OSMRE National Aviation Management Plan

March, 2018
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**Revision Schedule:** As per Department of the Interior (DOI) Departmental Manual Policy, this Plan will be formally reviewed and approved by the Bureau Director at a minimum of every three years. Bureau Director approval authority will not be delegated below the bureau’s designated aviation executive (DOI Executive Aviation Committee member—SES). The National Aviation Manager will review the NAMP annually and is authorized to make interim revisions as required.

### Revisions

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1.0 OSMRE National Aviation Management Plan.

1.1 Introduction/Purpose.
The Office of Surface Mining Reclamation and Enforcement (OSMRE) National Aviation Management Plan (NAMP) identifies the bureau’s intent, authorities, roles, responsibilities, and program objectives and provides strategic and operational guidance to each organization level. DOI Departmental Manual Policy 350 DM 1 Appendix 4 identifies the need for each bureau to have a cohesive national aviation management plan that will allow all regional, field offices, and aviation users to easily acquire the necessary information and policy to manage its aviation program. This plan has been written following new DOI guidance (OPM-6 Minimum Elements for Bureau National Aviation Management Plans, dated January 1, 2017).

Some of the required elements do not apply to OSMRE, and are noted as not applicable (N/A). The OSMRE’s NAMP provides the detailed operational procedures pertinent to Bureau Operations. OSMRE’s Aviation operations are subject to the policies described in the Department Manuals (350 - 354) OPM’s Handbooks and Guides. Where there are differences, the Departmental guidance prevails.

2.0 Aviation Management Organization.
The OSMRE organizational structure includes 3 Regions: Appalachian (AR), Mid-continent (MCR) and Western (WR). Each Region has an aviation program based on its needs. The majority of OSMRE’s manned flights occur in the Western Region and typically occur on OAS contracted aircraft. OSMRE’s AR and MCR rely mainly on internally operated, unmanned (UAS) flights to conduct aerial surveys.

2.1 Roles and Responsibilities.

Major responsibilities for each of the following include, but are not limited to:

Department of the Interior.

The Deputy Assistant Secretary – Public Safety, Resource Protection and Emergency Services (DAS PRE) has broad oversight responsibility for DOI aviation management policy.

The Office of Aviation Services (OAS) exercises programmatic oversight over the work of the bureaus relating to aviation management and operations. This includes coordinating, consulting, and collaborating with the bureaus to ensure Department-wide consistency within the bureau aviation programs, to the extent practical, given the different statutory requirements and missions of the
bureaus. (112 DM 12).

Interior Business Center (IBC) Acquisition Services Directorate (AQD) provides department-wide centralized contracting for aviation flight services for DOI and DOI customers. Other acquisition management activities include property accountability and small purchase service in support of OAS and Bureau operations including DOI fleet aircraft. http://OAS.doi.gov/apmd/index.htm

DOI's Aviation Governance Structure:

The Executive Aviation Board (EAB) is responsible for the Department of Interior aviation program. The EAB provides executive level oversight and performance accountability and assures that Department-wide strategies and initiatives are developed collaboratively and implemented consistently. Additionally, the Board provides final review and approval of policy, when needed. The Board establishes the Executive Aviation Committee. OSMRE’s Deputy Director is designated to serve as OSMRE’s member on the EAB.

The Executive Aviation Committee (EAC) provides executive-level aviation oversight within the bureaus and the Department of the Interior. The EAC is accountable to the EAB and ensures that Department wide strategies and initiatives are developed and implemented consistently. Additionally, the EAC provides review and approval of policy on behalf of the Departmental bureaus, when needed. The EAC is comprised of each Bureau’s designated Aviation Executive, a Senior Executive Service level employee. OSMRE’s Aviation Executive is appointed by the Deputy Director and is currently the Appalachian Regional Director.

The Executive Aviation Subcommittee (EAS) provides the expertise necessary to maintain the safest and most efficient aviation programs across all DOI bureaus. The EAS is accountable to the EAC, and serves as the subject matter experts (SME) in all aviation issues for the DOI. As required, the EAS drafts policy, procedures, and practices on behalf of DOI bureaus and OAS. It is recognized that for some specialty aviation programs the expertise resides within some bureaus, and not necessarily with all bureaus. The EAS is comprised of the Bureau National Aviation Managers and the OAS Assistant Director, Collaboration and Performance Management, who provide subject matter expertise; see 350 DM 1. OSMRE’s EAS member is the OSMRE National Aviation Manager.

OSMRE.

The Deputy Director is responsible for the OSMRE aviation program. The Deputy Director serves as OSMRE’s designated representative on the EAB. The Deputy Director provides executive level oversight and performance accountability and assures that Department-wide and OSMRE strategies and initiatives are developed collaboratively and implemented consistently across OSMRE. Additionally, the Deputy Director provides final review and approval of policy, when needed. The Deputy Director designates OSMRE’s Aviation Executive.
OSMRE’s Aviation Executive provides executive-level oversight and direction of OSMRE’s aviation program. OSMRE’s Aviation Executive is designated by the Deputy Director and serves as OSMRE’s member on the EAC. The Aviation Executive is accountable to the Deputy Director and ensures that Department wide and OSMRE strategies and initiatives are developed and implemented consistently across OSMRE. The Aviation Executive provides review and approval of policy on behalf of the Department and OSMRE. The Aviation Executive is delegated the authority to approve OSMRE’s National Aviation Management Plan. Currently, the Appalachian Regional Director has been designated as OSMRE’s Aviation Executive.

The OSMRE National Aviation Manager (NAM) is designated to administer the OSMRE aviation program at the national level. The NAM is thoroughly knowledgeable regarding the bureau aviation activities and meets the minimum training requirements specified in the Aviation User Training program (350 DM 1 Appendices 3 and 4, 352 DM 1, and Operational Procedures Memorandum (OPM - 04)). The OSMRE NAM is the Chief of the Office of Administration within OSMRE’s Finance and Administration Directorate. The NAM and is responsible for:

- Briefing and updating OSMRE’s EAC and EAB members on all OSMRE aviation activities.
- Identifying and developing OSMRE aviation policies and procedures;
- Coordinating aviation-related activities and services between the Headquarters Office and the Regional Offices;
- Ensuring OSMRE personnel have appropriate aviation training;
- Planning and conducting technical and managerial analyses to identify aviation and organizational resources appropriate for agency use, and to insure the cost-effectiveness of OSMRE aviation operations;
- Providing oversight of aircraft acquisitions and fleet management, contract administration, aviation operations, aviation safety, security and risk management, and reviews and evaluations of regional aviation programs;
- Developing and publishing a NAMP that addresses the minimum elements listed in OPM 6, Appendix A. OSMRE’s Aviation Executive is delegated the authority to review and approve OSMRE’s NAMP. The NAM will review the NAMP annually and is authorized to make interim revisions as required. At a minimum of every three years, the NAM will obtain the OSMRE's EAC member’s review and approval of OSMRE’s NAMP;
- Establishing a Regional Aviation Program Review process;
- Coordinating requests for program approvals waivers and exceptions to policy for aviation operations requiring OSMRE Director level approvals;
- Disseminating aviation related policy and technical information to appropriate OSMRE personnel;
• Coordinating with OAS for OSMRE aviation program evaluations;
• Recommending an OSMRE liaison to the OAS Chief, Aviation Safety, Training and Program Evaluations to participate on aviation mishap investigation teams;
• Participating in or assigning a senior line officer to participate in Aircraft Mishap Review Boards (AMRB) for incidents occurring within the Bureau;
• Responding to AMRB recommendations;
• Actively working with all OSMRE program managers to ensure operational aviation issues are addressed in program and policy decisions;
• Performing or ensuring that the Aviation Safety Manager Duties are accomplished. Provides expert insight and guidance on OSMRE aviation safety issues and sees that aviation safety practices and programs follow DOI/OAS safety guidance;
• Ensuring that OSMRE Regions utilizing aviation resources (other than scheduled air carriers) have a Mishap Response Plan for its flight operations. The purpose of the plan is to provide direction and reduce confusion when responding to an aircraft mishap. The Interagency Aviation Mishap Response Guide and Checklist (National Fire Equipment System (NFES) 2659, http://oas.doi.gov/safety/iamrp.html) is available as a resource to assist in the development of a mishap response plan;
• Promoting the Aviation Mishap Information System (AMIS/SAFCOM).

Regional Directors (RD): Aviation responsibilities are outlined in 350 DM 1 Appendix 4. RDs are responsible for all OSMRE flight operations conducted in their Regions and shall ensure aviation activities are conducted in compliance with applicable DOI and OSMRE policies and directives as well the OSMRE Aviation Management Plan. RDs ensure the following is accomplished:

• Disseminate Departmental aviation safety policy and information to appropriate personnel;
• Formally designate a Regional Aviation Manager (RAM);
• Regional personnel have appropriate aviation training in compliance with all DOI, OAS and OSMRE requirements;
• Regional Aviation Management Plan (RAMP) is developed and approved, in consultation with the National Aviation Manager;
• Responsible for the development of a comprehensive Regional Aviation Program Review process;
• All aviation activities are assessed for risk and safety hazards are mitigated;
• Recommends an OSMRE liaison to the OAS Chief, Aviation Safety, Training and Program Evaluations to participate on aviation mishap investigation teams;
• Supports and disseminates aviation policies and information;
• Aviation Life Safety Equipment (ALSE) requirements are followed;
• Significant operational problems are reported to the NAM;
• Promote and support the Aviation Mishap Information System
OSMRE National Aviation Management Plan

(AMIS/SAFECOM);
• Records related to the aviation program are appropriately maintained;
• Aviation resources are procured, managed, and operated within the scope of the contract.

Regional Aviation Managers (RAMs) are responsible for providing operational and aviation safety oversight to all flight operations conducted in their Region. The RAM position will be designated in writing by the Regional Director and is the primary contact for the Regional aviation review. Each OSMRE Region will have a designated RAM. Currently, most OSMRE manned flights occur on OAS contracted flights. OSMRE RAMS will coordinate with cooperators to assure OSMRE employees will meet DOI, OSMRE & OAS specific aviation training requirements prior to flight. Regions are encouraged to formalize this process and address it in their Regional Aviation Management Plans. RAM responsibilities include:

• Writing and implementing the Regional Aviation Management Plan (RAMP). See section 2.2 of this Chapter for specifics;
• Preparing and maintaining a current Regional Mishap Response Plan. The purpose of the plan is to provide direction and reduce confusion when responding to an aircraft mishap. The Interagency Aviation Mishap Response Guide and Checklist (National Fire Equipment System (NFES) 2659, http://oas.doi.gov/safety/iamrp.html is available as a resource to assist in the development of a mishap response plan;
• Reviewing Project Aviation Safety Plans (PASP) and coordinate the planning and completion of project plans and risk assessments. See Chapter 8 for required topics that must be included in the PASP;
• Observing and monitoring regional aviation activities and provide liaison with the NAM and other agencies as appropriate;
• Providing assistance for the implementation of Departmental Policy and OSMRE Aviation plan; Reviews proposed changes in policy and procedures;
• Coordinating or instructing aviation training courses as requested, when available;
• Ensuring that prior to participating in aviation operations, personnel have completed all required aviation training. Ensure Departmental required aviation training is verified in the Department aviation training system;
• Validating all Regional employees meet any OSMRE specific requirements, e.g., for over water flights, OSMRE employees must meet specific OAS standards. See Chapter 5 training in this document and Regional Aviation Management Plans;
• Reviewing requests for new flight services such as On-Call contacts, Aircraft Rental Agreements, Exclusive Use Contracts or Call When Needed (CWN) contracts;
• Reviewing requests for cooperater use (i.e. NOAA, USCG) to assure OSMRE passengers will meet all DOI, OAS & OSMRE policies;
• Serving, when delegated, as OSMRE representative or liaison for aviation mishap investigations and mishap review boards;
• Appraising the RD and NAM of aviation concerns and problems;
• Ensuring aircraft and pilots are appropriately approved for the mission and request technical assistance for aviation problems;
• Approving Mission Chiefs designated for all special use flights;
• Ensuring that Individuals who plan, organize, and manage the aviation operations of a project utilizing aircraft, are qualified per OPM-04: DOI Aviation User Training Program;
• Confirming all dispatching and flight following occurs in accordance with DOI, OAS and OSMRE policies. (OAS Director approved Vendor flight following program or Bureau provided).

