

# National Aviation Management Plan (NAMP)

**Security Safety and Law Enforcement** 



# **Mission Statements**

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

# National Aviation Management Plan

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# **Acronyms**

AA Alert Area

AIRS Aviation Information Reporting Support

ALSE Aviation Life Support Equipment
AMIS Aviation Mishap Information System
AQD Acquisitions Services Directorate

ARR Aerial Refueling Routes
AUR Aircraft User Reports
CFA Controlled Firing Areas
CFR Code of Federal Regulations
COA Certificate of Authorization

COR Contracting Officer's Representative
Department U.S. Department of the Interior

DM Departmental Manual
EAB Executive Aviation Board
EAC Executive Aviation Committee
EAS Executive Aviation Subcommittee
FAA Federal Aviation Administration
FAR Federal Aviation Regulations

FBMS Financial and Business Management System

HB Handbook

HAZMAT Hazardous Materials
IA Interagency Agreement

IACG Interagency Airspace Coordination Guide

IASC Interagency Airspace Committee
IAT Interagency Aviation Training

IHOG Interagency Helicopter Operations Guide

LATN Low Altitude Tactical Navigation

LOA Letter of Authorization MOA Military Operations Area

MOU Memorandum of Understanding

MTR Military Training Routes NAM National Aviation Manager

NAMP National Aviation Management Plan NIAC National Interagency Aviation Council

NOTAM Notice to Airman

NTSB National Transportation Safety Board

OAS Office of Aviation Services

OMB Office of Management and Budget OPM Operational Procedures Memoranda

PA Prohibited Area

PFD Personal Flotation Device PASP Project Aviation Safety Plan

PIC Pilot-in-Command

PPE Personal Protective Equipment

RA Restricted Area

RAM Regional Aviation Manager
Reclamation Bureau of Reclamation
RD Regional Director
SAFECOM Safety Communiqué

SSLE Security Safety and Law Enforcement

SOL Solicitor of the U.S. Department of the Interior

SR Slow Routes

TFR Temporary Flight Restriction
UAS Unmanned Aircraft Systems
USFS United States Forest Service

WA Warning Area

# **Chapter 1: Aviation Organization Overview**

# 1.1 Background and Purpose

The Bureau of Reclamation's National Aviation Management Plan (NAMP) defines the national aviation program and allows all regions, area offices, and aviation users to easily acquire the necessary requirements and information to manage and execute the Reclamation aviation program. The NAMP describes Reclamation's intent, authority, role and responsibilities, and program objectives, and provides strategic and operational requirements. This plan builds on the policy requirements described in Federal Aviation Administration (FAA) Regulations (<a href="http://www.faa.gov/">http://www.faa.gov/</a>), Departmental Manual (DM), Operational Procedural Memoranda (OPM) (<a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>), and other referenced requirements.

This aviation plan applies to flight services other than those acquired on a seat-fare basis from commercial air carriers (e.g., Delta, United) in the United States, Trust Territories, and Possessions operating under Federal Aviation Regulations (FAR) Part 121.

The FAA considers Unmanned Aircraft Systems (UAS) aircraft. All requirements for aircraft, including those outlined in this NAMP, apply to UAS and missions.

Aviation activities present a high risk for those involved as well as the agency as a whole. Considerable time, and thought, must be given to aviation operations as a whole and the decision to develop internal capabilities within the organization. The risks must outweigh the benefits. All individuals associated with aviation must read and follow the NAMP; formal acknowledgement of the NAMP is required (see Appendix 2).

# 1.2 Aviation Program Objectives

The Reclamation aviation program provides requirements, oversight, and tools to promote public safety, Reclamation staff and facility safety, and efficient management solutions. Aviation management balances mission goals with the environmental considerations, available funding, and safety of the involved personnel.

**Safety:** The priority in all Reclamation aviation missions is the safety of employees, contractors, cooperators, and the public.

- Risk management is inherent to all aviation missions and programs.
- All aviation personnel are empowered and expected to manage the risks of aviation operations and make reasonable and prudent decisions to accomplish the mission.
- Aviation personnel must take every opportunity to plan missions thoroughly and respect aircraft and the environment in which they operate.
- Individuals will be held accountable for their decisions, which will be based on policy, principles, risk management, training, experience, and the given situation.

Reclamation is committed to ensuring workplaces are free of recognized hazards.
 Prior to conducting any mission, all risks will be mitigated to the lowest acceptable level possible.

**Professionalism:** Reclamation personnel performing aviation functions must meet all qualification requirements as stated in U.S. Department of the Interior (Departmental) and Reclamation policy, requirements, manuals, handbooks, and guides.

**Innovation:** Management at all levels is responsible for enhancing the aviation program with a commitment to aviation safety and operational and management efficiency.

# 1.3 Federal, Departmental, and Reclamation Management Policies

Reclamation aviation management and operations will be conducted within policies contained in the FAR, DM, OPM, and Handbooks (HB). Specific HB, plans, and guides listed below are incorporated by reference and are Reclamation requirements.

### 1.3.1 Federal Aviation Regulations

These regulations are the basic guide for piloting and aircraft operations within the national airspace. FAR, Title 14, Chapter 1, of the Code of Federal Regulations (CFR) may be obtained from the Government Printing Office, commercial book stores selling pilot and aviation materials, or at: <a href="http://www.faa.gov">http://www.faa.gov</a>.

### 1.3.2 Office of Management and Budget Circulars

Office of Management and Budget (OMB) Circular No. A-11, Part 7, Exhibit 300 Process; A-123 (<a href="https://obamawhitehouse.archives.gov/omb/circulars\_a11\_current\_year\_a11\_toc">https://obamawhitehouse.archives.gov/omb/circulars\_a11\_current\_year\_a11\_toc</a>) and A-126 (<a href="https://obamawhitehouse.archives.gov/omb/circulars\_a126">https://obamawhitehouse.archives.gov/omb/circulars\_a126</a>) prescribe procedures for acquisition of fleet aircraft, internal program control, and the management and use of Federal Government aircraft.

### 1.3.3 Departmental Manual

Departmental Manual (DM) Parts 350 354 are the aviation policies for all Departmental bureaus and offices. The DM is available at: <a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>.

### 1.3.4 Departmental Operational Procedures Memoranda

Operational Procedures Memoranda (OPM) are interim directives that may become final policies. OPM are available at: <a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>.

### 1.3.5 Departmental Handbooks/Interagency Guides/Standards

The *Aviation Life Support Equipment* (ALSE) *Handbook* provides policies, procedures, and responsibilities for using aviation life support equipment. The *Interagency Helicopter Operations Guide* (IHOG) provides standardized helicopter procedures across all types of operations. These documents are available at: <a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>.

### 1.3.6 Departmental and Interagency Information Bulletins

Information bulletins, which contain material of a general nature, and do not have a defined expiration date, are available at: <a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>.

### 1.3.7 Departmental and Interagency Safety Alerts

Safety alerts, which are time-sensitive documents that are published, as needed, are available at: https://www.doi.gov/aviation/safety/safety\_alerts.

### 1.3.8 Departmental and Interagency Aviation Accident Prevention Bulletins

These bulletins, which contain material with wide application and are issued as needed, are available at: https://www.doi.gov/aviation/safety/accident\_prevention\_bulletins.

### 1.3.9 Departmental and Interagency Technical Bulletins

Technical data and recommendations regarding aircraft are published in technical bulletins, when warranted, and are available at: <a href="https://www.doi.gov/aviation/tech/tech\_bulletins">https://www.doi.gov/aviation/tech/tech\_bulletins</a>.

### 1.3.10 Reclamation Plans

- Reclamation National Aviation Management Plan
- Regional Flight Following Plans
- Regional Mishap Response Plans
- Project Aviation Safety Plan(s) (PASP)

# 1.4 Organizational Roles and Responsibilities

### 1.4.1 Department of the Interior

### 1.4.1.1 Office of Aviation Services.

Office of Aviation Services (OAS) is responsible for Departmental functions related to aircraft services. OAS provides service offerings that include aviation safety services, aviation technical services, fleet management, fleet property accountability, aviation user training services, and flight scheduling and coordination services. A complete list of functions and responsibilities is included in 350 DM 1 (https://www.doi.gov/aviation/).

### 1.4.1.2 Interior Business Center Acquisition Services Directorate.

Acquisition Services Directorate (AQD) provides Department-wide centralized acquisitions management for the Department and Departmental customers. Activities include contracting for aviation flight services, property accountability, and small purchase service in support of OAS and bureau and office operations, including Departmental fleet aircraft (https://www.doi.gov/aviation/aqd).

### 1.4.2 National Aviation Groups/Committees

#### 1.4.2.1 Executive Aviation Board.

The Executive Aviation Board (EAB) is responsible for the Department's aviation program. The board provides executive oversight and performance accountability and assures that Department-wide strategies and initiatives are developed collaboratively and implemented consistently. The

board provides final review and approval of policy, when needed. The EAB is chartered under the direction of the Deputy Assistant Secretary for Public Safety, Resource Protection, and Emergency Services. The EAB has authority over all aviation related boards/committees/groups within the Department. Reclamation's Deputy Commissioner – Policy, Administration, and Budget is the permanent member to the EAB.

### 1.4.2.2 Executive Aviation Committee.

The Executive Aviation Committee (EAC) is chartered under the direction of the EAB. The committee follows guidance and directives from the EAB and collaboratively works to meet EAB and Departmental objectives. The EAC also provides aviation program performance measurement metrics to the EAB. The EAC is responsible for establishing a Bureau Aviation Managers working group, the Executive Aviation Sub-Committee, to be the primary surrogate of the EAC to engage in all Departmental aviation-related issues at the operational level. Reclamation's Director, Security Safety and Law Enforcement (SSLE), is the permanent member to the EAC.

### 1.4.2.3 Executive Aviation Subcommittee.

The Executive Aviation Subcommittee (EAS) is an advisory group for the EAC. Reclamation's National Aviation Manager (NAM) is the permanent representative to the EAS.

### 1.4.3 Bureau of Reclamation

#### 1.4.3.1 Commissioner, Bureau of Reclamation.

The Commissioner is responsible for Reclamation's aviation management program.

### 1.4.3.2 Director, Security, Safety and Law Enforcement.

The Director, SSLE, provides national direction for Reclamation's aviation program, and is responsible for the implementation, execution, and enforcement of Departmental aviation policy and the development and execution of Reclamation aviation requirements, program development, and oversight.

### 1.4.3.3 National Aviation Manager

The NAM serves as Reclamation's principal aviation advisor. The NAM:

- Provides guidance and subject matter expertise on all aviation-related activities.
- Represents Reclamation at interagency meetings; on interagency committees developing government-wide aviation policies, requirements, procedures and reports; and, at aviation industry meetings and conventions.
- Serves at the single point of contact with OAS for procurement, training, aviation support, and Reclamation aviation-program evaluations.
- Assigns representatives to accident review boards and accident investigation teams.
- Actively works with other program managers to ensure operational aviation issues are addressed in program and policy decisions.
- Coordinates and approves fleet aircraft acquisition (including UAS), replacement, and disposal to support Reclamation programs.
- Approves all cooperator flight requests.

- Analyzes accident and incident trends and monitors Aviation Mishap Information System (AMIS) Safety Communiqué (SAFECOM) reports and incidental serious safety concerns.
- Approves all pilot training requests and coordinates with OAS to ensure pilot certification and training are maintained.
- Chairs the Reclamation Aviation Council.

### 1.4.3.4 Regional Directors (RDs).

RDs are responsible for executing Departmental aviation policy, including Reclamation requirements, and ensuring that a safe and efficient aviation program exists in their region, including ensuring the availability of aviation training and resources to staff responsible for aviation activities.

### 1.4.3.5 Regional Aviation Manager (RAM).

The RAM provides technical expertise and aviation safety oversight for their region. Because of the level of aviation activity within the Denver Office, a Denver-based regional aviation manager will be assigned to oversee aviation activities initiated by Denver/Washington office staff. The RAM:

- Develops and implements the following regional plans:
  - o Regional flight following plans
  - o Regional mishap reporting plans
  - o Regional UAS security plan
- Reviews and approves PASP.
- Validates that all regional aviation users meet the training requirements of the Interagency Aviation Training (IAT) Guide and OPM-04, *Aviation User Training Program*.
- Requests deviations, exemptions, or exceptions to standards, procedures, or other
  instructions, in accordance with Reclamation Manual RCD 03-03. Requests must be
  submitted to the NAM who will coordinate with the appropriate authority.
- Coordinates requests for approval for all cooperator aircraft flights in accordance with outlined procedures. Requests must be submitted to the NAM who will coordinate with the appropriate authority.
- Coordinates requests approval for purchase of all aircraft, including UAS. Requests must be submitted to the NAM who will coordinate with the appropriate authority.

### 1.4.3.6 Reclamation Aviation Council.

The Reclamation Aviation Council is comprised of the NAM and all the RAMs. The council coordinates aviation activities throughout Reclamation, identifies requirements and procedure needs, and provides guidance to users of aviation resources.

### 1.4.3.7 Immediate Supervisors.

Immediate supervisors of all aviation staff must ensure employees meet training requirements set forth by Reclamation, as well as those outlined by 351 DM 3 and OPM-04. All supervisors must maintain training currency per OPM-04.

### 1.4.3.8 Pilot-in-Command/Project Lead.

Pilot-in-Command (PIC) indicates whoever has primary control of the mission. The PIC is responsible for:

- conducting aviation operations in accordance with applicable policy and requirements;
- maintaining proficiency and qualification standards appropriate to the missions performed;
- providing for the safety of the aircraft and personnel on board (where applicable), and has the sole authority for aircraft operations;
- ensuring airworthiness and operating aircraft for maximum safety and efficiency;
- providing aircraft briefings;
- reporting unsafe operations, conditions, and situations using the SAFECOM system;
- completing all flight reporting activities at the conclusion of each mission; and,
- maintaining currency of training per OPM-04, and the NAMP.

