start/run-up.

Propulsion System

A system comprised of those components necessary to ensure the safe propulsion of the aircraft and/or UAV(s).

Rated Crewmember (Unmanned Aerial Vehicle)

UAV crewmembers described in this regulation and in AR 611-1 who have completed a TRADOC-approved UAV qualification training program, and whose assigned duties directly influence the in-flight mission of the UAV and/or its mission payload equipment.

Remotely Operated Aircraft (ROA)

FAA terminology for unmanned aerial vehicles

Restricted Area

Airspace designated in FAR Part 73 within which the flight of aircraft, while not prohibited, is subject to restriction(s).

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 non-participating aircraft. Limitation on non-participating aircraft may range from absolute exclusion to complete freedom of use within certain areas, depending upon activity being conducted.

Standardization Instructor Pilot (SP)

A qualified instructor pilot designated by the commander, in writing, to supervise unit standardization program. Primarily trains and evaluates other SPs and IPs.

Unit Trainer

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

Unmanned Aerial Vehicle

An aircraft capable of flight beyond visual line of sight under remote or autonomous control for military purposes, primarily for reconnaissance, surveillance, and other intelligence gathering missions, as well as for the adjustment of artillery and mortar fire, and may be used in an aerial target spotting/identification role. A UAV can be expendable or recoverable, can carry a payload, is not operated for sport or hobby, and does not transport passengers or crew. For purposes of compliance with 14 CFR, UAVs are to be considered "aircraft," typically either an "airplane" or "rotorcraft", as defined in 14 CFR part 1.1 [FAA refers to these aircraft as remotely operated aircraft (ROA)]

Weather Forecaster

Any person approved by the USAF or Navy Air Weather Services, or by the National Weather Service to forecast weather for flight planning.

Weather Observer

Any person approved by the USAF or Navy, or by the National Weather Service to make and report weather observations.