Vendor Pilots/Contractors: Vendors pilots and contractors may be designated the responsibility for flight following and flight plans. RAMs are to assure contracts utilized to secure these services contain appropriate language and OAS Director Approval. Contracts must also include vendor responsibility in notification for OSMRE mishap response plan etc. (See Chapter 3, 3.1 Aviation Administration for specific requirements).

Mission Chiefs: The Senior OSMRE employee on a flight will act as Mission Chief unless otherwise designated by the Regional Director or their Field Office Director. Designation will be kept on file with the RAM. Mission Chiefs will remain current with all training requirements and meet the requirements for the Air crewmember position as identified in OPM-4.

http://oas.doi.gov/library/opm/index.htm and A-109 Radio Use. (See Chapter 6 Aviation Training for specific requirements). The Mission Chief is responsible for:
• Planning and executing a safe aviation mission;
• Briefing of the mission to the Pilot and aircrew members;
• Being knowledgeable about DOI and Bureau aviation management and safety procedures;
• Coordinating with the pilot for pre-mission planning, briefing, and in-flight emergency duties of passengers;
• Ensuring compliance with the mission pilot’s proper orders;
• Reporting all mishaps and accidents as outlined in the departmental procedures and regulations (all employees are responsible for reporting any mishaps or accidents);
• Risk Assessments support informed GO/NO-GO decisions which are the responsibility of the Regional Director (line manager). Pilot retains final authority for a NO-GO decision when safe operation of the aircraft is a factor;
• Ensuring compliance with DOI and OSMRE safety programs with regard to the use of properly approved pilots and aircraft, approved flight following, use of personal protective equipment, installation of prescribed emergency equipment, and other items as prescribed by the contract and regulations.

Note: The RAM will assist the Mission Chief in meeting their responsibilities for pre-flight checks and planning.

Employees/Aviation Users are responsible for knowing and following applicable policy and directives; attending required aviation training in accordance with DOI and OSMRE policies; using appropriate personal protective and life support equipment; reporting potential and actual problems; and ensuring their own safety as well as that of others.
2.2 Objectives of this Aviation Management Plan
The Aviation Management plan provides for the safety of OSMRE employees and the public through clear direction and intent for required aviation safety education requirements, standardized procedures and formal information sharing. This plan assures that Acceptance of Risk is at the appropriate level in the Bureau.

In addition to the NAMP, each OSMRE Region engaged in aviation operations must to the degree dictated by the level of the program, prepare and maintain a Regional Aviation Management Plan (RAMP) in concert with the National Plan. The RAMP should be no more complex than necessary to ensure the safe, efficient and effective aviation operations and at a minimum meet the DOI requirements for Aviation Management Plans as identified in DM and OPM-6 Aviation Management Plans, dated January 1, 2017. https://www.doi.gov/aviation/library/opm Regions can meet this requirement by utilizing this National Plan and insert supplements with Regional Pages at the end of each chapter. A Regional Signature page must be included.

2.3 Authorities
With minor exceptions as stated in this document, this NAMP applies to flight services other than those acquired on a seat-fare basis operating under Federal Aviation Regulations (FAR) Part 135, or from commercial air carriers (e.g., Delta, United, etc.) in the United States, Trust Territories, and Possessions operating under FAR Part 121.

Because OSMRE is responsible for flight crew members, aircrew members and passengers on board aircraft under its operational control, this manual is applicable to OSMRE employees, OSMRE, State/Tribal partners, OSMRE volunteers, persons supervised by OSMRE employees, and support service contractors (all hereinafter referred to as OSMRE employees). Persons employed by, and whose work is directed solely by cooperators or contractors are exempt from provisions of this handbook except when their duties include the use of flight services under the operational control of the OSMRE. In that event, such persons will be subject to the policies and procedures contained herein.

2.4 Revision Schedule
As per DOI Policy, this Plan will be formally reviewed and approved by the Bureau Director at a minimum of every three years. O S M R E Director approval authority has been delegated to OSMRE’s Aviation Executive. Consistent with Departmental policy, approval authority may not be delegated below this level. The NAM will review the NAMP annually and report on said review and the necessity for any changes to the Aviation Executive. The NAM is authorized to make interim revisions as required.
2.5 OSMRE Aviation Governance Structure

3.0 Aviation Administration

3.1 Contracts – (Non-fleet)

OSMRE utilizes the contract aircraft available through IBC/AQD and required as per 353DM 1. Information is located on the AQD web page at [http://www.doi.gov/aviation/aqd_index.cfm](http://www.doi.gov/aviation/aqd_index.cfm). AQD Boise is responsible for the centralized contracting for aircraft and related services for all Department of the Interior agencies.

OSMRE Aviation Contracts may have additional requirements and responsibilities included for the Vendors. They are as follows:

**Vendors May Have the Responsibility for Flight Plans and Flight Following.** For this to occur, OSMRE AQD Aviation Contracts must have specific language that addresses what DOI standards must be met (example 30 minute check-ins) and what procedures must be followed in the event of an overdue aircraft or a mishap. (OSMRE Mishap response plans) Vendor provided flight following must be approved by the Director of OAS. Mission Chiefs are responsible to assure that vendor and Pilot are providing flight following, flight planning, and mishap response as per the contract language and OSMRE policy.

**Vendors may be responsible to provide cold weather personal protective equipment (PPE) for OSMRE employees.** All PPE must meet DOI Policy as per the ALSE Handbook. OSMRE/AQD Aviation
contracts must have specific language that identifies the DOI and any additional OSMRE standards for vendor provided PPE. Mission Chiefs are responsible to ensure the required PPE is provided by the vendor. Requirements are in the ALSE Handbook: https://www.doi.gov/aviation/library/guides

All aircraft services required by OSMRE must be acquired through the AQD- Aviation Services Procurement process with the following exceptions:

**Seat Fare** on flights with scheduled air carrier; Examples, commercial airlines, or approved SEAT FARE operations as per OPM-15 Acquisition of Seat Fares in Alaska.

**End Product/Service Contracts** can be used to obtain services and products such as aerial photographs, per head animal capture 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 Office of Aviation Services. There are very strict guidelines that include “operational control” for the use of these types of contracts. Refer to OPM-35: Identification of End Product/Service and Flight Service Procurement and consult with your RAM to confirm the flight you are proposing meets the End Product definition.

3.2 Acquisition – Fleet
Not applicable to OSMRE at this time.

3.3 Use Reports and Payments Process
Regions will specify any specific processes in addition to DOI requirements in their RAMP’s. Examples include: 1) process for flight ordering, 2) flight tracking including hours for missions on Cooperator aircraft, 3) Mission Chief/RAM responsibilities for process for payment, and 4) if the Regional Finance Supervisor has any additional requirements.

3.4 Record Keeping Requirements
Not applicable at this time.

3.5 Bureau-specific Administrative Requirements
Not applicable at this time.
4.0 Aviation Safety

The priority in all OSMRE aviation missions is the safety of employees, contractors, cooperators and the public. OSMRE personnel performing aviation functions must be service oriented and meet all qualification requirements of the departmental and bureau manuals, handbooks, and guides. The OSMRE is committed to ensuring our workplaces are free of recognized hazards. Risk management will be inherent in all aviation missions and programs. Prior to conducting any mission, all risks will be mitigated to the lowest acceptable level possible.

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 should be based on policy, principles, risk management, training, experience and the given situation.

4.1 Policy

As a bureau, we are often challenged with working in high-risk and dynamic environments that are not always predictable. The OSMRE Aviation management plan establishes senior management’s commitment to continually improve safety and defines the methods, process and organizational structure needed to meet safety goals. Where appropriate, OSMRE will implement more restrictive policies as required in the DM’s due to mission risk.

4.2 Risk Management

Risk management responsibilities and tools are identified in the National and Regional Aviation Management Plans. Special Use OSMRE flights will not occur without a current Project Aviation Safety Plan (PASP). The required elements of a PASP can be found in Chapter 8 of this Aviation Management Plan. For those Regions that perform similar special use aviation missions on a recurring or routine basis, the required PASP can be included as part of the RAMP that is reviewed at least annually. In this instance, in place of a PASP the Region must have a documented process to capture the unique and special circumstances (ex. dispatch log, passenger manifest, PPE requirements, supervisor approval).

Employee Prerogative

While performing their duties, OSMRE personnel may elect without fear of reprisal not to fly under any condition they consider to be unsafe. It is the employee’s responsibility to immediately report any aviation hazard that compromises the safety of personnel or equipment via a Safety Communiqué, (SAFECOM) https://www.safecom.gov/.

Project supervisors, RAMs and Missions Chiefs are responsible for ensuring PASPs are completed. The Project supervisor should work closely with RAMs in preparing these plans. The level at which a PASP is approved is based on the risk level as determined by the written risk assessment, and plan is completed and signed at appropriate level. Within OSMRE, employees with aviation management responsibilities (Mission Chief, RAM, NAM) have formal delegations for their responsibilities from the appropriate line manager (Bureau & RDs). Aviation Managers and supervisors will assure that all employees participating in aviation activities meet all DOI and OSMRE policies prior to a mission. In the event they do not, employees will not participate.
4.3 Promotion

**Education:** All OSMRE employees will meet mandatory DOI and Bureau Specific Aviation training requirements prior to participating on flights. OSMRE leadership supports an aviation safety culture that encourages participation and currency for all required aviation safety training. For specific currency and training requirements refer to this Aviation management plan, OPM-4 – Aviation User Training Program, [https://www.doi.gov/aviation/library/opm](https://www.doi.gov/aviation/library/opm) and the DOI IAT website for reference: [https://www.iat.gov](https://www.iat.gov).

**Reporting Aircraft Mishaps:** All aircraft incidents and accidents will be reported, via SAFECOM, to the OAS and by OSMRE policy to the Regional Director in accordance with Departmental policy. Aircraft mishaps are broadly defined as follows:

- **Accidents** involve death or serious injury or substantial damage to the aircraft. The National Transportation Safety Board (NTSB) is responsible for the investigation of aircraft accidents. All aviation accidents will be reported immediately to the NAM, Regional Director and the OAS in accordance with 352 DM 3, Aircraft Mishap Notification, Investigation and Reporting and OSMRE policy.

- **Incidents with Potential** are those in which the circumstances indicate significant potential for substantial damage or serious injury.

- **Aircraft Incidents** are occurrences that affect or could affect the safety of operations.

Final classification will be determined by the OAS Chief Aviation Safety, Training and Program Evaluations.

**Accident/Incident OSMRE Review Process:** The Regional Director, in coordination with the NAM, will determine within 14 days, whether an internal OSMRE review of the mishap is necessary.

**OSMRE & DOI Aviation Awards Program:** OSMRE will use the DOI Safety Award qualification standards and procedures to recognize aviation safety practices, per 352 DM Chapter 4 AVIATION SAFETY AWARDS PROGRAM and on the OAS website: [https://www.doi.gov/aviation/safety/safetyawards](https://www.doi.gov/aviation/safety/safetyawards). Aviation safety awards offered by the Department are as follows:

- **Award for In-Flight Action**
  This Award is established to recognize onboard flight crewmembers, aircrew members, and passengers who, through outstanding airmanship, courage, or other action, materially contribute to the successful recovery from an emergency, or who minimize or prevent aircraft damage or injury to personnel during a DOI aviation-related occurrence.
Award for Safe Flying
This award is established to recognize DOI pilots who have distinguished themselves by safe flying for the period considered.

Award for Significant Contribution to Aviation Safety
This award is established to recognize an individual, group, or organization for significant contribution to aviation safety or aircraft accident prevention within DOI.

Departmental Award for Outstanding Contribution to Aviation Safety
This award is established to recognize an individual, group, or organization for outstanding contribution to aviation safety or aircraft accident prevention within DOI. This award is restricted to DOI employees and only one such award shall be presented annually.

Airwards
This award is established to provide timely recognition to any individual who has demonstrated positive behavior or actions promoting DOI aviation safety, such as correcting a hazardous situation, submitting a good idea, or just making a difference.

All nominations will be processed through the respective NAM/ASM or their designee through the OAS Chief Aviation Safety, Training and Program Evaluations for eligibility verification. All nominations will be reviewed for approval by the Aviation Executive, except for Airwards which only need to be reviewed by the OAS Chief Aviation Safety and Program Evaluations.