### 1.4.3.9 Employees.

Employees involved in aviation activities are responsible for:

- knowing and following applicable policy and directives;
- signing the review and acknowledgement of the NAMP (Appendix 2);
- maintaining currency of training per OPM-04 and the NAMP:
- using appropriate personal protective and life support equipment, as required;
- reporting potential and actual problems; and,
- ensuring the safety of themselves and others.

# 1.5 Evaluation and Monitoring

Periodic internal and Departmental reviews of Reclamation aviation operating procedures are necessary to enhance safety, identify program strengths and weaknesses, help identify fiscal and personnel needs, and ensure the efficient use of aircraft under Reclamation control.

#### 1.5.1 Internal Control

The Aviation Internal Control Plan outlines Reclamation's requirements for compliance with aspects of OMB Circular No. A-123 and supports Reclamation's commitment to safe and efficient programmatic operations. Internal control reviews will be conducted in each region on a recurring basis and prior to OAS reviews.

### 1.5.2 Regional Aviation Program Review

Each region's overall aviation program will be reviewed at least once every 5 years by OAS, in coordination with the NAM. OAS program reviews are conducted in accordance with Departmental policy, 352 DM 2, *Aviation Program Evaluations*.

Any finding identified as a serious safety or programmatic concern must be responded to in writing. The response must include corrective actions, effective dates, and individual(s)

responsible for the correction. Unless otherwise approved by the Director, SSLE, all findings will be completed, and reported to OAS, within 1 year.

# **Chapter 2: Aviation Administration**

### 2.1 General

Aircraft operators who provide contract, individual charter, or hourly rental service to Reclamation must be approved by OAS. Pilots must meet Departmental experience requirements and adhere to flight time and duty limitations.

Approved sources for flight services include:

- Departmental fleet aircraft;
- United States Forest Service (USFS) fleet aircraft;
- OAS procured/contracted aircraft; and/or
- Affiliate/Cooperator aircraft approved under an OAS agreement.

### 2.2 Procurement

All aircraft services required by Reclamation must be acquired through the OAS procurement process in accordance with DM requirements, with prior approval from the NAM. This includes procurement of any non-commercial flight activities. The following exceptions apply:

- Seat fare on flights with scheduled air carrier.
- End product/service contracts.

Services acquired on an hourly rate basis may be used when the cost of services is \$25,000 per transaction or less. OAS provides an approved list of rental sources based on a standard OAS source list from which all vendors must be selected (<a href="https://www.doi.gov/aviation/aqd">https://www.doi.gov/aviation/aqd</a>).

### 2.2.1 End Product/Service Contracts

These contracts are used to obtain services and products such as aerial photographs, land surveys, or seeding/fertilization. Aircraft may be used to obtain the product or services; however, there are limits on specifying controls or specific types of aircraft in the solicitation. These types of contracts are not flight service contracts and do not need to be obtained through OAS. There are very strict guidelines that include waiving operational control (see Section 4.2) for the use of these types of contracts. For more information refer to OPM-35, *Identification of End Product/ Service and Flight Service Procurement* available at: https://www.doi.gov/sites/doi.gov/files/uploads/opm-35.pdf.

Appendix 1 provides additional guidance on end product contracts, including required contract language.

### 2.2.2 Requesting Procedures

Requests for aviation services must be submitted through the RAM to the NAM. The NAM will coordinate with the respective OAS regional office. The requesting office must submit, at minimum, the following:

- Proposed contract requirements/specifications.
- List of Government-furnished equipment.
- Justification for other than full or open competition.
- Justification for specific make and model.

Requests for contract services must be submitted at least 250 calendar days in advance of the anticipated date of contract award. Task orders against existing aircraft rental agreements or on call resources may take less time for award. Additional requirements and guidelines are available at: https://www.doi.gov/aviation/aqd.

# 2.2.3 Procurement of Flight Services from Other Departmental Bureaus or Offices

Before using fleet aircraft, including UAS, assigned to other Departmental bureaus or offices, Reclamation employees are responsible for contacting the service provider to determine aircraft use payment rates, pilot services, and per diem; this information must be included in the justification for services and maintained with all documentation related to the mission use. A formal agreement between bureaus, such as an Interagency Agreement (IA) or Memorandum of Understanding (MOU), must be implemented prior to utilizing such aircraft.

### 2.2.4 Procurement of Flight Services from Non-Federal Public Agencies

It is Federal policy not to compete with private industry. Reclamation procurement of, and reimbursement for, flight services from non-Federal public agencies are generally not authorized unless:

- That agency is providing the service as a commercial operator;
- The operation is conducted with civil aircraft where no operating certificate is required; and/or
- The services are necessary to respond to an imminent threat to life or property, and no service by a commercial operator is reasonably available to meet the threat.

The decision not to use a commercial operator must be documented in writing and made part of the permanent incident record (14 CFR 1.1).

### 2.2.5 Unauthorized Procurement

Unauthorized acquisition of aviation services may go through a ratification process and will include a penalty payment imposed by OAS. Specific details are found in 353 DM 1.8, *Ratification of Unauthorized Commitments*, which is available at: <a href="http://elips.doi.gov/ELIPS/DocView.aspx?id=1110&dbid=0">http://elips.doi.gov/ELIPS/DocView.aspx?id=1110&dbid=0</a>.

# 2.3 Emergency Aircraft Procurement

### 2.3.1 Definition of Emergency

The justification for the procurement of emergency aircraft services must meet the following criteria:

- **Life Threatening.** A situation or occurrence of a serious nature, developing suddenly and unexpectedly, and demanding immediate action to prevent loss of life.
- **Operational.** An unforeseen combination of circumstances that calls for immediate action, but is not life threatening.

### 2.3.2 Ordering Emergency Aircraft Services

Authorized personnel from the requesting Reclamation office must contact the appropriate OAS Flight Coordination Center or use the Aircraft Rental Agreement for requests for charter aircraft services to meet emergency needs. Pilot and aircraft must be approved (carded) for the intended mission. If, due to the nature of the emergency, the pilot and/or aircraft are not approved for the intended mission, a SAFECOM must be submitted immediately after the mission.

All such procurements must include a completed PASP, including a full risk assessment.

# 2.4 Cooperator Aircraft

Cooperative aircraft operations and partnerships are encouraged for the purpose of efficiency and standardization in procedure.

Use of cooperator aircraft and pilots (affiliate, state/local government, military, or other Federal agency aircraft) by Reclamation employees requires prior inspection and approval by OAS, usually in the form of a Letter of Authorization (LOA) and/or MOU. Proposed use of these aircraft must be requested through the RAM and approved by the NAM. A current list of cooperators is available at: <a href="https://www.doi.gov/aviation/library">https://www.doi.gov/aviation/library</a>.

Any employee who is asked to accompany personnel from another agency on other agency's aircraft must consult their respective aviation manager to ensure approvals are in place. Employees must also complete required training prior to flying on cooperator aircraft. Offices are encouraged to obtain necessary letters of authorization in advance of intended use period (reference 351 DM 4).

If Reclamation employees are in operational control of any UAS operated by our operating partners, these requirements apply. If the water district is flying a UAS on Reclamation lands, for their own purposes, requirements outlined in 43 CFR 423 and 43 CFR 429 apply.

### 2.4.1 Research/Cooperative Agreements/Support Services Contracts

Research activities, Cooperative Agreements, or Support Services Contracts that contain provisions for aviation services must follow the policies of this NAMP and all other applicable Departmental requirements.

# 2.5 SES/SL Use of Government Aircraft and Solicitor Approvals

OMB Circular No. A-126 requires the Solicitor (SOL) or his principal deputy to authorize all travel on government aircraft by employees above GS-15, members of their families, and non-Federal travelers. This applies to all government-owned, leased, chartered, and rental aircraft. "Mission requirements" are defined in OPM 7, Appendix 1

(https://www.doi.gov/sites/doi.gov/files/uploads/opm-07.pdf) and specifically exclude travel for meetings or routine site visits. Therefore, for non-mission flights, a cost comparison must be completed and forwarded to the Solicitor.

#### 2.5.1 Mission Travel

Mission travel is transporting people whose presence aboard an aircraft is required to perform, or is associated with the performance of, a governmental function such as, but not limited to, aeronautical research or biological or geological resource management, firefighting, search and rescue, law enforcement, and other such activities.

### 2.5.2 Required Use Travel

Required use travel is rare. An employee is a required use traveler if the President or the head of the agency has determined that the person's travel qualifies as such.

### 2.5.3 Other Travel for Conducting Agency Business

The SOL considers almost all Departmental travel at the SES level and above as non-mission official travel. Even when air travel is the only practical means of transportation to remote or roadless areas, SOL approval is required unless the flight is mission travel.

If an individual boards an aircraft at Point A and returns to Point A without any stops, with the exception of fuel or bathroom stops, SOL approval is not required. See IB 09-01, Revision 1, Guidelines for Requesting Approval from the Office of the Solicitor for SES Travel on Government Aircraft, available at: <a href="https://www.doi.gov/aviation/library/ses\_travel">https://www.doi.gov/aviation/library/ses\_travel</a>.

### 2.5.4 Requests for SOL Approval

All travel on Government aircraft must be authorized in advance. Procedures for approval are detailed in OPM-07, available at: https://www.doi.gov/sites/doi.gov/files/uploads/opm-07.pdf.

# 2.6 Payment and Reports

### 2.6.1 Departmental Aircraft Flight/Use and Aircraft Use Reports

For contract, rental, or charter aircraft, the Contracting Officers Representative (COR) will complete Form OAS-23E, *Aircraft Use Report* (<a href="https://www.doi.gov/aviation/aqd/ams">https://www.doi.gov/aviation/aqd/ams</a>) and submit it to OAS.

### 2.6.2 UAS Flight Aircraft Use Reports

For each UAS flight the PIC will complete form 2U, *UAS Aircraft Use Report* (<a href="https://sites.google.com/a/firenet.gov/unmanned-aircraft-systems/blm-uas-2u">https://sites.google.com/a/firenet.gov/unmanned-aircraft-systems/blm-uas-2u</a>) and submit it to OAS. The PIC will complete the form 2U at the completion of the mission.

### 2.6.3 Nonrevenue Flights

Each nonrevenue flight on approved cooperator aircraft (military or other public agencies) or approved privately-owned aircraft used for personal transportation on Government travel must be documented on Form OAS-23E, *Aircraft Use Report* (<a href="https://www.doi.gov/aviation/aqd/ams">https://www.doi.gov/aviation/aqd/ams</a>) and submitted to OAS.

The comment "not for payment purposes" must be included.

### 2.6.4 Aircraft Use Payment System

The Department uses Aircraft User Reports (AURs) in the Financial and Business Management System (FBMS) to accurately track aircraft usage for both Department-owned and contracted aircraft. Contractors are responsible for submitting AURs for the services they have performed for the Department.

The Aviation Information Reporting Support (AIRS) application was created to facilitate the submission of AURs by private vendors. Vendors must submit their AURs online through AIRS. AURs may be created, saved for later submission, signed by government representative, and submitted without access to FBMS. Additional information is available at: https://www.doi.gov/aviation/agd/ams.

### 2.6.5 Billee Code

Each unit or office using flight services, other than commercially scheduled carriers, must have an individual OAS billee code. This identifier is used for billing flight services and is required to complete Form OAS-23E, *Aircraft Use Report* (<a href="https://www.doi.gov/aviation/aqd/ams">https://www.doi.gov/aviation/aqd/ams</a>). The COR will reconcile all billing discrepancies. The current list of Billie Codes is available at: <a href="https://www.doi.gov/aviation/aqd/ams">https://www.doi.gov/aviation/aqd/ams</a>.

# **Chapter 3: Aviation Safety**

### 3.1 General

Safety of Reclamation personnel and assets is the primary focus of all aviation missions. If any questions or concerns arise during the course of conducting an aviation mission, any participant has the authority to halt operations until the perceived unsafe condition is mitigated, in accordance with SAF TRMR-100 *Stop Work Authority*. While performing their duties, Reclamation personnel may elect, without fear of reprisal, not to fly under any condition they consider to be unsafe.

### 3.2 Risk Assessment

The PIC must ensure a full risk assessment is completed prior to any aviation mission. The first question is always: is aviation an appropriate tool to support the required activities? The risk assessment must identify all perceived risks, including those traditionally included in a job hazard analysis, the appropriate mitigation measure(s) for each risk, and be documented in the mission specific Project Aviation Safety Plan (PASP). Information on how to conduct a risk assessment is included in the Risk Assessment Courses located at: http://www.iat.gov.

# 3.3 Personal Protective Equipment

All individuals participating in aviation activities will wear required PPE as outlined in the mission specific PASP, OPMs, and the *ALSE Handbook* (<a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>).

### 3.3.1 Special Use Flights

Flight crew members, air crew members, and passengers are required to wear PPE on all special use flights (defined in OPM 29, *Special Use Activities and Revised Standards for Technical Oversight*). For most special use flights, PPE minimally consists of fire-resistant clothing (e.g., Nomex), aviator's protective helmet (except in multiengine fixed wing aircraft), leather boots extending above the ankles, and flight gloves made completely of Nomex or leather, or a combination of Nomex and leather. The *ALSE Handbook* contains additional information and is available at: <a href="https://www.doi.gov/aviation/library">https://www.doi.gov/aviation/library</a>.

Wearing of materials with low temperature melting characteristics, such as synthetics (e.g., nylon, Dacron, polyester) and synthetic blends, are not permitted without a waiver or exception in accordance with the *ALSE Handbook*.

#### 3.3.2 First Aid Kits

All aircraft must have a basic first aid kit onboard. In the case of a UAS, the first aid kit will be readily accessible. Additionally, a survival kit containing the minimum items listed in the *ALSE Handbook* must be onboard all special use flights.

#### 3.3.3 Personal Flotation Device

In single engine aircraft, for operations beyond power-off gliding distance to shore, passengers must wear a Personal Flotation Device (PFD) approved for aircraft use. United States Coast Guard approved PFDs are not approved for aircraft use.

In multiengine aircraft, a PFD must be immediately available to each seated occupant.

When water takeoffs or landings are performed, occupants of all aircraft must wear PFDs.