4.4 Assurance
OSMRE will evaluate the continued effectiveness of implemented risk control strategies and support the identification of new hazards.

Program Evaluations
In addition to the 5 year DOI program reviews, the bureau will accomplish internal program reviews at the national level every 3 years to facilitate the sharing of information and standardization in the Bureau.

Mishap Response Plans & Hazard Maps
NAM and RAMs have the responsibility to have current/signed mishap response plans in place in the event of a Mishap. Each OSMRE office using flight services must maintain a current and complete Aviation Mishap Response Plan in a readily-accessible location. Local known area hazard maps are also required and must be reviewed prior to the mission. A hazard is any obstacle protruding into the planned flight altitude. Known and possible wire strike locations in the area to be flown will be reviewed and made known to the pilot during flight planning activities. Any new hazards found in the area flown must be added to the hazard map. Mission Chiefs and Pilots are responsible for reviewing hazard maps with pilots prior to each flight.

The Aviation Mishap Response Plan
OSMRE National Aviation Management Plan

The Aviation Mishap Response Plan must detail the actions that need to be accomplished in the event of an aviation accident. A brief outline of the required actions is listed below, and additional information can be found on the OAS Website: https://www.doi.gov/aviation/safety/iamrgc

A. Take necessary action to rescue survivors.
B. Secure the site and surrounding area to protect the wreckage from further damage and avoid injury to persons nearby.
C. Designate an Incident Commander to be in charge of the mishap site; get names, addresses, etc., of witnesses; and relay all media inquiries to the investigating team, OSMRE’s Office of Communication public information official.
D. Secure all OSMRE records pertaining to the operation, flight, maintenance, crewmembers, etc.
E. Document the available information on the Aircraft Accident Checklist in the Interagency Aviation Mishap Response Guide and Checklist, and provide the information to OAS and Regional Aviation Manager. Do not delay initial reporting to try to fill in all the blanks.

Mishap Notification Procedures
In the event of an aircraft accident, incident with potential, or when any of the mishaps listed below, the aircraft operator, flight manager, pilot, or person with flight following responsibilities must immediately, and by the most expeditious method, notify the National Aviation Manager, Regional Director and the Office of Aviation Services Safety Office, (24/7) at 1-888-4MISHAP (1-888-464-7427), who has the Departmental responsibility to coordinate with the nearest office of the NTSB:

OSMRE Internal Aviation Notification and Routing Procedures
The NAM or designee is the primary focal point of contact within the OSMRE, between OAS and the OSMRE and with the other bureaus for notification of significant aviation related events and policy related matters.

Note: Nothing in this procedure should be interpreted 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.

The RAM will inform the NAM of accidents with potential, serious safety concerns, aviation events of significant policy impact and aviation events or actions with the potential to cause widespread interest both within and outside OSMRE. The NAM will inform the ranking supervisor of involved staff and the Aviation Executive, Deputy Director and the Director of OSMRE. At that time if the RAM was not the initial notifier the NAM will also inform the RAM, where the event occurred. The RAM will inform, as described in the RAMP, the appropriate Regional local management in either informational scenario.

Concurrently, the NAM will contact the appropriate person in DOI/OAS for accidents and incidents with potential, this will usually be the Chief, Aviation Safety, Training and Program Evaluations or their designee.

Mishap Investigation
All DOI accidents are the domain of the NTSB whether they participate in the field investigation or not.
NTSB may engage the Office of Aviation Services to investigate accidents for the Board. In this case, the Office of Aviation Services is working for the NTSB and is bound by rules 49 CFR 830-831. OSMRE will offer a qualified individual to assist with the investigating agency and may also independently review the mishap internally. The OSMRE Regional Director, in conjunction with the NAM, will assign the appropriate individuals. When NTSB investigates DOI accidents, OAS generally will be included. NTSB and/or OAS may also choose to investigate other DOI aircraft incidents.

Aircraft Mishap Review Board (AMRB)
An AMRB is responsible for developing mishap prevention recommendations for all Interior accidents and selected incidents with potential. Specific responsibilities, functions and procedures to be followed are in accordance with DOI AM Instruction 220-1.

DOI Aircraft Mishap Review Board, (AMRB) OSMRE Attendance, Report Routing and Follow-up Actions
Per 350 DM 1 Appendix 4 A.11, the NAM is responsible for assigning a representative to the AMRB. This will usually be an aviation subject matter expert from an area outside the region where the event occurred. OSMRE policy requires that whenever an AMRB is convened by the Director of OAS in response to an aircraft mishap that a Senior Line Officer from the Region involved in the event will participate in the AMRB as a non-voting member. The NAM will coordinate with OAS for inclusion of this additional OSMRE participant on the AMRB.

Upon receipt of the AMRB report and final recommendations from the OAS Director, the NAM will route the report to senior OSMRE management. The NAM will concurrently route copies to the RAM in the affected region for distribution to the Regional Director of the involved Region. Within 30 days of the issuance of an AMRB report the RD of the Region involved will convene a Board of Review (BOR) that will include the Regional Senior Line Officer present at the AMRB, RAM, and OSMRE flight, air or ground crew involved in the mishap. The OSMRE will task the responsible parties with responding to and/or implementing the AMRB recommendations in addition to any the OSMRE may develop.

4.5 Aircraft Mishap Documentation requirements
Pilot/Operator Aircraft Accident Report. The aircraft operator must complete NTSB Form-6120.1/2, Pilot/Operator Aircraft Accident Report, and submit it to the nearest office of NTSB. In the case of DOI-owned/bureau operated aircraft, a copy of the report must also be sent to the OAS Regional Director and the OAS Safety Manager within 10 days following an aircraft accident or when requested by NTSB.

Aircraft Accident/Incident with Potential. The aircraft operator, passenger, or other person with knowledge of the accident/incident with potential must comply with the Aviation Mishap Notification Investigation and Reporting Handbook, per 352 DM 4.

Aviation Mishap Information System. The aircraft operator, flight manager, or any other person noting an aviation hazard, maintenance deficiency, airspace conflict, or related incident should
complete a SAFECOM Report within 5 days and submit it to the OAS Chief of Aviation Safety, Training and Program Evaluations and the Regional Aviation Manager.

4.6 Bureau-Specific Safety Requirements
All specifics are identified in the chapters of this NAMP

4.7 Reporting Airspace Conflicts through the SAFECOM System
There are Military training routes, varied airspace, and Memorandums of Agreement (for example) in areas of operations for OSMRE. Every effort is made to avoid and or notify when known operations are occurring. When conflicts occur they will be reported through the SAFECOM system.

OSMRE SAFECOM Management Roles

<table>
<thead>
<tr>
<th>POSITION</th>
<th>AUTHORITY</th>
<th>RESPONSIBILITIES</th>
<th>CRITICAL NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Submission</td>
<td>Fills out the SAFECOM form, completing all required fields including initial determination of Operational Control. Completes the Original Text in both the Narrative and Corrective Action fields. Consults with mission personnel prior to submitting electronically to OAS and hardcopy to RAM.</td>
<td>Fill out completely and accurately. Report only the facts. Narratives should be brief and concise.</td>
</tr>
<tr>
<td>Regional Aviation Manager</td>
<td>Submission</td>
<td>If only a hardcopy has been submitted, submits electronically to OAS.</td>
<td>Fill out completely and accurately. Report only the facts. Narratives should be brief and concise.</td>
</tr>
<tr>
<td>E-Mail Notification</td>
<td></td>
<td>Receives e-mail notification of all initial, corrective action, modified and completed SAFECOMs identifying OSMRE operational control within their Region.</td>
<td>Coordinate with submitter. Provide feedback to person submitting (unless anonymous)</td>
</tr>
<tr>
<td>Corrective Actions</td>
<td></td>
<td>Takes corrective action at the local level and describes these actions in the Public Text area of the Corrective Action field. Include your Job Title (do not enter personal information)</td>
<td>Must treat all corrective action descriptions as if they were public. Coordinate with NAM.</td>
</tr>
<tr>
<td>Role</td>
<td>Action</td>
<td>Authority</td>
<td>Coordination</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Modify Actions</td>
<td>Authority to change all SAFECOM information (except for of the submitter and the original narrative).</td>
<td>Coordinate with NAM. Verify and amend all info for accuracy.</td>
<td></td>
</tr>
<tr>
<td>Operational Control</td>
<td>Make final determination of the Agency and Region that has Operational Control.</td>
<td>Determines who will receive e-mail notification.</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Select the appropriate category to classify the SAFECOM.</td>
<td>Multiple categories possible.</td>
<td></td>
</tr>
<tr>
<td>National Aviation Manager or National Aviation Safety Manager</td>
<td>Make Public</td>
<td>Copies Original Text into the Public Text area for both the Narrative and Corrective Action fields. Sanitizes the Public Text. Makes the SAFECOM “Public” (if overly sensitive, consult with NAO before making public)</td>
<td>Ensures all Public Text is sanitized in Narrative &amp; Corrective Action fields prior to making public.</td>
</tr>
<tr>
<td>E-Mail Notification</td>
<td>Receives e-mail notification of all initial, corrective action, modified and completed SAFECOMs nationwide that identify OSMRE operational control.</td>
<td>Coordinate with RAM.</td>
<td></td>
</tr>
<tr>
<td>Corrective Actions</td>
<td>Takes additional corrective actions, if necessary, and documents on the SAFECOM.</td>
<td>Coordinate with RAM.</td>
<td></td>
</tr>
<tr>
<td>Modify Actions</td>
<td>Authority to change all SAFECOM information (except for the RAMs of submitter and the original narrative).</td>
<td>Coordinate with RAM.</td>
<td></td>
</tr>
<tr>
<td>Make Public</td>
<td>Has the authority to sanitize information and make the SAFECOM “public” (if not already done at the State level). Coordinates with AMD.</td>
<td>Ensures all Public Text is sanitized in Narrative &amp; Corrective Action fields prior to making public.</td>
<td></td>
</tr>
<tr>
<td>Completion</td>
<td>Has the authority to make the SAFECOM “complete”.</td>
<td>Ensures all Public Text is sanitized in Narrative &amp; Corrective Action</td>
<td></td>
</tr>
</tbody>
</table>
5.0 Aviation Operations

Aviation operations within OSMRE primarily consist of aerial expeditions and overflights of both abandoned and active coal mines. Operations may also include transportation of personnel and contractors to various outreach and government-to-government meetings; VIP tours; transportation for studies; and transportation of non-Federal passengers engaged in missions who enhance accomplishment of the OSMRE program. Specific program objectives include: safety, fiscal responsibility, and efficient and environmentally sound transportation.

The flight environment usually takes place completely over land, but include rugged mountainous terrain, in remote areas, often far from any support facilities. Each of these flight profiles may need to occur during periods of darkness and/or extreme cold weather.

As a bureau, we are often challenged with working in high-risk and dynamic environments that are not always predictable. It is the responsibility of each employee, cooperator and contractor to conduct aviation operations that have been planned properly, approved by management, that utilize the correct equipment and personnel and are carefully executed per Aviation Management Plans, Project Aviation Safety Plans and SOP’s to minimize risk. Safety is the first priority and leadership at all levels must foster a culture that encourages employees to communicate unsafe conditions, policies or acts that could lead to accidents without fear of reprisal.

5.1 Special Use

Some OSMRE flights occur in flight profiles that fall within the Special Use Category. See OPM-29 Special Use Activities [https://www.doi.gov/aviation/library/opm](https://www.doi.gov/aviation/library/opm)

Examples: Reconnaissance, Low level flight (within 500’ of the surface), Snow operations, water landings - floats or hull (helicopter), wheel operations on unprepared landing areas (airplane). These environments can be very unforgiving.
“Special use” is defined in 350 DM 1 and OPM 29 as those operations in which special pilot qualifications and techniques, special aircraft equipment, and personal protective equipment are required to enhance the safe transportation of personnel and property. Office of Aviation Services authorization for both pilot and aircraft is required for special use operations.

Special Use flight operations require, at a minimum:

- **Project Aviation Safety Plan, (PASP)** including a Risk Assessment, and at a minimum, the elements listed in Chapter 8 of this Aviation Management Plan.

5.2 **Fixed Wing**

Manned fixed wing dispatch, ordering, and operations shall be accomplished in accordance with National and Regional aviation plans. All flights will have a bureau assigned mission chief when under the operational control of OSMRE.

**Low-level Flight Operations (Less than 500’ AGL):**

All fixed-wing aircraft missions for low level operations must have an approved PASP as per OPM-6 and Chapter 8 of this plan.

**Operational Procedures:**

- Manned, Fixed-wing aircraft and pilots must be specifically approved for low-level flight operations.
- A high-level recon will be made prior to low-level flight operations.
- All flights below 500 feet will be contained to the area of operation.
- PPE is required for all fixed-wing; low-level flights (reference ALSE Handbook).

5.3 **Rotary Wing**

Helicopter dispatch, ordering, and operations shall be accomplished in accordance with National and Regional aviation plans. All flights will have an assigned bureau mission chief when under the operational control of OSMRE.

**OSMRE Employees flying with Cooperators (Affiliate, State, Military and Other Government Agency Operations)** When OSMRE employees are flying with OAS Approved Cooperators the RAM will assure that OSMRE employees meet all DOI & OSMRE Policy for PPE, flight following and mishap response. All flights with cooperators must have a current, approved PASP in place that addresses how the above will be accomplished. At a minimum, all OSMRE employees will meet training and currency requirements for A-100 Basic Aviation Safety Course. See 5.5 Cooperator Use for specifics.

5.4 **Fleet Operations**

Not applicable to OSMRE at this time.
5.5 Cooperator Operations (fixed or rotary wing):

OSMRE conducts aviation operations with cooperators in the performance of mission (i.e. NOAA procured/operated aircraft, USCG & DOD Assets, Lessee procured aircraft. As per DOI policy, an OAS cooperator approval must be in place prior to utilization, for DOI employees to fly on a cooperator aircraft.

Cooperator Operations identifies the specific types of cooperators. Cooperators types fall into 3 categories; Affiliate, Military and Other Government Agency Operations. Each category has specific approval processes and requirements. Responsibilities for both the Bureau and OAS are identified in this DM. [https://www.doi.gov/aviation/library/dm](https://www.doi.gov/aviation/library/dm)

Cooperator use must be approved via one of following methods: An MOU between the Department of Interior and cooperator signed by the OAS Director, or a Letter of Approval issued by an OAS Regional Director.

**MOU’s**

Current memorandums of understanding (MOU’s) signed by the Director of OAS can be located on the OAS website at [https://www.doi.gov/aviation/library/mou](https://www.doi.gov/aviation/library/mou)  Each MOU has a corresponding Information Bulletin (IB) that identifies and clarifies DOI Bureau responsibilities in the implementation and use of the MOU. The MOU establishes a framework under which the cooperator will provide aerial support to DOI authorized missions. The scope of the aviation support provided is also identified. MOU’s are generally issued for at least 5 years and have specific procedures in place should one of the parties decide to discontinue the agreement. Each MOU states; “Contact Bureau Aviation Managers (unit, state, region, national as identified by your respective bureau) for specific DOI and Bureau requirements prior to use” OSMRE employees must contact their RAM prior to any cooperator flights.

**Letter of Approval – LOA’s**

Letters of approval are not posted on the Website. Copies may be obtained through the OAS Regional Offices. As with the MOU’s OSMRE Employees must contact their RAM prior to use.

Cooperator letters of approval for Affiliates are generally issued for a 30 day period. Cooperator letters of approval for Military and Other Government Agency operations are generally issued for 12 months.

**Cooperator Flights with Affiliates:** Are typically used for inspection travel to both active and abandoned mine sites. Travel may take place on a lessee-contracted helicopter. For OSMRE personnel to fly on an affiliate aircraft, the request must be routed to the OAS Regional Director through the RAM with a cc to the NAM for approval by OAS. The pilot and aircraft must be currently approved/carded by OAS. 351 DM Chapter 4 outlines the approval process for Affiliate use. OSMRE employees must meet all ALSE HB requirements for PPE and the flight must meet DOI and Bureau specific flight following requirements.
OSMRE Employees flying with Cooperators:
When OSMRE employees are flying with OAS Approved Cooperators the RAM will assure that Bureau employees meet all DOI & OSMRE Policy for PPE, flight following and mishap response. All flights with cooperators must have a current, approved PASP in place that addresses how the above will be accomplished. At a minimum, all OSMRE employees will meet training and currency requirements for A-100 Basic Aviation Safety Course.

5.6 Passenger Transport
A passenger is any person aboard an aircraft, when traveling on official OSMRE business, who does not perform the function of a flight crewmember or Aircrew member. Unauthorized passengers will not be transported in any DOI aircraft. For official, unofficial and unauthorized definitions, Reference 350 DM 1.8. https://www.doi.gov/aviation/library/dm

All passengers will:
- Use appropriate personal protective equipment (reference ALSE Handbook).
- Report aviation incidents, operations deviating from policy to the RAM and/or through the SAFECOM system.
- Emphasize personal safety as well as the safety of others involved in the flight.
- Meet the training requirements of DOI OPM-04 Aviation User Training Program.

Agency Employees in Off Duty Status: Federal employees cannot utilize annual leave/LWOP or “volunteer” in order to circumvent agency policy. If any aspect of the employee’s activity is related to their official duties, they are conducting agency business, irrespective of their pay status. Reference the regulations regarding off-duty activities in accordance with the Standards of Ethical Conduct for Employees of the Executive Branch (5 CFR. Part 2635.802-803).

Non Federal Passengers: Restricted Category Helicopters: Carriage of Non-Federal passengers aboard restricted category aircraft is specifically prohibited.

Volunteers: Volunteers when traveling on official business, are official passengers, within the terms of 350 DM 1.8.A. (3) and this Aviation Management Plan. Volunteers are not permitted to operate aircraft or serve as an aircrew member on any DOI aircraft. Volunteers aboard DOI aircraft performing mission flights must be pre-approved by the appropriate OSMRE Regional Director.

Operations Flying with Doors off or Locked Open
Flight operations involving the helicopter doors locked open or off in flight, require special control measures due to their inherently higher risk and are considered “Special Use Activities”, and as such, require a secondary restraint, and a Project Aviation Safety Plan with management approval.

Emergency Exception to Policy
Federal employees who are involved in an event in which there clearly exists an imminent threat to human life, and there is insufficient time to utilize approved methods, may deviate from policy to the extent necessary to preserve life (reference 350 DM 1.3.B). The following provisions and follow-up actions apply:
Personnel involved are expected to use good judgment. Personnel involved in the decision making associated with deviating from policy must weigh the risks verses benefit. Any deviations shall be documented on a SAFECOM.

Use of Government Aircraft and Solicitor Approvals

Administrative Travel Justification and Documentation requirements:
The primary intent of this process is that taxpayers should pay no more than necessary to transport Government officials. The OPM discusses official travel on government aircraft and when the DOI Solicitor’s (SOL) approval is required for Senior Executive Service (SES), Senior Federal officials or non-Federal travelers.

- Senior Executive officials include all civilian officials appointed by the President or civilian employees of the Executive Office.
- Senior Federal officials include all Senior Executive Service (SES) employees.
- Non-Federal such as Congressional, Legislative, State, Cooperating Agency and Partner officials.

Specific information and procedures are addressed in OPM-7:
https://www.doi.gov/aviation/library/opm

5.7 Hazardous Materials Transport
When required by OSMRE, transportation of hazardous materials (hazmat) shall be in accordance with Special Permit DOT-E-9198 and the Department’s “Interagency Aviation Transport of Hazardous Materials” Handbook. The handbook outlines what types of hazardous materials are covered under this exemption. Some examples include: batteries, battery fluid, flammable and combustible liquids such as gasoline, diesel, kerosene, alcohol, white gas (stove fuel), paint, and thinners/solvents; fuses, flares, and other flammable solids designed for signaling, fire ignition, or fumigating; liquids or fuels under compression such as propane, butane, acetylene, etc., and aerosol containers; high-pressure cylinders such as air, oxygen, carbon dioxide, helium, nitrogen, and argon; small arms ammunition; medical waste consisting of blood-soaked materials such as clothing, bandages, etc.; bear repellent, and irritants.

Numerous DOI personnel are required to carry on their person materials essential to survival such as inflatable flotation devices, spare CO2 cartridges for flotation devices, small arms and ammunition, stove fuel, fire starters, pen flares, strike anywhere matches, and supplemental breathing air. Many of these survival devices are carried in a pocket, in a survival vest, or pack. Specifics are located at the...
OSMRE National Aviation Management Plan


A copy of the Special Permit and Interagency Aviation Transport of Hazardous Materials Handbook must be aboard each aircraft operating under the provisions of this permit. OSMRE personnel must complete the IAT (Interagency Aviation Training) on-line module (A-110 Aviation Transportation of Hazardous Materials) prior to performing hazmat transportation. https://www.iat.gov/

5.8 Flight Planning

All OSMRE flights will be ordered through and coordinated with the RAM. Each Region will address specific procedures in their RAMP. The following terminology is used throughout this section under these definitions.

A “Point-to-Point” flight is one that originates at one developed airport or permanent helibase and flies directly to another developed airport or permanent helibase with the sole purpose of transporting personnel or cargo (this term does not apply to flights with a scheduled air carrier on a seat fare basis). These types of flights are often referred to as “administrative” flights and require the aircraft and pilot to be only carded and approved for point-to-point flight. A point-to point flight is conducted higher than 500 feet above ground level (AGL). NOTE: A developed airport is one that is listed in the FAA Sectional or FAA supplement for the geographic area.

A “Mission flight” is defined as any flight other than point-to-point, conducted with the express purpose of performing (or directly supporting) an agency or resource management-related task such as reconnaissance etc. DOI refers to many such missions as “Special Use.” In OPM-29, these missions require special techniques, procedures and consideration. Aircraft and pilots must be approved for each specific activity prior to use. Mission flights require additional Regional planning, active flight following, additional pilot and aircraft inspections and carding, and operational supervision by bureau personnel.

5.9 Flight Following

DOI Flight following Policy in DM 351 DM 1: Designees (cooperator or OSMRE employees) are responsible for monitoring aircraft flight activities in accordance with DOI/OSMRE policies. DOI Policy (See 351 DM 1, page 10) states that Position reporting shall not exceed a maximum of 30 minute intervals under normal circumstances unless the pilot has ensured that radar contact with an air traffic control facility has been established and maintained.

If flight following cannot be maintained as per requirements in the PASP, and contact cannot be conducted in another available manner, the flight will be terminated and return to base.

Individuals responsible for flight following must have received training on and possess the means to initiate an aircraft mishap emergency response should the need arise.

Mishap Response Plans: All vendors, dispatch centers, individuals and units with the responsibility
for flight following must have a current copy of the OSMRE Mishap Response Plan and have the ability to initiate the appropriate action based on the situation.

Types of flight following include: Federal Aviation Administration (FAA), agency flight following to include Automated Flight Following and/or radio check-ins. OSMRE flight following will be accomplished through one of the following methods:

**Agency provided:** Via a OSMRE employee, another Bureau, or Cooperator provided flight follower must have the ability to initiate the Regional Mishap Response plan.

**Vendor provided:** In accordance with an OAS Director approved vendor flight following program specified in the DOI procurement document. (Example is included at the end of this Chapter)

**Point-to-Point** Flights will be tracked by a FAA - visual flight rules (VFR) or instrument flight rules (IFR) flight plan or on an international Civil Aviation Organization (ICAO) flight plan; or in accordance with a bureau approved flight plan program; or in accordance with an OAS Director approved vendor flight program specified in a DOI procurement document. FAA flight plans may be supplemented by agency flight plans.

Aircraft on FAA IFR flight plans are continuously tracked via radar. Radar tracking for VFR traffic is not guaranteed, but is available when requested if the controller workload, terrain, and operating altitude allow coverage. The designated Mission Chief will confirm that the pilot has filed and activated an authorized flight plan, notify Flight follower/Dispatch upon departure, arrival at any interim stops and arrival at the final destination.

A qualified OSMRE Mission chief will be assigned to perform the administrative functions and assure a briefing is given to the pilot and a pre-flight safety briefing is given to the passengers. Persons or Office responsible for flight following will have aircraft and pilot information, a passenger manifest, and an estimated time of departure and arrival.