# 3.4 Aviation Mishaps

All aviation mishaps, incidents, and accidents will be reported, via SAFECOM, to the OAS Aviation Safety Manager and the NAM. Aircraft mishaps are broadly defined below. Final designation of the mishap will be determined by the OAS Aviation Safety Manager.

### 3.4.1 Accidents

Accidents involve death, serious injury, or substantial damage to the aircraft. The National Transportation Safety Board (NTSB) is responsible for investigating aircraft accidents. All aviation accidents will be reported immediately to the NAM, RD, and OAS in accordance with 352 DM 3, *Aircraft Mishap Notification, Investigation and Reporting* (http://elips.doi.gov/ELIPS/DocView.aspx?id=1103) and Reclamation guidance.

### 3.4.2 Incidents With Potential

An Incident with Potential is an incident that narrowly misses being an accident and in which the circumstances indicate significant potential for substantial damage or serious injury. Final classification will be determined by the OAS Chief of Aviation Safety and Program Evaluations.

### 3.4.3 Aviation Incidents

An aviation incident is an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

### 3.4.5 Aviation Mishap

Mishaps include aircraft accidents, incidents with potential, aircraft incidents, aviation hazards (such as faulty equipment or improper use of an aircraft), and aircraft maintenance deficiencies.

### 3.4.6 Aviation Mishap Investigations

All Departmental accidents are the domain of the NTSB and the OAS Safety Office. NTSB may authorize OAS to investigate accidents for NTSB. If this occurs, the OAS is working with the NTSB and is bound by 49 CFR 830-831. If needed, Reclamation will offer a qualified individual to assist with the investigating agency and may also independently review the mishap internally. The Reclamation RD, in conjunction with the NAM, will offer the appropriate individuals to the OAS Aviation Safety Manager. When NTSB investigates Departmental accidents, OAS will be included and serve as the Department's representative. Employee participation (e.g., interviews, witness statements) in mishap investigations is required.

#### 3.4.7 Reclamation Review Process

Unless otherwise directed by OAS, the RD, in coordination with the Director, SSLE, and NAM will determine within 14 calendar days, whether an internal Reclamation review of the mishap is necessary.

# 3.5 Mishap Notification Procedures

Each region must develop a Regional Aviation Mishap Response Plan that specifies national, regional, and local points of contact and the necessary actions to be accomplished in the event of an aviation incident or accident. An outline of the required actions is found in the Interagency Aviation Mishap Response Guide and Checklist at <a href="https://www.doi.gov/aviation/safety/iamrgc">https://www.doi.gov/aviation/safety/iamrgc</a>.

In the event of an aircraft accident, incident with potential, or when any of the mishaps listed above occur, the aircraft operator, flight manager, pilot, or person with flight following responsibilities must immediately, and by the most expeditious method, notify the OAS Aviation Safety Office, (24/7) at 1 888-4MISHAP (1-888-464-7427), the RD, and the NAM.

In the case of an accident or incident with a UAS, the PIC will notify the RAM and NAM. Unless there is injury to persons or property damage over \$500, the pilot will file a SAFECOM only. A call to the OAS Aviation Safety Office is not required.

This Plan is not intended to delay the notification of immediately needed and locally available resources in the event of a life threatening emergency or when notification could delay resolution of an ongoing problem.

### 3.5.1 SAFECOM Submissions

Any person directly associated with aviation activities within the Department may submit a SAFECOM. Individuals are required to immediately report any aviation hazard that compromises the safety of personnel or equipment. SAFECOMs will be submitted at <a href="http://www.safecom.gov">http://www.safecom.gov</a>. If internet access is unavailable, hard copy SAFECOMs will be submitted through the RAM, NAM, or direct to the OAS Aviation Safety Office. Regardless the method used, the submitter must always retain a copy for his or her records.

SAFECOMs must be submitted as soon as practically possible. The SAFECOM must include all known information in as great detail as possible. Employees may update SAFECOMS as additional information is gathered.

### 3.5.2 Use of SAFECOMs

Submitting a SAFECOM is not a substitute for "on-the-spot" corrections(s) to a safety concern. Rather, the SAFECOM is a tool used to document and track safety concerns and follow-up corrective action(s) related to those safety concerns. However, it is important to remember that utilization of the SAFECOM does not replace the requirement to initiate a DI-134, *Report of Accident/Incident*, as required in 352 DM 3.3.6 *Aviation Mishap Response Plan*.

# 3.7 Hazard Maps

Available hazard maps of the planned flight area and altitude must be reviewed by all participants prior to the mission. In this instance a hazard is any obstacle protruding into the planned flight altitude or path. Known and potential wire strike locations in the flight area must be reviewed, and the pilot must be informed about them during flight planning activities. Any new hazards found in the flight area must be added to the hazard map. Flight managers and pilots are required to review hazard maps before each flight.

# **Chapter 4: Flight Operations**

### 4.1 General

Reclamation has a variety of missions that may be accomplished with aviation resources. These missions include, but are not limited to, point to point transportation, research and development activities, scientific efforts, and inspections. The use of fixed or rotor-wing aircraft must be accomplished via IA, MOU, contract, or end product/service contracts, as Reclamation no longer owns these type of fleet aircraft.

Missions accomplished by UAS must comply with all FAA aviation requirements. Reclamation currently leases UAS fleet aircraft and employs certified pilots, and as such these resources must be considered first when mission planning.

All aviation missions not conducted by Reclamation, where Reclamation maintains operational control, must be contracted through OAS and AQD.

# 4.2 Operational Control

Operational control is the exercise of authority over initiating, conducting, or terminating a flight. Reclamation is in operational control of any internal or contracted mission that does not specifically waive operational control. Even if operational control is waived, individuals must not provide any additional direction to the operator during the course of the mission so Reclamation does not take operational control, or it is not perceived that Reclamation is in operational control.

Any missions where Reclamation contracts for flight services with the intention of maintaining operational control must be coordinated through OAS and procured through AQD.

# 4.3 Special Use

Special use is defined in 350 DM 1 and OPM 29 as operations for which special pilot qualifications and techniques, special aircraft equipment, and PPE are required to ensure safe transportation of personnel and property. OAS authorization for both pilot and aircraft is required for special-use operations.

Reclamation does not generally perform special-use missions. If a special-use mission is necessary, the aircraft will not be under Reclamation's operational control and requires special permission from the NAM and OAS.

# 4.4 Fixed and Rotor-wing Aircraft

Reclamation no longer has fleet operations of fixed or rotor-wing aircraft. All contracted use of these aircraft must follow procedures outlined in contract language and this document.

# 4.5 Transport of Hazardous Materials by Aircraft

Reclamation must only use commercially approved methods for transportation of Hazardous Materials (HazMat) materials. This includes transportation of all UAS battery packs.

# 4.6 Transport of Cargo/Equipment

Only cargo and/or equipment necessary to accomplish the mission are permitted on-board aircraft, under Reclamation operational control, and must be transported in accordance with FARs and Departmental policies. For helicopter requirements, refer to IHOG Chapter 11, *Cargo Transport*, available at: <a href="https://www.doi.gov/aviation/library/guides">https://www.doi.gov/aviation/library/guides</a>.

# 4.7 Project Aviation Safety Plans

The PIC is responsible for all mission planning. The PIC will complete and certify a PASP for all flights including those not conduced within the National Airspace, such as indoors.

At a minimum, the following approvals are required, based on the mission complexity, as defined in the risk assessment included in the PASP:

- High Deputy Director, SSLE
- Serious NAM
- Medium RAM
- Low Immediate Supervisor for the PIC

Approvals must build on each other, e.g. a medium complexity mission will include the PIC's immediate supervisor and the RAM. The PIC must make every effort to streamline the approval process by not including unnecessary approval signatures. Coordination with other impacted parties will occur outside the PASP approval process.

When planning missions, the PIC must allow appropriate time for coordination and approval. Each signatory will have a minimum of five days to review and approve each PASP. Approval authority for PASPs may not be further delegated, including to an acting. If the mission is necessary, and appropriate communication has been done in advance, an equivalent supervisor who has taken the required training may sign the document, but the final approval will increase a level (e.g low to medium).

If circumstances change during the mission, work will stop and the PASP must be updated. If the risk level doesn't change, email notification will be provided to the signatories with a

justification of the change. If the risk level changes, the PASP must be resigned before work may continue.

The RAM will post copies of all signed PASPs to the Aviation Google Drive within five days of the completion of the mission.

For contract flights, where Reclamation has operational control, the COR is responsible for ensuring the contractor completes the PASP prior to any flight activities.

### 4.7.1 Environmental Considerations

Flight operations may be restricted because of environment factors such as darkness, temperature, wind, snow, rain, fog, and cloud cover. All flights shall be flown in accordance with 351 DM 1 (http://elips.doi.gov/ELIPS/DocView.aspx?id=1088).

Employees must terminate flight operations if the weather is below the applicable minimum by returning to the starting point or landing at the nearest safe spot. Flight operations are prohibited until the weather improves above the applicable minimum. The PIC may set a more restrictive weather minimum if necessary for a safe flight.

# 4.8 Flight Plan and Flight Following

Flight plans must be prepared and flight following must be conducted for all Reclamation traditional aviation activities, including contracted flights, as outlined in the 351 DM 1.4, available at: <a href="http://elips.doi.gov/ELIPS/DocView.aspx?id=1088">http://elips.doi.gov/ELIPS/DocView.aspx?id=1088</a>. UAS operations do not require flight following outside of the visual observer requirements.

Position reporting must not exceed 1-hour intervals under normal circumstances. To fulfill this requirement, regions are encouraged to establish agreements for flight following with other agency coordination and dispatch centers (e.g., Bureau of Land Management, USFS).

All regions will develop a Flight Following Plan.

### 4.9 Pilot Qualification Card

The Departmental Pilot Qualification Card must be carried by pilots and physically inspected by the COR or PIC prior to each mission. If the card is unavailable, the pilot's authorization to fly the mission must be verified prior to the flight. Approval of cooperator flight crew members must be accomplished via the cooperator approval process.

# 4.10 Unmanned Aircraft Systems

UAS are considered fleet aircraft and subject to all policy and procedures governing acquisition, funding, and use, including those outlined in this NAMP. No individual or office may acquire or use UAS for any purpose without advanced approval by the NAM and Director, SSLE, and in

compliance with OPM-11, DOI *Use of Unmanned Aircraft Systems*, available at https://www.doi.gov/sites/doi.gov/files/uploads/opm-11.pdf.

All UAS must be procured through OAS, in accordance with all DM and OAS requirements.

### 4.10.1 UAS Request/Approval Process

OAS requires a formal request for approval and purchase of all UAS. The form, OAS 13U DOI *Small Unmanned Aircraft Systems Acquisition Request Form* is available at: <a href="https://www.doi.gov/sites/doi.gov/files/uploads/oas-13u.pdf">https://www.doi.gov/sites/doi.gov/files/uploads/oas-13u.pdf</a>.

### The 13U shall include:

- evaluation of the relative merits of purchase versus contracting in accordance with OMB Circular A-11, Part 7, and Exhibit 300 process;
- details related to proposed mission purposes;
  - o How will the UAS be used and what are the benefits to purchasing the aircraft?
- the type and number of aircraft requested;
- the number of proposed pilots, their commitment to training and the policy requirements in this NAMP, and how proficiency will be maintained;
- the level of supervisory support;
- acquisition and operating costs;
- proposed equipment enhancements, if any;
- who is the custodial officer;
- a general overview of the storage plan for the aircraft;
- financial reserves for aircraft replacement purposes; and
- information on opportunities for sharing aircraft and pilots with other Reclamation offices.

Reclamation shall not conduct UAS operations until the 13U is approved by the local supervisor, RAM, RD, NAM, Director, SSLE, and OAS, and all minimum requirements have been met. Requests must be initiated at least 6 months (estimated) before the anticipated UAS mission start date.

### 4.10.2 Minimum Operational Requirements

All aircraft and pilots will be carded by OAS prior to use.

Departmental UAS Operators must be FAA certified 107 commercial UAS operators. Departmental operators of UAS must receive training for the specific systems they will operate. OAS will identify appropriate training in conjunction with FAA regulations. Operators must possess training certificates from OAS or OAS approved sources before receiving OAS certification as a Departmental UAS operator.

When a Departmental employee has satisfied all requirements listed above, the OAS UAS coordinator will issue a Departmental UAS Operator/Pilot LOA. The LOA must specify which UAS system(s) the operator is approved to operate.

At minimum, all UAS missions must have a PIC and a dedicated visual observer. Dedicated visual observers must also be certified pilots. When conducting missions that cover a large area or are more complex, additional flight observers may be used in conjunction with the dedicated visual observer and do not have to be certified pilots. In addition, support staff may be necessary, due to the complexity of a mission, as determined by the PIC.

For contracts where Reclamation has operational control, the COR is responsible for ensuring that pilots are appropriately carded and certified prior to any flight activities. Contractor visual observers do not have to be trained pilots. However, if a Reclamation employee is serving as the visual observer, the above requirements apply.

### 4.10.3 Request For UAS Pilot Training

All requests to complete UAS Pilot training must be approved in writing by the immediate supervisor, RAM, and NAM. When submitting requests, consideration must be given to the number of pilots being trained and the number of missions proposed per year. Pilots must be trained with the intention of becoming proficient in Reclamation requirements, planning, and operations.

# **Chapter 5: Aviation Training**

# 5.1 Required Aviation Training

RAMs are responsible for ensuring that all employees and their immediate supervisors involved in the use or control of aviation resources receive the required level of aviation training. Qualification standards and requirements are available in OPM-04 (<a href="https://www.doi.gov/sites/doi.gov/files/uploads/opm-04.pdf">https://www.doi.gov/sites/doi.gov/files/uploads/opm-04.pdf</a>). Training is available at: <a href="https://www.iat.gov">https://www.iat.gov</a>.

### 5.1.1 Required Training for Personnel Flying on Cooperator Aircraft

All personnel traveling on cooperator aircraft for point to point activities must complete A-100, Basic Aviation Safety, prior to traveling on the aircraft. If the individual traveling on a cooperator aircraft is considered a crew member or the flight is a special use flight, training requirements outlined in OPM-04 must be met prior to the flight activities.