**Mission Flights:** Approval to conduct mission flights is required prior to flight. Elements to be considered are: type of mission; environmental conditions: departure point, route, destination; time frames; Logistics – fuel, landing areas, equipment, support crew; communications; airspace, flight hazards. Mission flight following may require more frequent flight following timeframes. As per DM at a minimum aircraft position will be confirmed every 30 minutes.

### 5.10 Unmanned Aircraft Systems (UAS)


UAS are considered aircraft by the FAA and DOI Policy: Policy governing UAS operations for DOI is very dynamic, with government agencies such as the FAA and the DOI having responsibility as this new technology is developed and integrated into the national airspace system. Prior to any UAS use by OSMRE to include issuance of permits for cooperators, etc., OSMRE managers and employees must,
consult OPM-11 and communicate with your RAM and NAM to assure compliance with applicable policy and safety of use.

5.10.1 UAS Presidential Memorandum
On February 15, 2015, a Presidential Memorandum (PM) promoting economic competitiveness for unmanned aircraft systems (UAS) while providing direction to safeguard individual privacy and civil liberties of citizens was issued. From that memorandum, the EAC developed 21 action items, many which require action by DOI bureaus. The OSMRE has carefully considered each action item and is including the following language in this NAMP to comply with the intent of the memo.

With respect to OSMRE Aviation Management in order to comply with the PM the following direction for employees applies:

- Employees will only collect data that is consistent with the authorized mission of the agency.
- Employees will destroy data collected by UAS within 180 days if those datum are not essential to the mission of the agency.
- All data collected that MAY contain PII must be stored in a system of record.
- Collected information may only be shared outside the agency if it helps the agency meet the authorized mission of the agency.

*Note:* for specifics see Appendix A: Presidential Memorandum of 2-15-15, Section 1 (a) (ii): Retention

5.10.2 Procurement of UAS
All UAS, and all UAS operators must be approved by OAS prior to flying. Procedures are in place to provide standardized training for DOI operators. Approved DOI UAS operators have the necessary knowledge to operate within the national airspace safely and efficiently.

UAS technology has rapidly increased over the last several years. This technology offers users, with little or no training, the ability to fly an aircraft for the purposes of collecting aerial imagery. DOI has an active UAS program that has been approved by the FAA. However we are still finding situations where Departmental employees have purchased off-the-shelf hobby equipment with the intent of using those aircraft to conduct DOI missions. All aircraft purchases and use, regardless of the size and type of aircraft, must be approved by OSMRE’s Aviation Executive, and by OAS. This includes all types and sizes of UAS.

Unapproved use of hobby grade equipment threatens the legitimate use of UAS across the department. OSMRE employees are reminded that their personal UAS or any unapproved UAS may not be used to conduct OSMRE missions. Employees interested in using UAS to accomplish their missions shall work with their RAM/NAM to ensure they are in compliance with applicable policy. Please report any unauthorized purchases to OSMRE RAMs or NAM and the DOI UAS Fleet Manager via email to steven_ramaekers@ios.doi.gov or via www.SAFECOM.gov.
5.10.3 UAS Request/Approval Process:
OSMRE shall not conduct UAS operations until requests are approved by the appropriate RAM and all minimum requirements have been met. Requests must be initiated well in advance of the project which could be at least several months (estimated) prior to the anticipated UAS mission start date.

Feasibility by Regional Office: Initial feasibility discussions are conducted between pilot, pilot’s management, requestor, and aviation manager based off project and risk. Authority rests on applicable parties involved in accordance with the project’s PASP.

Request & Proposal by Cooperator or Field Office: The local office will prepare and submit a formal request to initiate a UAS project (UAS project request form located on the UAS Teams website or similar). This proposal shall include the general purpose, objectives, and justification for utilizing UAS. Submissions can be made to the OSMRE’s UAS team or Division Chief or Field Office Director with available UAS capabilities. The request can cover several individual missions, e.g. oversight partial inspections, with the understanding that each flight will still require its own PASP.

Request for Certificate of Authorization (COA), if needed: If the bureau proposal is approved, the OAS UAS Coordinator will work directly with bureau requestor and aviation manager to develop the FAA application for a COA. Collaboration and agreement will occur prior to official commitment of the application. The OAS UAS coordinator will keep the bureau informed on the status and issuance of the COA. The COA, once issued, shall serve as the UAS operations plan along with the Project Aviation Safety Plan (PASP).

5.10.4 UAS Training
All OSMRE remote pilots must complete the instructor led OAS A-450 Basic Remote Pilot Course training course. All nominations to attend this 5-day class should be submitted to the RAM and coordinated with the NAM and should include student name, email and contact phone number. There is no registration cost associated with the class; however, all travel expenses will be the responsibility of the appropriate OSMRE office.

Office of Aviation Services A-450 prerequisites
1.) All potential UAS operators must complete the following training online at www.iat.gov prior to attending the A-450 course:
   • A-203 Basic Airspace (IAT.gov)
   • A-100 Basic Aviation Safety
   • A-110 Aviation Transportation of Hazardous Materials
A-200 Mishap Review

2.) All students must obtain an FAA Part-107 certificate passing the exam. The certificate is administered by a registered FAA testing site. The cost of the test is $150 and a passing score of 70% must be achieved for successful completion. The registration for the Part 107 exams are administered through numerous locations throughout the region. The most current information can be found on the internet depending the OSMRE student office location and exam location.

3.) All students must also review the appropriate UAS user’s manual, and the current version of OPM-11: DOI Use of Unmanned Aircraft Systems (UAS). The user manual for the sUAS 3DR SOLO that is currently being used by certified OSMRE remote pilots is Located on OSMRE’s Google Drive.

Training- Supervisors
All first line supervisors with an employee that is a DOI remote pilot are required to complete the following online training at www.iat.gov. Particularly, this training pertains to the safety aspects of UAS, along with understanding, reviewing, and approving the Project Safety Aviation Plans (PASP).

- A-200 Mishap Review
- M-3 DOI Aviation Management Training for Supervisors

5.10.5 Request Payload Approval
Generally, payloads should pass the approval process if:
- They can be securely attached to the aircraft, with no danger of becoming detached during normal operation.
- They do not adversely impact aircraft Center of Gravity (CG) or flight performance.
- They are manufactured by a commercial entity or regularly utilized by industry, for the specific aircraft.

Custom payloads designed by OSMRE or third parties will require more hands on examination depending on complexity, which may include direct inspection and test flight by an OAS representative. In these cases OAS can personally review the payloads at your location or you can send it to OAS to test fly. If there are airworthiness concerns then OAS can utilize our NASA agreement to resolve. Depending on the payload, OAS can work with OSMRE to test and approve payloads. It is most important to keep OAS apprised of any changes or unusual payloads so you are protected as the pilot.

Contact OAS to receive and complete the Payload Approval Form
- Upload payload photos mounted and unmounted.
- Add links to web information for the payload and sensor.
- Move all materials related to each approval request to an individual folder beneath the appropriate aircraft on that page.
Await further instructions from the Fleet Manager on the next steps.

5.10.6 Project Aviation Safety Plan (PASP)

A PASP will be prepared and approved by management at the appropriate level depending on project/flight complexity and risk as required for specific projects. OSMRE has developed a PASP template for UAS operations. The OSMRE PASP template is included in Appendix C, as well as can be accessed at the following link PASP. Every project site is required to have a PASP completed and signed prior to conducting a flight. All PASP’s must meet all requirements detailed in the National Aviation Plan and OPM-6.

As part of the preparation of the PASP, the OSMRE remote pilot will have to determine if the location of the project is within compliant airspace (i.e. Military Operating Area, class B, C, D, E, or G) or if any additional waivers or COAs will be required, outside of the existing DOI FAA Blanket COA. Websites/apps are available like B4Ufly app. Websites and applications should all be used to determine the classified airspace on the project location.

The risk assessment and mitigation section of the PASP must also be completed by the OSMRE remote pilot to determine the level of risk associate with the project. The signatures of the appropriate OSMRE supervisors and/or management are required for the project to move forward. The Mishap Response Plan and if necessary the Hazard Map are included in the PASP. A hardcopy of the PASP must be taken into the field for the OSMRE staff to have in order to reference any material from the PASP. The remote pilot in charge has the final say prior/during flight to conduct operations.

5.10.7 Notice to Airmen – NOTAM

As per DOI OPM-11, a NOTAM must be filed prior to conducting a UAS flight. NOTAMs should be filed under the DOI FAA Blanket COA identifier (2016-CSA-185-COA), and filed between 24 to 48 hours prior to the date of the flight. The FAA small UAS Certificate of Registration number will also be required to complete the NOTAM. This process is covered during the OAS A-450 remote-pilot training course, but if there are any questions the OSMRE remote pilot should contact OAS.

Steps for submitting a NOTAM for OSMRE Flights:
1. Navigate to https://www.1800wxbrief.com/Website/
2. Create and Log in to account
3. Hover over UAS tab and click planning (draft NOTAM page will appear)
4. Click on the NOTAM service information and registration link to complete registration
5. Fill out form as required
6. Click MAP tab and verify the UAS operating area location
7. Click preview NOTAM
8. Click Submit
9. Go to Sky Vector website www.skyvector.com
10. Verify NOTAM is accurate
5.10.8 DOI UAS Operations in the National Airspace System (NAS)
DOI has the authority to conduct operations in the NAS. The specific authority identified for each project will be determined as part of the pre-flight planning. If a project is located in an area not covered by the FAA DOI Blanket COA, additional time should be considered in order to obtain appropriate approvals. The following are the main types of authority and approvals that OSMRE remote pilots will consider as part of planning a UAS project:

- Under the provisions outlined in the DOI FAA Blanket COA (DOI FAA Memorandum of Agreement) for operation in class G airspace.
- Under the requirements of OPM-11 and the following provisions of 14 CFR Part 107. Waiver request under 14 CFR part 107 will be coordinated with OSMRE’s National Aviation Manager (NAM), designee, and OAS.
- UAS operations within restricted, prohibited and warning areas must be authorized by the controlling authority (i.e. Air Traffic Control, Military Operating Area). DOI UAS operators must comply with any restrictions placed on the operation by the controlling agency.
- Under the terms of the DOI/FAA MOA Regarding Beyond Visual Line of site operations of sUAS in support of Emergency Assistance within an Active Temporary Flight Restriction (TFR).
- Under a stand-alone COA for specific missions. COA’s will be coordinated with OSMRE’s NAM, designee, and OAS.
- Under an Emergency COA (ECOA) requested through the OAS UAS division to the FAA.

**DOI Blanket COA** - 2016-CSA-185-COA Rev 1, Effective April 11th, 2017, the FAA in coordination with DOI, has updated and revised the DOI blanket COA, 2016-CSA-185-COA. The new revision allows for DOI sUAS operations to all Class G airspace, the ceiling limitation (400 feet above ground surface) have been removed. Be advised we still are required to fly within line-of-sight, so mission altitude will be defined by the ability to maintain visual contact with the aircraft. Night flying allowance as identified in section F (no more class G notification.).

5.10.9 Office of Aviation Services-2U Form
OAS requires DOI remote pilots to complete the OAS-2U form after flights have been completed. The main purpose of this is for OAS to track the flight time of the aircraft. However, additional information is captured on the OAS-2U form (e.g., payloads, ground controls, data products, and remote pilot in charge). The link to the OAS-2U form can be found here: [UAS-2U Link](#).

The link will require an internet connection to fill out and submit. The OAS-2U should be completed the same day or within 1 day after the completion of the project and associated flights.

5.10.10 UAS System Shipping
For safety purposes it is very important to follow the shipping requirements for the lithium batteries for the approved UAS.
Unit with Batteries:
   Packaged in hard case or backpack inside cardboard box
   Only 3 batteries in package in own slot not in craft
   Must have 1 of 2 labels below on package
   Three (3) batteries or less keeps it under 5 kg limit
   Must provide phone number for HAZMAT certified 24 hour line

Shipping Batteries by AIR:
   Only allowed in the carry-on luggage. The lithium batteries are not permitted in checked luggage.

Shipping Batteries alone:
   Weight under 66 lbs.
   Must be specialty packaged
   Dangerous goods surcharge
   Must be labeled with 1 of 2 stickers as shown below

For more information see:
https://drive.google.com/file/d/0B14Gb5sfUL-iX1Y5NXZnbGxkT0U/view

5.10.11 Accountability.
To provide for effective accountability, OSMRE in conjunction with the Office of Aviation Services, the Office of the Chief Information Officer and the Office of Civil Rights, will provide collaborative oversight of the DOI UAS program within their respective areas of expertise and responsibility. OSMRE shall comply with Departmental oversight activities, and take additional appropriate steps to ensure effective oversight and accountability for its UAS program. Accordingly, OSMRE employees engaged in aviation activities shall ensure:

- Oversight procedures are implemented for UAS use, including audits or assessments, in compliance with Departmental policies and regulations.
- OSMRE employees and contractors comply with UAS program training requirements, Rules of Behavior, and procedures for reporting suspected cases of misuse or abuse of UAS technologies
- Policies and procedures are implemented that provide meaningful oversight of individuals who have access to sensitive information (including any PII) collected using UAS consistent
with applicable Federal laws, regulations, and policies, as well as Departmental policy guidance.

- Any data-sharing agreements or policies, data use policies, and records management policies applicable to UAS conform to applicable laws, regulations, and policies.
- Policies and procedures are implemented to authorize the use of UAS in response to a request for UAS assistance in support of Federal, State, local, tribal, or territorial government operations. Any authorized use, letter of authorization, or memorandum of understanding must include the requirements of this policy and appropriate safeguards to protect privacy, civil rights, and civil liberties.
- State, local, tribal, and territorial government recipients of Federal grant funding for the purchase or use of UAS for their own operations have in place policies and procedures to safeguard individuals’ privacy, civil rights, and civil liberties prior to expending such funds.

5.10.12 Transparency. OSMRE will complete the following activities, in collaboration with Departmental UAS programs, to promote transparency about DOI UAS activities within the NAS, while not revealing information that could reasonably be expected to compromise law enforcement or national security. OSMRE will use its WEB page for these notifications:

- Provide notice to the public regarding where OSMRE’s UAS are authorized to operate in the NAS.
- Keep the public informed about the DOI UAS program as well as changes that would significantly affect privacy, civil rights, or civil liberties.
- Make available to the public, on an annual basis, a general summary of OSMRE UAS operations during the previous fiscal year, to include a brief description of types or categories of missions flown, and the number of times the agency provided assistance to other agencies, nongovernmental organizations, or to State, local, tribal, territorial governments.

5.11 Documentation Requirements

Any specific requirements will be listed in the individual chapters of this plan.

5.12 Bureau Specific Operational Requirements

DOI & OSMRE-required PPE may be provided by the vendor or contractor for special Use Missions. Examples: Aviation Life Support Equipment. See Chapter 3, 3.1 Contracts for specific information.

5.12.1 Flight Helmets

All passengers on DOI helicopters, OSMRE contracted helicopters and all OSMRE employees who fly on cooperator helicopters, will wear a serviceable SPH-5 flight helmet. For detailed information see the Interagency ALSE Handbook and the DOI Flight Helmet Users Guide in Appendix E.
https://www.doi.gov/aviation/library/guides
• Before and after each flight the user will inspect their flight helmet for condition and serviceability.
• Every 180 days an ALSE Technician will inspect all flight helmets in accordance with DOI and manufacturer guidance.
• Flight helmets are not required to be worn during point-to-point missions in multi-engine fixed-wing aircraft. Refer to the ALSE Handbook and 351 DM 1.
• Helmets for helicopter flights will be provided by OSMRE, or OAS if flying on an OAS-provided aircraft, unless covered through the vendor contract or a cooperator agreement.

5.12.2 Cold Weather Clothing
When flying in cold weather where air temperature is below 20 degree Fahrenheit, and not flying over open water or where ice is able to support the helicopter, all personnel should wear FR arctic clothing. When flying in conditions where the temperatures could be as low as 0 degrees Fahrenheit and when not flying over open water, NOMEX Arctic clothing will be worn. This may be vendor provided as part of the contract written language. Personnel on Charter Aircraft may be required to provide their own winter gear for each flight and verified by the RAM.

5.12.3 Immersion Suits
For flights over open water that is colder than 50 F° personnel will wear a cold water immersion suit approved by the Regional Director. This may be vendor provided as part of the contract written language. Immersion suits will be a Dry Suit type which will have waterproof feet that are integrated into the suit, and seals at the wrist and at the neck or around the face that will not allow water into the suit. The suit should also be large enough to allow multiple layers of clothing to protect you from the temperature of the water being flown over. Caution: Aircraft occupants wearing anti-exposure garments may experience difficulty exiting from an overturned or submerged aircraft.

5.12.4 Personal Flotation Devices (PFDs)
• PFDs will be worn on all over water flights.
• PFDs must use a compressed gas cartridge located in the inflation chamber. Inflatable PFDs are specifically required because they do not restrict the occupant’s movement or egress.
• PFDs shall have two separate inflation cells.
• The instructions for activating the inflation cartridge must be clearly accessible and marked.
• PFDs equipped with an automatic (water-activated) inflation mechanism are prohibited.
• PFDs will be maintained and inspected according to manufacturer’s instructions.

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1 When an immersion suit is worn, Fire Resistant (FR) garments are not required.
5.12.5 ALSE Exceptions and Waivers
Exceptions to DOI ALSE requirements are listed in the ALSE Handbook. ALSE waiver requests will conform to the process defined in the ALSE Handbook. Specifically, a waiver of an ALSE requirement can be authorized by the OSMRE Director if it is determined that the requirement presents a concern affecting the safety or security of the employee.

6.0 Aviation Training

6.1 Management Responsibilities
Directors, Supervisors and Aviation Managers are responsible to assure that all OSMRE employees who will be flying as part of their official duties meet OSMRE specific and DOI aviation training requirements. For specific currency and training requirements refer to this Aviation management plan, OPM-4 - Aviation User Training Program, http://www.doi.gov/aviation/library/opm_index.cfm and the DOI IAT website for reference: www.iat.gov

All OSMRE employees will meet mandatory DOI and Bureau Specific Aviation training requirements prior to participating on Flights.

6.2 Required Aviation Training
General statement: for the purposes of this NAMP we have included the primary aviation position requirements utilized by OSMRE. All OSMRE employees will meet at a minimum the aviation training requirements as outlined in OPM 04 - Aviation User Training Program https://www.doi.gov/aviation/library/opm

OSMRE Employees may meet the initial training requirements for A-100 and M3 via the IAT website on-line curriculum. www.iat.gov
Note: Instructor Led courses are preferable if available for initial and refresher training.

6.2.1 Requirements by Position
Passenger Any person aboard an aircraft who does not perform the function of a flight crew/pilot or aircrew member. Non-Routine and Routine Offshore Passengers are required to take IAT courses A-100, A-116, and A-200. (See 6.3 below)

Aircrew Member (see OSMRE Mission Chiefs in section 6.6 of this chapter) Personnel (not pilot/passenger) required to be on board the aircraft to perform an active mission function during a flight to ensure the successful outcome of the mission.

OSMRE Persons working in or around the aircraft and essential to the mission are required to have the following minimum mandatory training every three years.
The required training is listed below:

A-100 Basic Aviation Safety  
A-116 General Security and Awareness Training  
A-200 DOI/USFS Aviation Mishap Review

**Aviation Manager** A person with aviation management responsibilities for a unit, regional, or national level and serves as the focal point for aviation services and management. Within the OSMRE organizational structure Aviation Managers are the national and regional aviation managers (NAM and RAM).

The required training is listed below:

A-103 FAA NOTAM System  
A-107 Aviation Policy and Regulations I  
A-110 Aviation Transportation of Hazardous Materials (if involved in transport of hazardous materials)  
A-112 Mission Planning and Flight Request Process  
A-115 Automated Flight Following  
A-116 General Awareness Security Training  
A-200 (3) Mishap Review  
A-202 Interagency Aviation Organizations  
A-203 Basic Airspace  
A-204 Aircraft Capabilities and Limitations  
A-205 Risk Management I  
A-208 Aircraft and Pilot Approval  
A-218 Aircraft Pre-Use Inspection  
A-302 Personal Responsibility and Liability  
A-303 Human Factors in Aviation  
A-305 Risk Management II  
A-306 Aviation Contract Administration Parts I & II  
A-307 Aviation Policy and Regulations II  
A-310 CRM  
A-311 Aviation Planning

**Supervisory Personnel** Those who supervise employees who use aircraft to accomplish agency programs (first- and second-level supervisors as determined by the agency). Individuals who have aviation duties and/or responsibilities that are identified in more than one position in the matrix (i.e., Supervisor and Aviation Manager) must take the required training for all positions that apply.

Supervisors must complete M-3 Aviation Management for Supervisors and A-200 Mishap Review every 3 years. In lieu of completing the M-3 course, a supervisor may complete all of the following aviation training courses every 3 years:  
A-107 Aviation Policy and Regulations I
6.3 Contracting Officer’s Representative (COR) Requirements
The majority of contract flights for OSMRE occur through the AQD aviation contracts (CWN On-CALL). AQD Contracting Officers manage the Aviation Rental Agreement program for Charter Aircraft. If the Regions have an OSMRE managed exclusive use contract for aviation services, the Region will provide a Contracting Officer’s Representative (COR) that meets DOI & AQD requirements to perform that role. Specifics may be outlined in the Regional AMP.

6.4 Documentation Requirements
RAMs will ensure that all Regional Employee training records are documented and tracked in the AT 2.0 Aviation User training database or maintained by the RAMs. RAMS will serve as the Unit ATA for all Regional Employees. The NAM will ensure that National Office employees meet these requirements.

6.5 Bureau-Specific Training Requirements
OSMRE Mission Chiefs or Designated Representatives must meet training and currency requirements as per the DOI Aircrew member position; (A-100 Basic Aviation Safety, A-116 General Awareness Security Training, and A-200 Mishap Review every 3 years). In addition to the Aircrew member training requirements, OSMRE Mission Chiefs will be required to complete A-109 Aviation Radio Use training every 3 years.

7.0 Aviation Security
The policies and procedures in this chapter are intended to increase security awareness, reduce the risk of potential criminal or terrorist incidents, and clarify specific requirements for all personnel using aviation resources under operational control of OSMRE. For more detailed information, refer to 351 DM 5 Aircraft and Aviation Facility Security: https://www.doi.gov/aviation/library/dm
The Transportation Security Administration (TSA) implemented a national toll free hotline that the general aviation (GA) community can use to report any “out-of-the-ordinary” event or activity at GA airports. The hotline — **(866) GA SECURE (866) 427-3287** — is operated by the National Response Center and centralizes reporting to the appropriate local, state and federal agencies.

### 7.1 Aviation Facilities (owned, leased, occupied, or operationally controlled)
Not applicable at this time.

### 7.2 Aircraft (fleet, leased, contracted, etc.)
All DOI/AQD aviation contracts state that the contractor is solely responsible for the security of their aircraft while under the control of the DOI (352 DM 5). Contract language is specific to what types of physical controls will meet DOI requirements. For specific information refer to the contract, 352 DM 5, and the Field Reference Guide for Aviation Security for Airport or other Aviation Facilities (AAF) [https://www.doi.gov/aviation/library/guides](https://www.doi.gov/aviation/library/guides)

Any AQD/OSMRE contracted aircraft will be physically secured via a dual-lock method whenever the aircraft is unattended. The dual-lock method consists of any combination of anti-theft devices on or within the aircraft, devices designed to lock aircraft flight control surfaces when not in use, or lockable devices designed to secure an aircraft to the ground.

#### 7.2.1 Examples of Acceptable Locking Devices & Methods
The following are examples of locking devices and methods which can be used in tandem to achieve the required “dual-lock” status. Utilization of other means of securing an aircraft are acceptable provided they achieve a level of security equal to or greater than the methods listed herein.

- Locking Hangar Door
- Keyed magneto
- Keyed Starter Switch
- Keyed Master Power Switch
- Hidden Battery Cut-Off Switches
- Hidden Start Relay Switches
- Throttle/Power Lever Lock
- Mixture/Fuel Lever Lock
- Locking Fuel Cut-Off
- Locking Control Surface “Gust-Lock” (Airplane only)
- Propeller Lock (Airplane only)
- Propeller Chain Lock (Airplane only)
- Propeller Cable Lock (Airplane only)
- Locking Wheel Lock or Chock (Airplane only)
- Locking Tie-Down Cable
• Locking “Club”-type Devices for Control Yoke (Airplane only)

7.2.2 Examples of Unacceptable Locking Devices and Methods
• Locking Aircraft Doors
• Fenced or Gated Tie-Down Area

7.2.3 Advisements for Locking Devices and Methods
• Operational environments and personnel safety must be considered when selecting the locking devices and methods to be used.
• Removal and/or disabling of locking devices and methods must be incorporated into preflight checklists to prevent accidental damage to aircraft.