### 5.1.2 Unmanned Aircraft System Pilot Training

In addition to the requirements outlined in OPM-11, all UAS pilots must complete the following:

- A-100, Basic Aviation Safety
- A-107, Aviation Policy and Regulations
- A-116, General Awareness Security Training
- A-200, Mishap Review
- A-205, Risk Management I
- A-302, Personal Responsibility and Liability
- A-305, Risk Management II
- A-311, Aviation Planning
- Reclamation Requirements and Expectations for UAS Pilots

# 5.2 Aviation Training Equivalencies

The NAM, working with the OAS Training Division, is authorized to determine aviation training equivalencies for training that has been acquired from sources other than IAT.

# 5.3 Contracting Officer Representative

All aviation contracts must be accomplished in accordance with Section 2.2, or end product/service contract requirements.

No matter the contract vehicle, or approving acquisitions office, all CORs for aviation activities must meet all FAR and Departmental training requirements for COR certification. In addition, all CORs for aviation activities must complete the following:

- A-100, Basic Aviation Safety
- M-2, Aviation Manager Line Managers Briefing

# 5.4 Aviation Training Records

Aviation training records for Reclamation employees must be maintained by the respective Region in accordance with OPM-04, *Aviation User Training Program*. The IAT records database will be used to meet this requirement.

# **Chapter 6: Aircraft Security**

### 6.1 General

As Reclamation does not own or operate fleet aircraft, this section does not apply.

### 6.2 UAS

All regions with UAS activities must develop a UAS Security Plan to ensure UAS are properly stored and accounted for at all times.

# **Chapter 7: Airspace Coordination**

### 7.1 General

Reclamation does not operate fleet aircraft so this section is specific to UAS operations. All contracted or cooperator flights will follow the FAA rules and regulations for airspace.

# 7.2 Interagency Airspace Coordination

Interagency airspace coordination is accomplished through the Interagency Airspace Subcommittee (IASC) charted under the National Interagency Aviation Council (NIAC). Guidance and education is provided through the *Interagency Airspace Coordination Guide* (IACG) available at: <a href="https://www.nwcg.gov/publications">https://www.nwcg.gov/publications</a>.

### 7.3 Notice to Airmen

A NOTAM must be filed for all aviation missions, even those flown under FAA 107 regulations.

# 7.4 Flight Planning

UAS pilots have a variety of airspace authorizations available when planning missions:

- FAA Part 107
- Certification of Waiver or Authorizations (COA)
- DOI Blanket COA (<a href="https://www.doi.gov/sites/doi.gov/files/uploads/faa\_form\_7711-1">https://www.doi.gov/sites/doi.gov/files/uploads/faa\_form\_7711-1</a> 2016-csa-185 doi rev 1.pdf)
- Emergency COA
- 107 Waiver
- Memorandum of Agreement (MOA) for Class G airspace (<a href="https://www.doi.gov/aviation/uas/moa">https://www.doi.gov/aviation/uas/moa</a>)

Each authorization provides different authorities and requirements for flight with a specific timeframe for implementation. Missions flown under FAA Part 107 and the DOI Blanket COA require no advanced notification, while missions flown under a new COA require at least 6-months for approval.

All UAS missions must be flown under one of the authorizations listed above. The PIC must determine the best authorization for the mission. If additional approval is required for the authorization selected, the PIC must coordinate with the RAM and NAM in advance.

The preference is always to fly under the auspices of the Departmental Blanket COA.

### 7.5 Hazards and Obstructions

Regions are responsible to develop area flight hazard maps or planning tools that are posted and available for flight planning purposes. The following hazards or locally significant areas must be included on the flight hazard maps:

- Military Airspace Warning Area (WA), Restricted Area (RA), Military Operations Area (MOA), Alert Area (AA), Prohibited Area (PA), Military Training Routes (MTRs), Controlled Firing Areas (CFA), Slow Routes (SR), Aerial Refueling Routes (ARs) and Low Altitude Tactical Navigation (LATN) Areas;
- Airspace Class B/C/D and National Security Areas;
- Airports/airstrips public and private, military;
  - o Include frequencies of nearby airports
- Dispatch zone boundaries;
- Parachute, hang glider, rocket, model airplane operating areas;
- Towers over 200 feet (other towers as locally determined significant);
- Highways and roadways;
- Open, fast, or high water areas near streams and reservoirs;
- Wires Major transmission lines, other lines determined locally as significant (wires crossing canyons, rivers, lakes, near airports); and,
- NOTAMs.

When incorporating this information into a PASP, the PIC must have situational awareness of the entire project area and surroundings proposed for the mission.

# 7.6 No-Fly Zones

Reclamation currently has five FAA established no-fly zones for all air traffic under 400 feet, specifically directed at UAS traffic. These restrictions are in place at: Folsom, Glen Canyon, Grand Coulee, Hoover, and Shasta Dams and Powerplants. All commercial operators of aircraft must contact the local facility to receive a permit to operate. The permitting process is outlined in local procedures, generally through the land management office.

In addition, 43 CFR Part 423 Public Conduct on Bureau of Reclamation Facilities, Lands, and Waterbodies (<a href="https://www.gpo.gov/fdsys/granule/CFR-2011-title43-vol1/CFR-2011-title43-vol1-part423">https://www.gpo.gov/fdsys/granule/CFR-2011-title43-vol1-part423</a>) restricts the operation of all commercial UAS from Reclamation lands without prior approval.

# 7.7 Airspace Conflicts

While the word "deconflict" is not in the dictionary, it is a commonly referred aviation term describing the process of reducing the risk of a mid-air collision or a Temporary Flight Restriction (TFR) intrusion. Airspace deconfliction must occur for both emergency response and non-emergency aviation activities.

Pilots must obtain all information pertinent to flight before flying. This is accomplished by obtaining a briefing from the FAA through the Flight Service Stations. This is the official source of NOTAM information. DOD units that have special use airspace or military training routes share this information as hazards information on the resource order when the aircraft are dispatched.

Aviation Internet websites are prolific on the internet. When used for obtaining airspace information, the user must be aware of any disclaimers regarding the timeliness of the information posted. The FAA's U.S. NOTAM office provides current TFR information through DOD Internet NOTAM Service (DINS) at: <a href="https://www.notams.faa.gov/dinsQueryWeb/">https://www.notams.faa.gov/dinsQueryWeb/</a> and <a href="https://www.faa.gov">https://www.faa.gov</a>.

If a PIC encounters an airspace conflict, he or she will file a SAFECOM.

### 7.7.1 Operations Along Foreign Borders

All aircraft operations along border patrol zones must be coordinated with the U.S. Border Patrol. All pilots will be briefed about border zone flight procedures.

# **Appendix 1: Requirements for End Point Contracting**

### General

End product contracts are not aircraft flight service contracts. End product contract is a means of procuring a service which may involve the use of aviation resources to produce an end product (e.g. the use of an aircraft to spray or dust a field). The intent of this type of procurement is for the contractor to supply all personnel and equipment in order to provide a "service" or "end-result." Many contractors utilize aircraft (including UAS) to meet the performance objectives of end product contracts for activities such as: animal capture, seeding, spraying, survey, photography, etc. Since these are not flight services contracts, the AQD does not perform any acquisition service. End product contracts are administered by Reclamation procurement units.

These contracts must be conducted in accordance with 353 DM 1.2A (3) and DOI Operational Procedures Memorandum (OPM)-35, found at:

https://www.doi.gov/sites/doi.gov/files/uploads/opm-35.pdf. OPM-35 aids in determining whether an operation is being conducted as either end product or flight service. If the provisions of 353 DM 1.2A (3) and OPM-35 are met, the aircraft will be operated as a civil aircraft and the aviation management principles normally required for aircraft under Departmental operational control do not apply.

# **End Product Contract Specifications**

Specifications in solicitations and contracts must only describe the desired quantity or quality of the "service" or contracted "end-result." Contracting officers, procurement specialists and aviation managers at all levels must be aware of these requirements. Reclamation contracting officers, contract specialists, and resource specialists must consult with the Reclamation aviation managers if the acceptable language guidelines do not address a specific project requirement or the contract solicitation does not follow the guidelines in OPM-35. End product contracts where contractors could conceivably utilize aircraft must be reviewed by the regional aviation manager or National Aviation Manager to ensure that specifications and language do not unintentionally imply or determine aircraft operational control.

When end product solicitations and contracts are being drafted, the acquisition community will use the information described below:

- The work must be described in terms of: scale of area, general topography, elevation, slope, vegetation, and accessibility by roads or off-road vehicles, land use restrictions for mechanized equipment, etc.
- The contract language will not describe aircraft or pilot capabilities, standards, requirements or aircraft specific payment provisions.

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- In areas of military airspace it is acceptable to describe coordination agreements with
  military airspace scheduling or range control authorities and that it is the contractors'
  responsibility to coordinate their activities with the scheduling office or Range Control.
  Close coordination is necessary to ensure compliance with applicable airspace
  coordination agreements that states have with military authorities.
- Do not mention or require flight hour/aircraft usage reports.

The following language must be included in solicitations and contracts:

- Contractor is required to demonstrate to the government that the equipment is able to capture the imagery and/or data as specified in the project description.
- The Contractor must comply with all applicable Federal, state and local regulations and land-use permitting procedures.
- Contractor must provide a communication system so that contractor personnel engaged in the project at different locations are able to communicate at all times with each other, and so that government Project Inspectors may communicate with the contractor at any time to discuss performance matters.
- The government VHF-FM radio system may have to be described.
- Only approved contractor personnel, contractor equipment and government-provided equipment required for performance will be transported by contractor vehicles, trailers, animals or equipment.
- Any ground or aerial hazards that would pose a danger to Contractor's personnel or operating equipment must be identified and mitigated by the Contractor prior to commencing operations.

# **Operational Control**

During the performance of end product contracts, Reclamation employees will not exercise operational control of the aircraft in any way. Reclamation employees will not direct the contractor as to flight profiles, flight following, landing areas (except for areas that are off limits due to land management restrictions), use of personal protective equipment, etc.

Reclamation personnel assigned as a COR to administer end product contracts will have no aviation management responsibility or authority. All traditional COR requirements and training defined by the FAR apply. Reclamation requirements listed in Section 5.3 do not apply to end point contracts.

All COR directions to the contractor must be in terms of the service or end-result being specified: desired imagery quality, number and disposition of animals surveyed, etc. It is acceptable to inform military airspace scheduling authorities or range control that the contractor plans on performing work during specified time periods and provide the military authorities the contractor contact information. Reclamation employees will not perform the airspace scheduling service for the contractor. Reclamation personnel must not become involved in any way with aircraft ground operations such as take-off and landing areas, loading, fueling, etc.

# **Aircraft Use Reporting**

Since aircraft utilized by the contractor under Reclamation end product contracts are operating entirely within the applicable 14 CFR as a civil aircraft, and procurement is not through AQD, Reclamation or the contractor will not submit any billing invoices to AQD. All invoices will be submitted to the responsible acquisitions office in accordance with the contract terms. Any flight time incurred by the contractor will not be recorded or reported as Reclamation aviation statistics because Reclamation does not have operational control of the aircraft.

#### **Aircraft Incidents and Accidents**

Although aircraft utilized by the contractor under end product contracts are operating entirely within the applicable 14 CFR as a civil aircraft, to continue to promote aviation safety Reclamation will report aviation incidents or accidents incurred by these contractors through the Departmental Aviation Mishap Information System. These events must be noted in the contract daily diary and reported through channels as normally required for end product contracts.

# **Reconnaissance/Observation Flights**

Before, during or after the performance of an end product contract it may be necessary for Reclamation employees to aerially survey or inspect the project area.

When flights transporting Reclamation personnel are required, an AQD aviation flight service procurement (completely separate from the end product contract) is required. Aircraft and pilots must have current OAS approvals for the intended mission and a current Departmental contract or Aircraft Rental Agreement must be in place. When a Departmental procurement is utilized all aviation management policy, procedures, and requirements must be applied.

# **Operations within Military Airspace**

If an end product contract project using aircraft is being conducted within Military Airspace (MOA, RA, MTR) it is the responsibility of the contractor to coordinate with the Military Airspace Scheduling Office. Reclamation Contracting Officers and CORs must inform the contractor of any Departmental agreements with the Military organizations regarding airspace.

# **Appendix 2: Review and Acknowledgement of the NAMP**

I acknowledge that I have read and understand the National Aviation Management Plan. As a member of Reclamation's aviation community I will follow the requirements outlined in this Plan and provided by regional and national program managers when participating in all aviation activities. I will represent Reclamation and Reclamation's Aviation program professionally in all situations.