Locking devices and methods must be installed in a manner that precludes their inadvertent interference with in-flight operations.

7.3 Aviation fuel (owned, leased, or operationally controlled)
If utilized, must be addressed in RAMPs and meet DOI approved standards

7.4 Bureau-specific security requirements (if applicable)
Not applicable to OSMRE at this time.

8.0 Airspace Coordination
It is the pilots’ responsibility to plan the flight. It is the flight RAM/mission chiefs’ responsibility to provide relevant information to the pilot for the flight and mission objectives for all OSMRE flights.

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 should be depicted:
• 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
• Dispatch zone boundaries
• Parachute, hang glider, rocket, model airplane operating areas
- Towers over 200 feet. Other towers as locally determined significant
- Wires – Major transmission lines, other lines determined locally as significant (wires crossing, canyons, rivers, lakes, near airports)
- Update/Revision date

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. Dispatching units may obtain scheduling information from DOD units that have special use airspace or military training routes and share this information as “hazards” information on the flight request when the aircraft are dispatched. For non-emergency flights, information may be shared through common communication protocol.

Aviation 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 information through DOD Internet NOTAM Service (DINS) at: https://www.notams.faa.gov/dinsQueryWeb/ and www.faa.gov

This would be considered when ordering the flight and performed by scheduler. The following topics will be addressed in the Regional AMP’s if applicable:

8.1 Introduction to Interagency process
Interagency airspace coordination is accomplished through the Interagency Airspace Subcommittee (IASC) charted under the NIAC. Guidance and education is provided through the Interagency Airspace Coordination Guide (IACG). http://www.airspacecoordination.org/index.html

8.2 Definitions (e.g., describe NOTAMs, FTAs, TFRs, and procedures involved, etc.)
In order to enhance safety during an incident, the FAA may be requested to issue a Temporary Flight Restriction (TFR) that closes the airspace to non-participating aircraft (with some exceptions).

There are currently nine different types of TFR’s, which are explicit as to what aviation operations are prohibited, restricted or allowed. Aviation Managers requesting a TFR should be familiar with the ordering procedures, coordination protocol and exceptions that are outlined in Chapter 6 of the Interagency Airspace Coordination Guide. TFR’s are not authorized by the FAA for resource management projects. A NOTAM D may be requested through the aircraft dispatcher at a local GACC who will contact the local Flight Service Station (FSS).

Non wildfire TFRs are under the jurisdiction of the FAA. All participants involved with an “all risk” TFR should be acquainted with the FAA’s publication “FAA Airspace Management Plan for Disasters” located at: http://www.airspacecoordination.org/files/FAA%20AMP%20for%20disasters%20pdf%20version%20for%20website.pdf
Presidential TFR’s (91.141) involve a set of 30 nautical miles and 10 nautical miles Temporary Flight Restrictions. Flights within the Presidential TFR’s require coordination well in advance of the TFR implementation. For further information, contact the National Aviation Manager.

8.3 De-confliction Procedures (foreign borders, airspace boundaries, agreements and requests).

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 TFR intrusion. Airspace deconfliction can occur for both emergency response and non-emergency aviation activities.

Deconfliction can be accomplished through the following measures:

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. Dispatching units may obtain scheduling information from DOD units that have special use airspace or military training routes and share this information as “hazards” information on the resource order when the aircraft are dispatched.

For non-emergency flights, information may be shared through common communication protocol. Aviation 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: https://www.notams.faa.gov/dinsQueryWeb/ and http://www.faa.gov

Aviation personnel have a responsibility to identify and report conflicts and incidents through the Interagency SAFECOM System to assist in the resolution of airspace conflicts. When a conflict or incident occurs, it may indicate a significant aviation safety hazard. Conflicts may include near mid-air collisions (NMAC), TFR intrusions, and FTA communication non-compliance. Further guidance is available in the Interagency Airspace Coordination Guide, Chapter 8.

Operations along Foreign Borders

All aircraft operations along border patrol zones require coordination with the U.S. Border Patrol. The Dispatch Centers with foreign border zones will have an operational plan detailing the coordination measures with the U.S. Border Patrol Air Marine Operations Center (AMOC). All pilots and aircrews will be briefed about border zone flight procedures.

Airspace Agreements – Memorandums of Understanding

When Special Use Airspace (SUA’s), MTR’s, Slow Routes (SR’s), or Aerial Refueling Routes (AR’s) are located over lands within an agency’s jurisdiction or within their area of normal flight operations, the agency should consider instituting an agreement with the appropriate DOD entity that schedules the airspace. Airspace agreements establish protocol for emergency and nonemergency contacts. They provide local level leadership a tool that defines protocols to address recurring activities, coordination of time critical responses, deconfliction and resolving issues in a timely manner.
OSMRE regions may establish agreements with military airspace authorities to coordinate OSMRE flight activities. A template and sample format is provided in the Interagency Airspace Coordination Guide, Chapter 12.

8.4 Emergency Security Control of Air Traffic (ESCAT) Procedures
ESCAT may be implemented due to an air defense emergency as directed by the North American Aerospace Defense Command (NORAD). Reference Interagency Airspace Coordination Guide, Chapter 4 for details.

8.5 Bureau-Specific Airspace Requirements
Not applicable at this time.

9.0 Aviation Project Planning Requirements

9.1 Project Aviation Safety Plans
For Aviation Planning, OSMRE has adopted, at a minimum, the Project Aviation Safety Plan (PASP) elements as listed in Appendix B of OPM-6 Aviation Management Plans:
https://www.doi.gov/aviation/library/opm

OSMRE flights will not occur without a current Project Aviation Safety Plan (PASP). The required elements of a PASP can be found in OPM-6, Appendix B and are included in this chapter.

Project Aviation Safety Plans (PASPs) will be developed for all special use missions. For those regions that perform similar special use aviation missions on a recurring or routine basis, the required PASP can be rolled into a regional aviation plan that is reviewed at least annually. In this instance, in place of a PASP the Region must have a documented process to capture the unique and special circumstances (i.e. Flight following & scheduling, dispatch logs, passenger manifest). Project supervisors and management-level project approvers are responsible for ensuring PASPs are completed. RAMs & Mission Chiefs will work with project supervisors as the aviation subject matter experts.

The project supervisor will work closely with RAMs in preparing these plans. The level at which a PASP is approved is based on the risk level as determined by the written risk assessment/bureau approved SMS (Safety Management System) within the PASP. Project Aviation Safety Plans will include, at a minimum, the elements in Appendix B.

OPM–6; APPENDIX B / C Minimum Elements of a Project Aviation Safety Plan (PASP)
**Instructions:** If an element listed in this appendix does not apply to the project then the PASP will list that element as not applicable. For example if the mission does not require protective clothing or equipment, then that section would be listed as “N/A”.

1. **Project Name and Objectives** – Brief description of the project and its objectives.

2. **Justification** – Indicate why the project will require the use of an aircraft in special use flight conditions/environments and list the most practical alternative for completion of the project.

3. **Project Dates** – Dates the project will begin and end. These may be approximate, since the exact dates of flight may not be known or change due to weather conditions.

4. **Location** – Enter a descriptive location and include a map clearly showing the area where the flights will occur. Aerial hazards must be clearly indicated.

5. **Projected Cost of Aviation Resources** – Enter cost coding, projected flight hours and cost, projected miscellaneous expenses (overnight charges, service truck mileage, etc.), and total cost of the aviation portion of the project.

6. **Aircraft** – If known, identify company(ies) that own(s) aircraft anticipated to be used, registration number, aircraft type, date of aircraft data card expiration and missions for which the aircraft is approved.

7. **Pilot** – If known, identify Pilot(s), types of aircraft qualified in, types of missions qualified for and Pilot card expiration date.

8. **Participants** – List individuals involved in flights, their qualifications for their role (e.g., Mission Chief, Aircrew Member, Passengers), dates of last aviation training, and include individual’s project responsibilities.

9. **Communication Plan, Flight Following and Emergency Search and Rescue** – Identify the procedures to be used.

10. **Aerial Hazard Analysis** – An aerial hazard analysis with attached map will be provided to the pilot before the flight. Flights made in confined areas (e.g., deep, narrow canyons) require that a prior ground and/or aerial survey of hazards be made. A copy of the hazards map shall be provided to the pilot prior to any project flight. The necessary temporary flight restrictions and coordination with the Federal Aviation Administration and, if appropriate, military authorities must be accomplished prior to project.

11. **Protective Clothing and Equipment** – Identify the protective equipment and clothing necessary for the particular operation. Survival equipment (extra water, flotation devices, sleeping bags, etc.) beyond the normal PPE complement may be required.
12. **Weight & Balance / Load Calculations** – The pilot is responsible for the accurate completion of weight and balance load calculations. Trained aviation personnel shall ensure that aircraft scheduled are capable of performing the mission(s) safely and within the capability of the aircraft selected. The helicopter or fixed wing manager shall ensure that manifests and weight and balance load calculations are completed properly and completed daily.


   A variety of risk assessment tools can be found in the *IHOG Appendix J*:

14. **Signatures** – Line Manager or appropriate level of approval based on the risk assessment or other bureau requirement.
Appendix B – Sample Operational Risk Assessment

manage risk for project and fire aviation operations. This is a BETA version for evaluation only and does not indicate or imply a mandatory utilization at this point in time.

Conducting a risk assessment with this tool allows the user to identify a real time, immediate, and area specific snap-shot of the current conditions that may influence the safe conduct of any flight. The score from the initial evaluation will help the personnel understand the level of risk in a quantitative way. It will also assure that overall risk remains within the pre-determined and approved risk level identified in the missions associated PASP. This form should also help to highlight areas where further mitigations may be necessary or prudent.

Utilizing the ORA

For the sake of the evaluation, the intent is for this tool to be used immediately prior to the commencement of any aviation missions or projects. It should be conducted in a collaborative manner by the flight manager and the pilot. The involvement by other flight participants, though not necessary, may help in providing other viewpoints and concerns that may be overlooked by the flight manager and pilot.

Conducting the ORA entails stepping through each category and assessing the hazard by selecting the score that best represents the conditions present or anticipated in the flight and project environment.

A cumulative score is derived from the total of all categories. For project work, any cumulative score that results in a risk level greater than the pre-determined PASP risk level shall require a line officer approval to commence or continue operations. Any single item selected that is scored as a NG-GO shall also require a suspension of operations until the hazard is eliminated, properly mitigated, or approval granted from the line officer.

A record of the ORA should be retained and kept on file with other project documents.

assessment worksheets for project operations. The ORA acts as an immediate assessment of the current active and observed conditions.

If the ORA is being conducted for fire related operations, the overall risk level will provide the flight manager with a relative mission risk level. The flight manager may need to follow-up with the appropriate management level before commencing operations (see IHOG Chap. 3 for Risk Decision table).

Initial scoring of the ORA provides a recognition of the conditions at the start of operations. Some categories are dynamic and change over time and space and should be continually monitored throughout operations. The three categories on the right side of the form represent those dynamic conditions. These should be re-evaluated any time conditions or mission parameters change. The multiple columns for these categories provide space to re-score during operations.

Because the overall cumulative score is a composite of individual flight, environmental, and operational values, it may not fully emphasize a heightened level of risk that may be associated with an individual category. For example, extremely adverse weather in itself, exclusive of the other categories, may alone merit the suspension of operations.

ORA Evaluation

In an effort to develop a product that is both usable and useful in helping flight managers manage the immediate operational risks, an evaluation of this form will be conducted for an undefined period, starting during the 2012 field season. Feedback will be solicited on a regular basis and incorporated as appropriate. Subsequent BETA versions may be provided when appropriate.
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<td>Value 2</td>
<td>Value 3</td>
</tr>
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*Note: This table is an excerpt from the OSMRE National Aviation Management Plan.*
Appendix C - OSMRE Project Aviation Safety Plan (PASP)

OSMRE Project Aviation Safety Plan (PASP)
Small Unmanned Aircraft Systems (sUAS)  
v.2017 07 16

Project Name: ____________________________

Project Name, Purpose, and Objectives:

Target Start Date: ________________________ Target End Date: ________________________

Requesting Agency (select one):

☐ OSMRE
☐ State
☐ Tribe
☐ Other (explain)

Unit, Field Office, or District:

Project Purpose (select one):

☐ Title IV
☐ Title V
☐ Technical Investigation
☐ Technical Study
☐ Other (explain)

Project Objectives:

Project Location:

Description (attach area map including aerial hazards):

Center Point Latitude/Longitude (DDD.MM.MMM):

Status (Ownership):

Project Justification:
Projected Costs Associated with Aviation Resources Used for this Project:

Estimated Project Total Flight Hours: 

<table>
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<th>OSMRE Contracted sUAS Service</th>
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</thead>
<tbody>
<tr>
<td>Aircraft &amp; Sensors: $</td>
<td>Contract Estimate: $</td>
</tr>
<tr>
<td>sUAS Travel: $</td>
<td>Other Aviation Costs: $</td>
</tr>
<tr>
<td>sUAS Flight Time: $</td>
<td>Total Projected Cost: $</td>
</tr>
<tr>
<td>Equipment/Supplies: $</td>
<td></td>
</tr>
<tr>
<td>Other Aviation Costs: $</td>
<td></td>
</tr>
</tbody>
</table>

Total Projected Cost: $

Other Considerations:

FBMS Accounting Structure (if splitting accounts, total must = 100%):

Aircraft to be Used:

sUAS Type: Make/Model: 
Registration #: Fixed or Rotary: 

Manufacturer’s Weight, Balance, and Cargo Limitations: Note - Current approved payloads for each model of DOI UAS can be found on the OAS website.

Other Manufacturer’s Operational Parameters:

DOI Aircraft Data Card? (Y/N): Card Expires: 

Additional Aircraft Comments or Special Considerations:
## OSMRE National Aviation Management Plan

### Remote Pilot:

<table>
<thead>
<tr>
<th>Remote Pilot #1:</th>
<th>DOI Pilot Card?</th>
<th>DOI Pilot Card Expires:</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Remote Pilot #2:</th>
<th>DOI Pilot Card?</th>
<th>DOI Pilot Card Expires:</th>
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</thead>
<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Remote Pilot #3:</th>
<th>DOI Pilot Card?</th>
<th>DOI Pilot Card Expires:</th>
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<tr>
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</tbody>
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### Project Participants:

<table>
<thead>
<tr>
<th>Participant #1:</th>
<th>Project Responsibilities:</th>
</tr>
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<tbody>
<tr>
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<td>Title &amp; Dates of Most Recent Applicable Training:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participant #2:</th>
<th>Project Responsibilities:</th>
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<tbody>
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<td>Title &amp; Dates of Most Recent Applicable Training:</td>
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</table>

<table>
<thead>
<tr>
<th>Participant #3:</th>
<th>Project Responsibilities:</th>
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<tbody>
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<td>Title &amp; Dates of Most Recent Applicable Training:</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Participant #4:</th>
<th>Project Responsibilities:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Title &amp; Dates of Most Recent Applicable Training:</td>
</tr>
</tbody>
</table>

### Additional Participant Information:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Communications Plan and Airspace Considerations:</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Telephone and Radio Frequency (if applicable) Information:</td>
<td></td>
</tr>
<tr>
<td>Temporary Flight Restrictions (TFR):</td>
<td></td>
</tr>
<tr>
<td>Military Training Routes (MTR):</td>
<td></td>
</tr>
<tr>
<td>Special Use Airspace (SUA):</td>
<td></td>
</tr>
<tr>
<td>Special Flight Path Planning Information:</td>
<td></td>
</tr>
<tr>
<td>Additional Considerations:</td>
<td></td>
</tr>
<tr>
<td>Airspace Authorization (select one):</td>
<td>Authorization Comments:</td>
</tr>
<tr>
<td>☐ COA</td>
<td></td>
</tr>
<tr>
<td>☐ E-COA</td>
<td></td>
</tr>
<tr>
<td>☐ Blanket COA</td>
<td></td>
</tr>
<tr>
<td>☐ FAA/DOI MOA</td>
<td></td>
</tr>
<tr>
<td>☐ Part 107</td>
<td></td>
</tr>
<tr>
<td>☐ Other (explain)</td>
<td></td>
</tr>
<tr>
<td>Emergency Search and Rescue:</td>
<td></td>
</tr>
</tbody>
</table>
Flight Following and Emergency Search and Rescue (N/A for OSMRE’s sUAS operations)

Aerial Hazards Analysis:

Note: An aerial hazard analysis (with map) will be provided to the pilot before the flight. Flights made in confined areas (e.g. deep, narrow canyons) require that a prior ground and/or aerial survey of hazards be made. The necessary temporary flight restrictions and coordination with the Federal Aviation Administration and, if appropriate, military authorities, must be accomplished prior to the project.

Hazard Analysis Summary:

Safety and Personal Protective Equipment Considerations:

The senior OSMRE representative present during each phase of an OSMRE aviation operational period will ensure:

- OSMRE aviation participants utilize PPE required by their assigned position and other environmental factors;
- Serviceable first aid kit, fire extinguisher, and other necessary equipment are available on-site during operations;
- OSMRE aviation participants conduct a project aviation safety briefing and complete a pre-flight checklist at the beginning of each operational period;
- OSMRE aviation participants adhere to DOI flight time and duty day policy in OPM-11;
- OSMRE aviation participants maintain a safe distance from manned and unmanned aircraft;
- Visual observers are used as required;
- A post-flight After Action Review (AAR) will be conducted at the each operational period; and
- Injuries due to aircraft, lost aircraft, damage to aircraft, system anomalies, or fly-aways will be reported via the SAFECOM system: Telephone 1-888-4MISHAP (1-888-464-7427) or https://www.safecom.gov/.

Lost Link/Fly-Away Procedures: Procedures must include considerations to safely attempt to recover aircraft. Inform nearest airport and OSMRE Regional Director as soon as possible.
## Additional PPE/Safety Considerations

**Weight and Balance / Load Calculations:** See Page 2 (Aircraft to be Used)

**OSMRE sUAS Risk Assessment Worksheet**

Assess the risks involved with the proposed operation.
Use additional sheets if necessary. Line Officer/Designee Signature Required

<table>
<thead>
<tr>
<th>Likelihood of Risk Occurring</th>
<th>Severity of Risk when it Occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent (A)</td>
<td>Negligible (IV)</td>
</tr>
<tr>
<td>Probable (B)</td>
<td>Marginal (III)</td>
</tr>
<tr>
<td>Occasional (C)</td>
<td>Critical (II)</td>
</tr>
<tr>
<td>Remote (D)</td>
<td>Catastrophic (I)</td>
</tr>
<tr>
<td>Improbable (E)</td>
<td></td>
</tr>
</tbody>
</table>

### Determining Risk Level

- **Likelihood Scale Definitions**
  - Frequent (A): Individual - Likely to occur often.
    - Fleet - Continuously experienced.
  - Probable (B): Individual - Will occur several times.
    - Fleet - Will occur often.
  - Occasional (C): Individual - Likely to occur some time.
    - Fleet - Will occur several times.
  - Remote (D): Individual - Unlikely to occur, but possible.
    - Fleet - Unlikely but can reasonably be expected to occur.
  - Improbable (E): Individual - So unlikely, it can be assumed it will not occur.
    - Fleet - Unlikely to occur, but possible.

### Severity Scale Definitions

- Catastrophic (I): Mishap results in fatalities.
- Critical (II): Severe injury/repairable UAS damage.
- Marginal (III): Minor injury/minor UAS damage.
- Negligible (IV): No injuries/UAS damage.

**OSMRE sUAS Risk Level Approval Authorities**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Approval Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>OSMRE Director</td>
</tr>
<tr>
<td>Serious</td>
<td>Regional Director</td>
</tr>
<tr>
<td>Medium</td>
<td>sUAS Remote Pilot’s Immediate Supervisor</td>
</tr>
<tr>
<td>Low</td>
<td>sUAS Remote Pilot’s Immediate Supervisor</td>
</tr>
</tbody>
</table>
Assess hazards and mitigating measures associated with the proposed operation. Use additional sheets if necessary.

<table>
<thead>
<tr>
<th>Describe the Hazard:</th>
<th>PRE-Mitigation Risk Rating</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Collision with personnel or vehicles.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Collision with a fixed aerial hazard.</td>
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<tr>
<td>4. Aircraft flyaway (loss of control).</td>
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<tr>
<td>5. Aircraft loss of link with ground control station.</td>
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<tr>
<td>6. Injury caused by spinning propellers.</td>
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<tr>
<td>7. Adverse weather (wind, lightning, etc.).</td>
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<tr>
<td>8. Night operations.</td>
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<td></td>
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<tr>
<td>10. Operating aircraft outside of published parameters.</td>
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</tr>
<tr>
<td>11. Other Hazard.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Other Hazard.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Other Hazard.</td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Describe the Hazard’s Mitigation.</th>
<th>POST-Mitigation Risk Rating</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OSMRE will apply the following mitigating measures at a minimum (add other measures as appropriate):</td>
<td>Likelihood (A-E)</td>
<td>Severity (I-IV)</td>
</tr>
<tr>
<td>1. The remote pilot will utilize a visual observer (VO) who will scan the area for air traffic and other hazards to aviation. The remote pilot will file a NOTAM as per DOI/FAA policy. Flights within TFRs will be coordinated with the controlling authority and participating aircraft. The remote pilot will give way to manned aircraft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. The remote pilot will conduct a pre-flight briefing which will include flight patterns and safe observation/paring areas. The remote pilot will not fly the UAS over personnel or vehicles.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. The remote pilot will conduct a survey of the operations area prior to flight operations.</td>
<td></td>
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</tr>
<tr>
<td>4. Aircraft, personnel, and ATC having jurisdiction over the airspace will be notified with the last location, heading, speed, and approximate battery/time remaining of the UAS. The crew actions to recover the UAS will be replayed as well.</td>
<td></td>
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</tr>
<tr>
<td>5. UAS will be programmed to return to home and land.</td>
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</tr>
<tr>
<td>6. Preflight briefing will include safety precautions when working around UAS with motors running.</td>
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<tr>
<td>7. Remote pilot will obtain a current forecast and ensure the aircraft is flown within approved parameters. The crew will monitor weather conditions periodically during flights.</td>
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<tr>
<td>8. OSMRE pilots will not fly after sunset or before sunrise or during any time where visibility is limited or jeopardized.</td>
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<tr>
<td>9. Batteries will be stored in approved containers. A fire extinguisher will be available on site.</td>
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</tr>
<tr>
<td>10. The remote pilot will ensure the aircraft is operated within policy and the provisions of the aircraft operations manual.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Other mitigation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Other mitigation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Other mitigation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

POST-Mitigation Overall Risk Level (Equal to the Highest Individual Hazard Risk Level):
IMPORTANT NOTE: The Remote Pilot is responsible for and is the final authority as to the operation of the aircraft.

- The OSMRE Remote Pilot is responsible for performing a preflight inspection of the sUAS in accordance with the manufacturer’s recommendations and assuring the aircraft is in an airworthy condition.

- The OSMRE Remote Pilot shall fly in accordance with the sUAS manufacturer’s specifications and established DOI policy/training standards.

- Proposed deviations from established operational procedures (checklists, etc.), which may affect safety of flight, shall be discussed with the agency program manager and OAS in order to minimize programmatic/operational risk.

- The OSMRE Remote Pilot must discontinue any flight in which the airworthiness of the aircraft or system is in question.

**PASP Distribution:**

The approved PASP will be routed to the following OSMRE recipients PRIOR to the sUAS mission:

- Aviation Executive
- National Aviation Manager (NAM)
- Aviation Safety Manager
- Chief, Office for Equal Opportunity
- Associate Chief Information Officer
- Regional Director
- Regional Aviation Manager (RAM)
- Other Regional Staff (as deemed appropriate by Regional Director)
- Field Office Director
- Remote Pilot(s)
- Other Aviation Project Participants