N	ame	•

Supervisor

#### **RECLAMATION MANUAL APPROVAL FORM**

Reclamation Manual Release Number and Subject:			
NAMP Final Draft Tempoary Reclamation Manual Release			
Summary of Changes (if applicable):			
This is a temporary release of the National Aviation Management Plan. The plan was reformatted to meet Office of Aviation Services requirements. Plan appendices are still under development, however, due to ongoing mission flights, Reclamation needs to issue the plan as a temporary release to guide and direct current activities.			
Terms/Words for Index and Search Engine:			
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Union referral not required.			
(Signature) 10/19/2017			
DAVID L. Williams Human Resource Specialist			
Approved by Management (temporary actings cannot approve Reclamation Manual actions):			
My signature below indicates my approval of this Reclamation Manual action described in the Summary of Changes section above.			
(Signature)  Bruce C Muller Jf Director, SSCE  (Name and Title)			



# National Aviation Management Plan (NAMP)

**Security Safety and Law Enforcement** 



# **Mission Statements**

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

# National Aviation Management Plan

Prepared by:	
Toni Linenberger	
National Aviation Manager, Acting	
Approved by:	
Bruce C. Muller, Jr.	
Director, Security Safety and Law Enforcement	

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# **Acronyms**

AA Alert Area

AIRS Aviation Information Reporting Support

ALSE Aviation Life Support Equipment
AMIS Aviation Mishap Information System
AQD Acquisitions Services Directorate

ARR Aerial Refueling Routes
AUR Aircraft User Reports
CFA Controlled Firing Areas
CFR Code of Federal Regulations
COA Certificate of Authorization

COR Contracting Officer's Representative
Department U.S. Department of the Interior

DM Departmental Manual
EAB Executive Aviation Board
EAC Executive Aviation Committee
EAS Executive Aviation Subcommittee
FAA Federal Aviation Administration
FAR Federal Aviation Regulations

FBMS Financial and Business Management System

HB Handbook

HAZMAT Hazardous Materials
IA Interagency Agreement

IACG Interagency Airspace Coordination Guide

IASC Interagency Airspace Committee
IAT Interagency Aviation Training

IHOG Interagency Helicopter Operations Guide

LATN Low Altitude Tactical Navigation

LOA Letter of Authorization MOA Military Operations Area

MOU Memorandum of Understanding

MTR Military Training Routes NAM National Aviation Manager

NAMP National Aviation Management Plan NIAC National Interagency Aviation Council

NOTAM Notice to Airman

NTSB National Transportation Safety Board

OAS Office of Aviation Services

OMB Office of Management and Budget OPM Operational Procedures Memoranda

PA Prohibited Area

PFD Personal Flotation Device PASP Project Aviation Safety Plan

PIC Pilot-in-Command

PPE Personal Protective Equipment

RA Restricted Area

RAM Regional Aviation Manager
Reclamation Bureau of Reclamation
RD Regional Director
SAFECOM Safety Communiqué

SSLE Security Safety and Law Enforcement

SOL Solicitor of the U.S. Department of the Interior

SR Slow Routes

TFR Temporary Flight Restriction
UAS Unmanned Aircraft Systems
USFS United States Forest Service

WA Warning Area

# **Chapter 1: Aviation Organization Overview**

# 1.1 Background and Purpose

The Bureau of Reclamation's National Aviation Management Plan (NAMP) defines the national aviation program and allows all regions, area offices, and aviation users to easily acquire the necessary requirements and information to manage and execute the Reclamation aviation program. The NAMP describes Reclamation's intent, authority, role and responsibilities, and program objectives, and provides strategic and operational requirements. This plan builds on the policy requirements described in Federal Aviation Administration (FAA) Regulations (<a href="http://www.faa.gov/">http://www.faa.gov/</a>), Departmental Manual (DM), Operational Procedural Memoranda (OPM) (<a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>), and other referenced requirements.

This aviation plan applies to flight services other than those acquired on a seat-fare basis from commercial air carriers (e.g., Delta, United) in the United States, Trust Territories, and Possessions operating under Federal Aviation Regulations (FAR) Part 121.

The FAA considers Unmanned Aircraft Systems (UAS) aircraft. All requirements for aircraft, including those outlined in this NAMP, apply to UAS and missions.

Aviation activities present a high risk for those involved as well as the agency as a whole. Considerable time, and thought, must be given to aviation operations as a whole and the decision to develop internal capabilities within the organization. The risks must outweigh the benefits. All individuals associated with aviation must read and follow the NAMP; formal acknowledgement of the NAMP is required (see Appendix 2).

# 1.2 Aviation Program Objectives

The Reclamation aviation program provides requirements, oversight, and tools to promote public safety, Reclamation staff and facility safety, and efficient management solutions. Aviation management balances mission goals with the environmental considerations, available funding, and safety of the involved personnel.

**Safety:** The priority in all Reclamation aviation missions is the safety of employees, contractors, cooperators, and the public.

- Risk management is inherent to all aviation missions and programs.
- All aviation personnel are empowered and expected to manage the risks of aviation operations and make reasonable and prudent decisions to accomplish the mission.
- Aviation personnel must take every opportunity to plan missions thoroughly and respect aircraft and the environment in which they operate.
- Individuals will be held accountable for their decisions, which will be based on policy, principles, risk management, training, experience, and the given situation.

Reclamation is committed to ensuring workplaces are free of recognized hazards.
 Prior to conducting any mission, all risks will be mitigated to the lowest acceptable level possible.

**Professionalism:** Reclamation personnel performing aviation functions must meet all qualification requirements as stated in U.S. Department of the Interior (Departmental) and Reclamation policy, requirements, manuals, handbooks, and guides.

**Innovation:** Management at all levels is responsible for enhancing the aviation program with a commitment to aviation safety and operational and management efficiency.

# 1.3 Federal, Departmental, and Reclamation Management Policies

Reclamation aviation management and operations will be conducted within policies contained in the FAR, DM, OPM, and Handbooks (HB). Specific HB, plans, and guides listed below are incorporated by reference and are Reclamation requirements.

#### 1.3.1 Federal Aviation Regulations

These regulations are the basic guide for piloting and aircraft operations within the national airspace. FAR, Title 14, Chapter 1, of the Code of Federal Regulations (CFR) may be obtained from the Government Printing Office, commercial book stores selling pilot and aviation materials, or at: <a href="http://www.faa.gov">http://www.faa.gov</a>.

#### 1.3.2 Office of Management and Budget Circulars

Office of Management and Budget (OMB) Circular No. A-11, Part 7, Exhibit 300 Process; A-123 (<a href="https://obamawhitehouse.archives.gov/omb/circulars\_a11\_current\_year\_a11\_toc">https://obamawhitehouse.archives.gov/omb/circulars\_a11\_current\_year\_a11\_toc</a>) and A-126 (<a href="https://obamawhitehouse.archives.gov/omb/circulars\_a126">https://obamawhitehouse.archives.gov/omb/circulars\_a126</a>) prescribe procedures for acquisition of fleet aircraft, internal program control, and the management and use of Federal Government aircraft.

#### 1.3.3 Departmental Manual

Departmental Manual (DM) Parts 350 354 are the aviation policies for all Departmental bureaus and offices. The DM is available at: <a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>.

#### 1.3.4 Departmental Operational Procedures Memoranda

Operational Procedures Memoranda (OPM) are interim directives that may become final policies. OPM are available at: https://www.doi.gov/aviation/library/.

#### 1.3.5 Departmental Handbooks/Interagency Guides/Standards

The *Aviation Life Support Equipment* (ALSE) *Handbook* provides policies, procedures, and responsibilities for using aviation life support equipment. The *Interagency Helicopter Operations Guide* (IHOG) provides standardized helicopter procedures across all types of operations. These documents are available at: <a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>.

#### 1.3.6 Departmental and Interagency Information Bulletins

Information bulletins, which contain material of a general nature, and do not have a defined expiration date, are available at: https://www.doi.gov/aviation/library/.

#### 1.3.7 Departmental and Interagency Safety Alerts

Safety alerts, which are time-sensitive documents that are published, as needed, are available at: <a href="https://www.doi.gov/aviation/safety/safety\_alerts">https://www.doi.gov/aviation/safety/safety\_alerts</a>.

#### 1.3.8 Departmental and Interagency Aviation Accident Prevention Bulletins

These bulletins, which contain material with wide application and are issued as needed, are available at: https://www.doi.gov/aviation/safety/accident\_prevention\_bulletins.

#### 1.3.9 Departmental and Interagency Technical Bulletins

Technical data and recommendations regarding aircraft are published in technical bulletins, when warranted, and are available at: <a href="https://www.doi.gov/aviation/tech/tech\_bulletins">https://www.doi.gov/aviation/tech/tech\_bulletins</a>.

#### 1.3.10 Reclamation Plans

- Reclamation National Aviation Management Plan
- Regional Flight Following Plans
- Regional Mishap Response Plans
- Project Aviation Safety Plan(s) (PASP)

# 1.4 Organizational Roles and Responsibilities

#### 1.4.1 Department of the Interior

#### 1.4.1.1 Office of Aviation Services.

Office of Aviation Services (OAS) is responsible for Departmental functions related to aircraft services. OAS provides service offerings that include aviation safety services, aviation technical services, fleet management, fleet property accountability, aviation user training services, and flight scheduling and coordination services. A complete list of functions and responsibilities is included in 350 DM 1 (https://www.doi.gov/aviation/).

#### 1.4.1.2 Interior Business Center Acquisition Services Directorate.

Acquisition Services Directorate (AQD) provides Department-wide centralized acquisitions management for the Department and Departmental customers. Activities include contracting for aviation flight services, property accountability, and small purchase service in support of OAS and bureau and office operations, including Departmental fleet aircraft (https://www.doi.gov/aviation/aqd).

#### 1.4.2 National Aviation Groups/Committees

#### 1.4.2.1 Executive Aviation Board.

The Executive Aviation Board (EAB) is responsible for the Department's aviation program. The board provides executive oversight and performance accountability and assures that Department-wide strategies and initiatives are developed collaboratively and implemented consistently. The

board provides final review and approval of policy, when needed. The EAB is chartered under the direction of the Deputy Assistant Secretary for Public Safety, Resource Protection, and Emergency Services. The EAB has authority over all aviation related boards/committees/groups within the Department. Reclamation's Deputy Commissioner – Policy, Administration, and Budget is the permanent member to the EAB.

#### 1.4.2.2 Executive Aviation Committee.

The Executive Aviation Committee (EAC) is chartered under the direction of the EAB. The committee follows guidance and directives from the EAB and collaboratively works to meet EAB and Departmental objectives. The EAC also provides aviation program performance measurement metrics to the EAB. The EAC is responsible for establishing a Bureau Aviation Managers working group, the Executive Aviation Sub-Committee, to be the primary surrogate of the EAC to engage in all Departmental aviation-related issues at the operational level. Reclamation's Director, Security Safety and Law Enforcement (SSLE), is the permanent member to the EAC.

#### 1.4.2.3 Executive Aviation Subcommittee.

The Executive Aviation Subcommittee (EAS) is an advisory group for the EAC. Reclamation's National Aviation Manager (NAM) is the permanent representative to the EAS.

#### 1.4.3 Bureau of Reclamation

#### 1.4.3.1 Commissioner, Bureau of Reclamation.

The Commissioner is responsible for Reclamation's aviation management program.

#### 1.4.3.2 Director, Security, Safety and Law Enforcement.

The Director, SSLE, provides national direction for Reclamation's aviation program, and is responsible for the implementation, execution, and enforcement of Departmental aviation policy and the development and execution of Reclamation aviation requirements, program development, and oversight.

#### 1.4.3.3 National Aviation Manager

The NAM serves as Reclamation's principal aviation advisor. The NAM:

- Provides guidance and subject matter expertise on all aviation-related activities.
- Represents Reclamation at interagency meetings; on interagency committees developing government-wide aviation policies, requirements, procedures and reports; and, at aviation industry meetings and conventions.
- Serves at the single point of contact with OAS for procurement, training, aviation support, and Reclamation aviation-program evaluations.
- Assigns representatives to accident review boards and accident investigation teams.
- Actively works with other program managers to ensure operational aviation issues are addressed in program and policy decisions.
- Coordinates and approves fleet aircraft acquisition (including UAS), replacement, and disposal to support Reclamation programs.
- Approves all cooperator flight requests.

- Analyzes accident and incident trends and monitors Aviation Mishap Information System (AMIS) Safety Communiqué (SAFECOM) reports and incidental serious safety concerns.
- Approves all pilot training requests and coordinates with OAS to ensure pilot certification and training are maintained.
- Chairs the Reclamation Aviation Council.

#### 1.4.3.4 Regional Directors (RDs).

RDs are responsible for executing Departmental aviation policy, including Reclamation requirements, and ensuring that a safe and efficient aviation program exists in their region, including ensuring the availability of aviation training and resources to staff responsible for aviation activities.

#### 1.4.3.5 Regional Aviation Manager (RAM).

The RAM provides technical expertise and aviation safety oversight for their region. Because of the level of aviation activity within the Denver Office, a Denver-based regional aviation manager will be assigned to oversee aviation activities initiated by Denver/Washington office staff. The RAM:

- Develops and implements the following regional plans:
  - o Regional flight following plans
  - o Regional mishap reporting plans
  - o Regional UAS security plan
- Reviews and approves PASP.
- Validates that all regional aviation users meet the training requirements of the Interagency Aviation Training (IAT) Guide and OPM-04, *Aviation User Training Program*.
- Requests deviations, exemptions, or exceptions to standards, procedures, or other instructions, in accordance with Reclamation Manual RCD 03-03. Requests must be submitted to the NAM who will coordinate with the appropriate authority.
- Coordinates requests for approval for all cooperator aircraft flights in accordance with outlined procedures. Requests must be submitted to the NAM who will coordinate with the appropriate authority.
- Coordinates requests approval for purchase of all aircraft, including UAS. Requests must be submitted to the NAM who will coordinate with the appropriate authority.

#### 1.4.3.6 Reclamation Aviation Council.

The Reclamation Aviation Council is comprised of the NAM and all the RAMs. The council coordinates aviation activities throughout Reclamation, identifies requirements and procedure needs, and provides guidance to users of aviation resources.

#### 1.4.3.7 Immediate Supervisors.

Immediate supervisors of all aviation staff must ensure employees meet training requirements set forth by Reclamation, as well as those outlined by 351 DM 3 and OPM-04. All supervisors must maintain training currency per OPM-04.

#### 1.4.3.8 Pilot-in-Command/Project Lead.

Pilot-in-Command (PIC) indicates whoever has primary control of the mission. The PIC is responsible for:

- conducting aviation operations in accordance with applicable policy and requirements;
- maintaining proficiency and qualification standards appropriate to the missions performed;
- providing for the safety of the aircraft and personnel on board (where applicable), and has the sole authority for aircraft operations;
- ensuring airworthiness and operating aircraft for maximum safety and efficiency;
- providing aircraft briefings;
- reporting unsafe operations, conditions, and situations using the SAFECOM system;
- completing all flight reporting activities at the conclusion of each mission; and,
- maintaining currency of training per OPM-04, and the NAMP.

#### 1.4.3.9 Employees.

Employees involved in aviation activities are responsible for:

- knowing and following applicable policy and directives;
- signing the review and acknowledgement of the NAMP (Appendix 2);
- maintaining currency of training per OPM-04 and the NAMP:
- using appropriate personal protective and life support equipment, as required;
- reporting potential and actual problems; and,
- ensuring the safety of themselves and others.

# 1.5 Evaluation and Monitoring

Periodic internal and Departmental reviews of Reclamation aviation operating procedures are necessary to enhance safety, identify program strengths and weaknesses, help identify fiscal and personnel needs, and ensure the efficient use of aircraft under Reclamation control.

#### 1.5.1 Internal Control

The Aviation Internal Control Plan outlines Reclamation's requirements for compliance with aspects of OMB Circular No. A-123 and supports Reclamation's commitment to safe and efficient programmatic operations. Internal control reviews will be conducted in each region on a recurring basis and prior to OAS reviews.

#### 1.5.2 Regional Aviation Program Review

Each region's overall aviation program will be reviewed at least once every 5 years by OAS, in coordination with the NAM. OAS program reviews are conducted in accordance with Departmental policy, 352 DM 2, *Aviation Program Evaluations*.

Any finding identified as a serious safety or programmatic concern must be responded to in writing. The response must include corrective actions, effective dates, and individual(s)

responsible for the correction. Unless otherwise approved by the Director, SSLE, all findings will be completed, and reported to OAS, within 1 year.

# **Chapter 2: Aviation Administration**

#### 2.1 General

Aircraft operators who provide contract, individual charter, or hourly rental service to Reclamation must be approved by OAS. Pilots must meet Departmental experience requirements and adhere to flight time and duty limitations.

Approved sources for flight services include:

- Departmental fleet aircraft;
- United States Forest Service (USFS) fleet aircraft;
- OAS procured/contracted aircraft; and/or
- Affiliate/Cooperator aircraft approved under an OAS agreement.

#### 2.2 Procurement

All aircraft services required by Reclamation must be acquired through the OAS procurement process in accordance with DM requirements, with prior approval from the NAM. This includes procurement of any non-commercial flight activities. The following exceptions apply:

- Seat fare on flights with scheduled air carrier.
- End product/service contracts.

Services acquired on an hourly rate basis may be used when the cost of services is \$25,000 per transaction or less. OAS provides an approved list of rental sources based on a standard OAS source list from which all vendors must be selected (<a href="https://www.doi.gov/aviation/aqd">https://www.doi.gov/aviation/aqd</a>).

#### 2.2.1 End Product/Service Contracts

These contracts are used to obtain services and products such as aerial photographs, land surveys, or seeding/fertilization. Aircraft may be used to obtain the product or services; however, there are limits on specifying controls or specific types of aircraft in the solicitation. These types of contracts are not flight service contracts and do not need to be obtained through OAS. There are very strict guidelines that include waiving operational control (see Section 4.2) for the use of these types of contracts. For more information refer to OPM-35, *Identification of End Product/ Service and Flight Service Procurement* available at: <a href="https://www.doi.gov/sites/doi.gov/files/uploads/opm-35.pdf">https://www.doi.gov/sites/doi.gov/files/uploads/opm-35.pdf</a>.

Appendix 1 provides additional guidance on end product contracts, including required contract language.

#### 2.2.2 Requesting Procedures

Requests for aviation services must be submitted through the RAM to the NAM. The NAM will coordinate with the respective OAS regional office. The requesting office must submit, at minimum, the following:

- Proposed contract requirements/specifications.
- List of Government-furnished equipment.
- Justification for other than full or open competition.
- Justification for specific make and model.

Requests for contract services must be submitted at least 250 calendar days in advance of the anticipated date of contract award. Task orders against existing aircraft rental agreements or on call resources may take less time for award. Additional requirements and guidelines are available at: https://www.doi.gov/aviation/aqd.

# 2.2.3 Procurement of Flight Services from Other Departmental Bureaus or Offices

Before using fleet aircraft, including UAS, assigned to other Departmental bureaus or offices, Reclamation employees are responsible for contacting the service provider to determine aircraft use payment rates, pilot services, and per diem; this information must be included in the justification for services and maintained with all documentation related to the mission use. A formal agreement between bureaus, such as an Interagency Agreement (IA) or Memorandum of Understanding (MOU), must be implemented prior to utilizing such aircraft.

#### 2.2.4 Procurement of Flight Services from Non-Federal Public Agencies

It is Federal policy not to compete with private industry. Reclamation procurement of, and reimbursement for, flight services from non-Federal public agencies are generally not authorized unless:

- That agency is providing the service as a commercial operator;
- The operation is conducted with civil aircraft where no operating certificate is required; and/or
- The services are necessary to respond to an imminent threat to life or property, and no service by a commercial operator is reasonably available to meet the threat.

The decision not to use a commercial operator must be documented in writing and made part of the permanent incident record (14 CFR 1.1).

#### 2.2.5 Unauthorized Procurement

Unauthorized acquisition of aviation services may go through a ratification process and will include a penalty payment imposed by OAS. Specific details are found in 353 DM 1.8, *Ratification of Unauthorized Commitments*, which is available at: <a href="http://elips.doi.gov/ELIPS/DocView.aspx?id=1110&dbid=0">http://elips.doi.gov/ELIPS/DocView.aspx?id=1110&dbid=0</a>.

# 2.3 Emergency Aircraft Procurement

#### 2.3.1 Definition of Emergency

The justification for the procurement of emergency aircraft services must meet the following criteria:

- **Life Threatening.** A situation or occurrence of a serious nature, developing suddenly and unexpectedly, and demanding immediate action to prevent loss of life.
- **Operational.** An unforeseen combination of circumstances that calls for immediate action, but is not life threatening.

#### 2.3.2 Ordering Emergency Aircraft Services

Authorized personnel from the requesting Reclamation office must contact the appropriate OAS Flight Coordination Center or use the Aircraft Rental Agreement for requests for charter aircraft services to meet emergency needs. Pilot and aircraft must be approved (carded) for the intended mission. If, due to the nature of the emergency, the pilot and/or aircraft are not approved for the intended mission, a SAFECOM must be submitted immediately after the mission.

All such procurements must include a completed PASP, including a full risk assessment.

# 2.4 Cooperator Aircraft

Cooperative aircraft operations and partnerships are encouraged for the purpose of efficiency and standardization in procedure.

Use of cooperator aircraft and pilots (affiliate, state/local government, military, or other Federal agency aircraft) by Reclamation employees requires prior inspection and approval by OAS, usually in the form of a Letter of Authorization (LOA) and/or MOU. Proposed use of these aircraft must be requested through the RAM and approved by the NAM. A current list of cooperators is available at: <a href="https://www.doi.gov/aviation/library">https://www.doi.gov/aviation/library</a>.

Any employee who is asked to accompany personnel from another agency on other agency's aircraft must consult their respective aviation manager to ensure approvals are in place. Employees must also complete required training prior to flying on cooperator aircraft. Offices are encouraged to obtain necessary letters of authorization in advance of intended use period (reference 351 DM 4).

If Reclamation employees are in operational control of any UAS operated by our operating partners, these requirements apply. If the water district is flying a UAS on Reclamation lands, for their own purposes, requirements outlined in 43 CFR 423 and 43 CFR 429 apply.

#### 2.4.1 Research/Cooperative Agreements/Support Services Contracts

Research activities, Cooperative Agreements, or Support Services Contracts that contain provisions for aviation services must follow the policies of this NAMP and all other applicable Departmental requirements.

# 2.5 SES/SL Use of Government Aircraft and Solicitor Approvals

OMB Circular No. A-126 requires the Solicitor (SOL) or his principal deputy to authorize all travel on government aircraft by employees above GS-15, members of their families, and non-Federal travelers. This applies to all government-owned, leased, chartered, and rental aircraft. "Mission requirements" are defined in OPM 7, Appendix 1

(https://www.doi.gov/sites/doi.gov/files/uploads/opm-07.pdf) and specifically exclude travel for meetings or routine site visits. Therefore, for non-mission flights, a cost comparison must be completed and forwarded to the Solicitor.

#### 2.5.1 Mission Travel

Mission travel is transporting people whose presence aboard an aircraft is required to perform, or is associated with the performance of, a governmental function such as, but not limited to, aeronautical research or biological or geological resource management, firefighting, search and rescue, law enforcement, and other such activities.

#### 2.5.2 Required Use Travel

Required use travel is rare. An employee is a required use traveler if the President or the head of the agency has determined that the person's travel qualifies as such.

#### 2.5.3 Other Travel for Conducting Agency Business

The SOL considers almost all Departmental travel at the SES level and above as non-mission official travel. Even when air travel is the only practical means of transportation to remote or roadless areas, SOL approval is required unless the flight is mission travel.

If an individual boards an aircraft at Point A and returns to Point A without any stops, with the exception of fuel or bathroom stops, SOL approval is not required. See IB 09-01, Revision 1, Guidelines for Requesting Approval from the Office of the Solicitor for SES Travel on Government Aircraft, available at: <a href="https://www.doi.gov/aviation/library/ses\_travel">https://www.doi.gov/aviation/library/ses\_travel</a>.

#### 2.5.4 Requests for SOL Approval

All travel on Government aircraft must be authorized in advance. Procedures for approval are detailed in OPM-07, available at: https://www.doi.gov/sites/doi.gov/files/uploads/opm-07.pdf.

# 2.6 Payment and Reports

#### 2.6.1 Departmental Aircraft Flight/Use and Aircraft Use Reports

For contract, rental, or charter aircraft, the Contracting Officers Representative (COR) will complete Form OAS-23E, *Aircraft Use Report* (<a href="https://www.doi.gov/aviation/aqd/ams">https://www.doi.gov/aviation/aqd/ams</a>) and submit it to OAS.

#### 2.6.2 UAS Flight Aircraft Use Reports

For each UAS flight the PIC will complete form 2U, *UAS Aircraft Use Report* (<a href="https://sites.google.com/a/firenet.gov/unmanned-aircraft-systems/blm-uas-2u">https://sites.google.com/a/firenet.gov/unmanned-aircraft-systems/blm-uas-2u</a>) and submit it to OAS. The PIC will complete the form 2U at the completion of the mission.

#### 2.6.3 Nonrevenue Flights

Each nonrevenue flight on approved cooperator aircraft (military or other public agencies) or approved privately-owned aircraft used for personal transportation on Government travel must be documented on Form OAS-23E, *Aircraft Use Report* (<a href="https://www.doi.gov/aviation/aqd/ams">https://www.doi.gov/aviation/aqd/ams</a>) and submitted to OAS.

The comment "not for payment purposes" must be included.

#### 2.6.4 Aircraft Use Payment System

The Department uses Aircraft User Reports (AURs) in the Financial and Business Management System (FBMS) to accurately track aircraft usage for both Department-owned and contracted aircraft. Contractors are responsible for submitting AURs for the services they have performed for the Department.

The Aviation Information Reporting Support (AIRS) application was created to facilitate the submission of AURs by private vendors. Vendors must submit their AURs online through AIRS. AURs may be created, saved for later submission, signed by government representative, and submitted without access to FBMS. Additional information is available at: <a href="https://www.doi.gov/aviation/aqd/ams">https://www.doi.gov/aviation/aqd/ams</a>.

#### 2.6.5 Billee Code

Each unit or office using flight services, other than commercially scheduled carriers, must have an individual OAS billee code. This identifier is used for billing flight services and is required to complete Form OAS-23E, *Aircraft Use Report* (<a href="https://www.doi.gov/aviation/aqd/ams">https://www.doi.gov/aviation/aqd/ams</a>). The COR will reconcile all billing discrepancies. The current list of Billie Codes is available at: <a href="https://www.doi.gov/aviation/aqd/ams">https://www.doi.gov/aviation/aqd/ams</a>.

# **Chapter 3: Aviation Safety**

#### 3.1 General

Safety of Reclamation personnel and assets is the primary focus of all aviation missions. If any questions or concerns arise during the course of conducting an aviation mission, any participant has the authority to halt operations until the perceived unsafe condition is mitigated, in accordance with SAF TRMR-100 *Stop Work Authority*. While performing their duties, Reclamation personnel may elect, without fear of reprisal, not to fly under any condition they consider to be unsafe.

#### 3.2 Risk Assessment

The PIC must ensure a full risk assessment is completed prior to any aviation mission. The first question is always: is aviation an appropriate tool to support the required activities? The risk assessment must identify all perceived risks, including those traditionally included in a job hazard analysis, the appropriate mitigation measure(s) for each risk, and be documented in the mission specific Project Aviation Safety Plan (PASP). Information on how to conduct a risk assessment is included in the Risk Assessment Courses located at: http://www.iat.gov.

# 3.3 Personal Protective Equipment

All individuals participating in aviation activities will wear required PPE as outlined in the mission specific PASP, OPMs, and the *ALSE Handbook* (<a href="https://www.doi.gov/aviation/library/">https://www.doi.gov/aviation/library/</a>).

#### 3.3.1 Special Use Flights

Flight crew members, air crew members, and passengers are required to wear PPE on all special use flights (defined in OPM 29, *Special Use Activities and Revised Standards for Technical Oversight*). For most special use flights, PPE minimally consists of fire-resistant clothing (e.g., Nomex), aviator's protective helmet (except in multiengine fixed wing aircraft), leather boots extending above the ankles, and flight gloves made completely of Nomex or leather, or a combination of Nomex and leather. The *ALSE Handbook* contains additional information and is available at: <a href="https://www.doi.gov/aviation/library">https://www.doi.gov/aviation/library</a>.

Wearing of materials with low temperature melting characteristics, such as synthetics (e.g., nylon, Dacron, polyester) and synthetic blends, are not permitted without a waiver or exception in accordance with the *ALSE Handbook*.

#### 3.3.2 First Aid Kits

All aircraft must have a basic first aid kit onboard. In the case of a UAS, the first aid kit will be readily accessible. Additionally, a survival kit containing the minimum items listed in the *ALSE Handbook* must be onboard all special use flights.

#### 3.3.3 Personal Flotation Device

In single engine aircraft, for operations beyond power-off gliding distance to shore, passengers must wear a Personal Flotation Device (PFD) approved for aircraft use. United States Coast Guard approved PFDs are not approved for aircraft use.

In multiengine aircraft, a PFD must be immediately available to each seated occupant.

When water takeoffs or landings are performed, occupants of all aircraft must wear PFDs.

# 3.4 Aviation Mishaps

All aviation mishaps, incidents, and accidents will be reported, via SAFECOM, to the OAS Aviation Safety Manager and the NAM. Aircraft mishaps are broadly defined below. Final designation of the mishap will be determined by the OAS Aviation Safety Manager.

#### 3.4.1 Accidents

Accidents involve death, serious injury, or substantial damage to the aircraft. The National Transportation Safety Board (NTSB) is responsible for investigating aircraft accidents. All aviation accidents will be reported immediately to the NAM, RD, and OAS in accordance with 352 DM 3, *Aircraft Mishap Notification, Investigation and Reporting* (http://elips.doi.gov/ELIPS/DocView.aspx?id=1103) and Reclamation guidance.

#### 3.4.2 Incidents With Potential

An Incident with Potential is an incident that narrowly misses being an accident and in which the circumstances indicate significant potential for substantial damage or serious injury. Final classification will be determined by the OAS Chief of Aviation Safety and Program Evaluations.

#### 3.4.3 Aviation Incidents

An aviation incident is an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

#### 3.4.5 Aviation Mishap

Mishaps include aircraft accidents, incidents with potential, aircraft incidents, aviation hazards (such as faulty equipment or improper use of an aircraft), and aircraft maintenance deficiencies.

#### 3.4.6 Aviation Mishap Investigations

All Departmental accidents are the domain of the NTSB and the OAS Safety Office. NTSB may authorize OAS to investigate accidents for NTSB. If this occurs, the OAS is working with the NTSB and is bound by 49 CFR 830-831. If needed, Reclamation will offer a qualified individual to assist with the investigating agency and may also independently review the mishap internally. The Reclamation RD, in conjunction with the NAM, will offer the appropriate individuals to the OAS Aviation Safety Manager. When NTSB investigates Departmental accidents, OAS will be included and serve as the Department's representative. Employee participation (e.g., interviews, witness statements) in mishap investigations is required.

#### 3.4.7 Reclamation Review Process

Unless otherwise directed by OAS, the RD, in coordination with the Director, SSLE, and NAM will determine within 14 calendar days, whether an internal Reclamation review of the mishap is necessary.

# 3.5 Mishap Notification Procedures

Each region must develop a Regional Aviation Mishap Response Plan that specifies national, regional, and local points of contact and the necessary actions to be accomplished in the event of an aviation incident or accident. An outline of the required actions is found in the Interagency Aviation Mishap Response Guide and Checklist at <a href="https://www.doi.gov/aviation/safety/iamrgc">https://www.doi.gov/aviation/safety/iamrgc</a>.

In the event of an aircraft accident, incident with potential, or when any of the mishaps listed above occur, the aircraft operator, flight manager, pilot, or person with flight following responsibilities must immediately, and by the most expeditious method, notify the OAS Aviation Safety Office, (24/7) at 1 888-4MISHAP (1-888-464-7427), the RD, and the NAM.

In the case of an accident or incident with a UAS, the PIC will notify the RAM and NAM. Unless there is injury to persons or property damage over \$500, the pilot will file a SAFECOM only. A call to the OAS Aviation Safety Office is not required.

This Plan is not intended to delay the notification of immediately needed and locally available resources in the event of a life threatening emergency or when notification could delay resolution of an ongoing problem.

#### 3.5.1 SAFECOM Submissions

Any person directly associated with aviation activities within the Department may submit a SAFECOM. Individuals are required to immediately report any aviation hazard that compromises the safety of personnel or equipment. SAFECOMs will be submitted at <a href="http://www.safecom.gov">http://www.safecom.gov</a>. If internet access is unavailable, hard copy SAFECOMs will be submitted through the RAM, NAM, or direct to the OAS Aviation Safety Office. Regardless the method used, the submitter must always retain a copy for his or her records.

SAFECOMs must be submitted as soon as practically possible. The SAFECOM must include all known information in as great detail as possible. Employees may update SAFECOMS as additional information is gathered.

#### 3.5.2 Use of SAFECOMs

Submitting a SAFECOM is not a substitute for "on-the-spot" corrections(s) to a safety concern. Rather, the SAFECOM is a tool used to document and track safety concerns and follow-up corrective action(s) related to those safety concerns. However, it is important to remember that utilization of the SAFECOM does not replace the requirement to initiate a DI-134, *Report of Accident/Incident*, as required in 352 DM 3.3.6 *Aviation Mishap Response Plan*.

# 3.7 Hazard Maps

Available hazard maps of the planned flight area and altitude must be reviewed by all participants prior to the mission. In this instance a hazard is any obstacle protruding into the planned flight altitude or path. Known and potential wire strike locations in the flight area must be reviewed, and the pilot must be informed about them during flight planning activities. Any new hazards found in the flight area must be added to the hazard map. Flight managers and pilots are required to review hazard maps before each flight.

# **Chapter 4: Flight Operations**

#### 4.1 General

Reclamation has a variety of missions that may be accomplished with aviation resources. These missions include, but are not limited to, point to point transportation, research and development activities, scientific efforts, and inspections. The use of fixed or rotor-wing aircraft must be accomplished via IA, MOU, contract, or end product/service contracts, as Reclamation no longer owns these type of fleet aircraft.

Missions accomplished by UAS must comply with all FAA aviation requirements. Reclamation currently leases UAS fleet aircraft and employs certified pilots, and as such these resources must be considered first when mission planning.

All aviation missions not conducted by Reclamation, where Reclamation maintains operational control, must be contracted through OAS and AQD.

# 4.2 Operational Control

Operational control is the exercise of authority over initiating, conducting, or terminating a flight. Reclamation is in operational control of any internal or contracted mission that does not specifically waive operational control. Even if operational control is waived, individuals must not provide any additional direction to the operator during the course of the mission so Reclamation does not take operational control, or it is not perceived that Reclamation is in operational control.

Any missions where Reclamation contracts for flight services with the intention of maintaining operational control must be coordinated through OAS and procured through AQD.

# 4.3 Special Use

Special use is defined in 350 DM 1 and OPM 29 as operations for which special pilot qualifications and techniques, special aircraft equipment, and PPE are required to ensure safe transportation of personnel and property. OAS authorization for both pilot and aircraft is required for special-use operations.

Reclamation does not generally perform special-use missions. If a special-use mission is necessary, the aircraft will not be under Reclamation's operational control and requires special permission from the NAM and OAS.

# 4.4 Fixed and Rotor-wing Aircraft

Reclamation no longer has fleet operations of fixed or rotor-wing aircraft. All contracted use of these aircraft must follow procedures outlined in contract language and this document.

# 4.5 Transport of Hazardous Materials by Aircraft

Reclamation must only use commercially approved methods for transportation of Hazardous Materials (HazMat) materials. This includes transportation of all UAS battery packs.

# 4.6 Transport of Cargo/Equipment

Only cargo and/or equipment necessary to accomplish the mission are permitted on-board aircraft, under Reclamation operational control, and must be transported in accordance with FARs and Departmental policies. For helicopter requirements, refer to IHOG Chapter 11, *Cargo Transport*, available at: <a href="https://www.doi.gov/aviation/library/guides">https://www.doi.gov/aviation/library/guides</a>.

# 4.7 Project Aviation Safety Plans

The PIC is responsible for all mission planning. The PIC will complete and certify a PASP for all flights including those not conduced within the National Airspace, such as indoors.

At a minimum, the following approvals are required, based on the mission complexity, as defined in the risk assessment included in the PASP:

- High Deputy Director, SSLE
- Serious NAM
- Medium RAM
- Low Immediate Supervisor for the PIC

Approvals must build on each other, e.g. a medium complexity mission will include the PIC's immediate supervisor and the RAM. The PIC must make every effort to streamline the approval process by not including unnecessary approval signatures. Coordination with other impacted parties will occur outside the PASP approval process.

When planning missions, the PIC must allow appropriate time for coordination and approval. Each signatory will have a minimum of five days to review and approve each PASP. Approval authority for PASPs may not be further delegated, including to an acting. If the mission is necessary, and appropriate communication has been done in advance, an equivalent supervisor who has taken the required training may sign the document, but the final approval will increase a level (e.g low to medium).

If circumstances change during the mission, work will stop and the PASP must be updated. If the risk level doesn't change, email notification will be provided to the signatories with a

justification of the change. If the risk level changes, the PASP must be resigned before work may continue.

The RAM will post copies of all signed PASPs to the Aviation Google Drive within five days of the completion of the mission.

For contract flights, where Reclamation has operational control, the COR is responsible for ensuring the contractor completes the PASP prior to any flight activities.

#### 4.7.1 Environmental Considerations

Flight operations may be restricted because of environment factors such as darkness, temperature, wind, snow, rain, fog, and cloud cover. All flights shall be flown in accordance with 351 DM 1 (http://elips.doi.gov/ELIPS/DocView.aspx?id=1088).

Employees must terminate flight operations if the weather is below the applicable minimum by returning to the starting point or landing at the nearest safe spot. Flight operations are prohibited until the weather improves above the applicable minimum. The PIC may set a more restrictive weather minimum if necessary for a safe flight.

# 4.8 Flight Plan and Flight Following

Flight plans must be prepared and flight following must be conducted for all Reclamation traditional aviation activities, including contracted flights, as outlined in the 351 DM 1.4, available at: <a href="http://elips.doi.gov/ELIPS/DocView.aspx?id=1088">http://elips.doi.gov/ELIPS/DocView.aspx?id=1088</a>. UAS operations do not require flight following outside of the visual observer requirements.

Position reporting must not exceed 1-hour intervals under normal circumstances. To fulfill this requirement, regions are encouraged to establish agreements for flight following with other agency coordination and dispatch centers (e.g., Bureau of Land Management, USFS).

All regions will develop a Flight Following Plan.

#### 4.9 Pilot Qualification Card

The Departmental Pilot Qualification Card must be carried by pilots and physically inspected by the COR or PIC prior to each mission. If the card is unavailable, the pilot's authorization to fly the mission must be verified prior to the flight. Approval of cooperator flight crew members must be accomplished via the cooperator approval process.

# 4.10 Unmanned Aircraft Systems

UAS are considered fleet aircraft and subject to all policy and procedures governing acquisition, funding, and use, including those outlined in this NAMP. No individual or office may acquire or use UAS for any purpose without advanced approval by the NAM and Director, SSLE, and in

compliance with OPM-11, DOI *Use of Unmanned Aircraft Systems*, available at <a href="https://www.doi.gov/sites/doi.gov/files/uploads/opm-11.pdf">https://www.doi.gov/sites/doi.gov/files/uploads/opm-11.pdf</a>.

All UAS must be procured through OAS, in accordance with all DM and OAS requirements.

#### 4.10.1 UAS Request/Approval Process

OAS requires a formal request for approval and purchase of all UAS. The form, OAS 13U DOI *Small Unmanned Aircraft Systems Acquisition Request Form* is available at: <a href="https://www.doi.gov/sites/doi.gov/files/uploads/oas-13u.pdf">https://www.doi.gov/sites/doi.gov/files/uploads/oas-13u.pdf</a>.

#### The 13U shall include:

- evaluation of the relative merits of purchase versus contracting in accordance with OMB Circular A-11, Part 7, and Exhibit 300 process;
- details related to proposed mission purposes;
  - o How will the UAS be used and what are the benefits to purchasing the aircraft?
- the type and number of aircraft requested;
- the number of proposed pilots, their commitment to training and the policy requirements in this NAMP, and how proficiency will be maintained;
- the level of supervisory support;
- acquisition and operating costs;
- proposed equipment enhancements, if any;
- who is the custodial officer;
- a general overview of the storage plan for the aircraft;
- financial reserves for aircraft replacement purposes; and
- information on opportunities for sharing aircraft and pilots with other Reclamation offices.

Reclamation shall not conduct UAS operations until the 13U is approved by the local supervisor, RAM, RD, NAM, Director, SSLE, and OAS, and all minimum requirements have been met. Requests must be initiated at least 6 months (estimated) before the anticipated UAS mission start date.

#### 4.10.2 Minimum Operational Requirements

All aircraft and pilots will be carded by OAS prior to use.

Departmental UAS Operators must be FAA certified 107 commercial UAS operators. Departmental operators of UAS must receive training for the specific systems they will operate. OAS will identify appropriate training in conjunction with FAA regulations. Operators must possess training certificates from OAS or OAS approved sources before receiving OAS certification as a Departmental UAS operator.

When a Departmental employee has satisfied all requirements listed above, the OAS UAS coordinator will issue a Departmental UAS Operator/Pilot LOA. The LOA must specify which UAS system(s) the operator is approved to operate.

At minimum, all UAS missions must have a PIC and a dedicated visual observer. Dedicated visual observers must also be certified pilots. When conducting missions that cover a large area or are more complex, additional flight observers may be used in conjunction with the dedicated visual observer and do not have to be certified pilots. In addition, support staff may be necessary, due to the complexity of a mission, as determined by the PIC.

For contracts where Reclamation has operational control, the COR is responsible for ensuring that pilots are appropriately carded and certified prior to any flight activities. Contractor visual observers do not have to be trained pilots. However, if a Reclamation employee is serving as the visual observer, the above requirements apply.

#### 4.10.3 Request For UAS Pilot Training

All requests to complete UAS Pilot training must be approved in writing by the immediate supervisor, RAM, and NAM. When submitting requests, consideration must be given to the number of pilots being trained and the number of missions proposed per year. Pilots must be trained with the intention of becoming proficient in Reclamation requirements, planning, and operations.

# **Chapter 5: Aviation Training**

# 5.1 Required Aviation Training

RAMs are responsible for ensuring that all employees and their immediate supervisors involved in the use or control of aviation resources receive the required level of aviation training. Qualification standards and requirements are available in OPM-04 (<a href="https://www.doi.gov/sites/doi.gov/files/uploads/opm-04.pdf">https://www.doi.gov/sites/doi.gov/files/uploads/opm-04.pdf</a>). Training is available at: <a href="https://www.iat.gov">https://www.iat.gov</a>.

#### 5.1.1 Required Training for Personnel Flying on Cooperator Aircraft

All personnel traveling on cooperator aircraft for point to point activities must complete A-100, Basic Aviation Safety, prior to traveling on the aircraft. If the individual traveling on a cooperator aircraft is considered a crew member or the flight is a special use flight, training requirements outlined in OPM-04 must be met prior to the flight activities.

#### 5.1.2 Unmanned Aircraft System Pilot Training

In addition to the requirements outlined in OPM-11, all UAS pilots must complete the following:

- A-100, Basic Aviation Safety
- A-107, Aviation Policy and Regulations
- A-116, General Awareness Security Training
- A-200, Mishap Review
- A-205, Risk Management I
- A-302, Personal Responsibility and Liability
- A-305, Risk Management II
- A-311, Aviation Planning
- Reclamation Requirements and Expectations for UAS Pilots

# 5.2 Aviation Training Equivalencies

The NAM, working with the OAS Training Division, is authorized to determine aviation training equivalencies for training that has been acquired from sources other than IAT.

# 5.3 Contracting Officer Representative

All aviation contracts must be accomplished in accordance with Section 2.2, or end product/service contract requirements.

No matter the contract vehicle, or approving acquisitions office, all CORs for aviation activities must meet all FAR and Departmental training requirements for COR certification. In addition, all CORs for aviation activities must complete the following:

- A-100, Basic Aviation Safety
- M-2, Aviation Manager Line Managers Briefing

# 5.4 Aviation Training Records

Aviation training records for Reclamation employees must be maintained by the respective Region in accordance with OPM-04, *Aviation User Training Program*. The IAT records database will be used to meet this requirement.

# **Chapter 6: Aircraft Security**

#### 6.1 General

As Reclamation does not own or operate fleet aircraft, this section does not apply.

# 6.2 UAS

All regions with UAS activities must develop a UAS Security Plan to ensure UAS are properly stored and accounted for at all times.

# **Chapter 7: Airspace Coordination**

#### 7.1 General

Reclamation does not operate fleet aircraft so this section is specific to UAS operations. All contracted or cooperator flights will follow the FAA rules and regulations for airspace.

# 7.2 Interagency Airspace Coordination

Interagency airspace coordination is accomplished through the Interagency Airspace Subcommittee (IASC) charted under the National Interagency Aviation Council (NIAC). Guidance and education is provided through the *Interagency Airspace Coordination Guide* (IACG) available at: https://www.nwcg.gov/publications.

#### 7.3 Notice to Airmen

A NOTAM must be filed for all aviation missions, even those flown under FAA 107 regulations.

# 7.4 Flight Planning

UAS pilots have a variety of airspace authorizations available when planning missions:

- FAA Part 107
- Certification of Waiver or Authorizations (COA)
- DOI Blanket COA (https://www.doi.gov/sites/doi.gov/files/uploads/faa\_form\_7711-1 2016-csa-185\_doi\_rev\_1.pdf)
- Emergency COA
- 107 Waiver
- Memorandum of Agreement (MOA) for Class G airspace (https://www.doi.gov/aviation/uas/moa)

Each authorization provides different authorities and requirements for flight with a specific timeframe for implementation. Missions flown under FAA Part 107 and the DOI Blanket COA require no advanced notification, while missions flown under a new COA require at least 6-months for approval.

All UAS missions must be flown under one of the authorizations listed above. The PIC must determine the best authorization for the mission. If additional approval is required for the authorization selected, the PIC must coordinate with the RAM and NAM in advance.

The preference is always to fly under the auspices of the Departmental Blanket COA.

#### 7.5 Hazards and Obstructions

Regions are responsible to develop area flight hazard maps or planning tools that are posted and available for flight planning purposes. The following hazards or locally significant areas must be included on the flight hazard maps:

- Military Airspace Warning Area (WA), Restricted Area (RA), Military Operations Area (MOA), Alert Area (AA), Prohibited Area (PA), Military Training Routes (MTRs), Controlled Firing Areas (CFA), Slow Routes (SR), Aerial Refueling Routes (ARs) and Low Altitude Tactical Navigation (LATN) Areas;
- Airspace Class B/C/D and National Security Areas;
- Airports/airstrips public and private, military;
  - o Include frequencies of nearby airports
- Dispatch zone boundaries;
- Parachute, hang glider, rocket, model airplane operating areas;
- Towers over 200 feet (other towers as locally determined significant);
- Highways and roadways;
- Open, fast, or high water areas near streams and reservoirs;
- Wires Major transmission lines, other lines determined locally as significant (wires crossing canyons, rivers, lakes, near airports); and,
- NOTAMs.

When incorporating this information into a PASP, the PIC must have situational awareness of the entire project area and surroundings proposed for the mission.

# 7.6 No-Fly Zones

Reclamation currently has five FAA established no-fly zones for all air traffic under 400 feet, specifically directed at UAS traffic. These restrictions are in place at: Folsom, Glen Canyon, Grand Coulee, Hoover, and Shasta Dams and Powerplants. All commercial operators of aircraft must contact the local facility to receive a permit to operate. The permitting process is outlined in local procedures, generally through the land management office.

In addition, 43 CFR Part 423 Public Conduct on Bureau of Reclamation Facilities, Lands, and Waterbodies (<a href="https://www.gpo.gov/fdsys/granule/CFR-2011-title43-vol1/CFR-2011-title43-vol1-part423">https://www.gpo.gov/fdsys/granule/CFR-2011-title43-vol1/CFR-2011-title43-vol1-part423</a>) restricts the operation of all commercial UAS from Reclamation lands without prior approval.

# 7.7 Airspace Conflicts

While the word "deconflict" is not in the dictionary, it is a commonly referred aviation term describing the process of reducing the risk of a mid-air collision or a Temporary Flight Restriction (TFR) intrusion. Airspace deconfliction must occur for both emergency response and non-emergency aviation activities.

Pilots must obtain all information pertinent to flight before flying. This is accomplished by obtaining a briefing from the FAA through the Flight Service Stations. This is the official source of NOTAM information. DOD units that have special use airspace or military training routes share this information as hazards information on the resource order when the aircraft are dispatched.

Aviation Internet websites are prolific on the internet. When used for obtaining airspace information, the user must be aware of any disclaimers regarding the timeliness of the information posted. The FAA's U.S. NOTAM office provides current TFR information through DOD Internet NOTAM Service (DINS) at: <a href="https://www.notams.faa.gov/dinsQueryWeb/">https://www.notams.faa.gov/dinsQueryWeb/</a> and <a href="https://www.faa.gov">https://www.faa.gov</a>.

If a PIC encounters an airspace conflict, he or she will file a SAFECOM.

#### 7.7.1 Operations Along Foreign Borders

All aircraft operations along border patrol zones must be coordinated with the U.S. Border Patrol. All pilots will be briefed about border zone flight procedures.

# **Appendix 1: Requirements for End Point Contracting**

#### General

End product contracts are not aircraft flight service contracts. End product contract is a means of procuring a service which may involve the use of aviation resources to produce an end product (e.g. the use of an aircraft to spray or dust a field). The intent of this type of procurement is for the contractor to supply all personnel and equipment in order to provide a "service" or "end-result." Many contractors utilize aircraft (including UAS) to meet the performance objectives of end product contracts for activities such as: animal capture, seeding, spraying, survey, photography, etc. Since these are not flight services contracts, the AQD does not perform any acquisition service. End product contracts are administered by Reclamation procurement units.

These contracts must be conducted in accordance with 353 DM 1.2A (3) and DOI Operational Procedures Memorandum (OPM)-35, found

at: <a href="https://www.doi.gov/sites/doi.gov/files/uploads/opm-35.pdf">https://www.doi.gov/sites/doi.gov/files/uploads/opm-35.pdf</a>. OPM-35 aids in determining whether an operation is being conducted as either end product or flight service. If the provisions of 353 DM 1.2A (3) and OPM-35 are met, the aircraft will be operated as a civil aircraft and the aviation management principles normally required for aircraft under Departmental operational control do not apply.

# **End Product Contract Specifications**

Specifications in solicitations and contracts must only describe the desired quantity or quality of the "service" or contracted "end-result." Contracting officers, procurement specialists and aviation managers at all levels must be aware of these requirements. Reclamation contracting officers, contract specialists, and resource specialists must consult with the Reclamation aviation managers if the acceptable language guidelines do not address a specific project requirement or the contract solicitation does not follow the guidelines in OPM-35. End product contracts where contractors could conceivably utilize aircraft must be reviewed by the regional aviation manager or National Aviation Manager to ensure that specifications and language do not unintentionally imply or determine aircraft operational control.

When end product solicitations and contracts are being drafted, the acquisition community will use the information described below:

- The work must be described in terms of: scale of area, general topography, elevation, slope, vegetation, and accessibility by roads or off-road vehicles, land use restrictions for mechanized equipment, etc.
- The contract language will not describe aircraft or pilot capabilities, standards, requirements or aircraft specific payment provisions.

- In areas of military airspace it is acceptable to describe coordination agreements with
  military airspace scheduling or range control authorities and that it is the contractors'
  responsibility to coordinate their activities with the scheduling office or Range Control.
  Close coordination is necessary to ensure compliance with applicable airspace
  coordination agreements that states have with military authorities.
- Do not mention or require flight hour/aircraft usage reports.

The following language must be included in solicitations and contracts:

- Contractor is required to demonstrate to the government that the equipment is able to capture the imagery and/or data as specified in the project description.
- The Contractor must comply with all applicable Federal, state and local regulations and land-use permitting procedures.
- Contractor must provide a communication system so that contractor personnel engaged in the project at different locations are able to communicate at all times with each other, and so that government Project Inspectors may communicate with the contractor at any time to discuss performance matters.
- The government VHF-FM radio system may have to be described.
- Only approved contractor personnel, contractor equipment and government-provided equipment required for performance will be transported by contractor vehicles, trailers, animals or equipment.
- Any ground or aerial hazards that would pose a danger to Contractor's personnel or operating equipment must be identified and mitigated by the Contractor prior to commencing operations.

# **Operational Control**

During the performance of end product contracts, Reclamation employees will not exercise operational control of the aircraft in any way. Reclamation employees will not direct the contractor as to flight profiles, flight following, landing areas (except for areas that are off limits due to land management restrictions), use of personal protective equipment, etc.

Reclamation personnel assigned as a COR to administer end product contracts will have no aviation management responsibility or authority. All traditional COR requirements and training defined by the FAR apply. Reclamation requirements listed in Section 5.3 do not apply to end point contracts.

All COR directions to the contractor must be in terms of the service or end-result being specified: desired imagery quality, number and disposition of animals surveyed, etc. It is acceptable to inform military airspace scheduling authorities or range control that the contractor plans on performing work during specified time periods and provide the military authorities the contractor contact information. Reclamation employees will not perform the airspace scheduling service for the contractor. Reclamation personnel must not become involved in any way with aircraft ground operations such as take-off and landing areas, loading, fueling, etc.

# **Aircraft Use Reporting**

Since aircraft utilized by the contractor under Reclamation end product contracts are operating entirely within the applicable 14 CFR as a civil aircraft, and procurement is not through AQD, Reclamation or the contractor will not submit any billing invoices to AQD. All invoices will be submitted to the responsible acquisitions office in accordance with the contract terms. Any flight time incurred by the contractor will not be recorded or reported as Reclamation aviation statistics because Reclamation does not have operational control of the aircraft.

#### **Aircraft Incidents and Accidents**

Although aircraft utilized by the contractor under end product contracts are operating entirely within the applicable 14 CFR as a civil aircraft, to continue to promote aviation safety Reclamation will report aviation incidents or accidents incurred by these contractors through the Departmental Aviation Mishap Information System. These events must be noted in the contract daily diary and reported through channels as normally required for end product contracts.

# **Reconnaissance/Observation Flights**

Before, during or after the performance of an end product contract it may be necessary for Reclamation employees to aerially survey or inspect the project area.

When flights transporting Reclamation personnel are required, an AQD aviation flight service procurement (completely separate from the end product contract) is required. Aircraft and pilots must have current OAS approvals for the intended mission and a current Departmental contract or Aircraft Rental Agreement must be in place. When a Departmental procurement is utilized all aviation management policy, procedures, and requirements must be applied.

# **Operations within Military Airspace**

If an end product contract project using aircraft is being conducted within Military Airspace (MOA, RA, MTR) it is the responsibility of the contractor to coordinate with the Military Airspace Scheduling Office. Reclamation Contracting Officers and CORs must inform the contractor of any Departmental agreements with the Military organizations regarding airspace.

# **Appendix 2: Review and Acknowledgement of the NAMP**

I acknowledge that I have read and understand the National Aviation Management Plan. As a member of Reclamation's aviation community I will follow the requirements outlined in this Plan and provided by regional and national program managers when participating in all aviation activities. I will represent Reclamation and Reclamation's Aviation program professionally in all situations.

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Supervisor

#### Surnames for DCN: BOR0015650

Subject: 20170911 NAMP Final Draft Tempoary Reclamation Manual Release

Addressee: Muller, Jr, Bruce C.

Date: 10/23/2017

Surname: Toni Linenberger Office: DO-SSLE-SO

Title:

Entered By: Toni Linenberger Date: 10/05/2017

Comments: None

Attachments Surnamed:

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Surname: Scott D Swanson Office: DO-SSLE-PEMO

Title:

Entered By: Scott D Swanson Date: 10/05/2017

Comments: None

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Surname: Phoebe Percell Office: DO-SSLE

Title:

Entered By: Phoebe Percell Date: 10/05/2017

Comments: None

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Entered By: Nathan Minarchick

Date: 10/18/2017

Comments: None

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Surname: Bruce Muller, Jr Office: DO-SSLE

Title: Director, SSLE Entered By: Bruce Muller, Jr Date: 10/18/2017

Comments: None

Attachments Surnamed:

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# Surnames for DCN: BOR0015650 (cont.)

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Comments: None

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Surname: David L Williams Office: DO-PA-HRPPD

Title:

Entered By: David L Williams Date: 10/19/2017

Comments: None

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