Reference Manual 60
Aviation Management

Approved:

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**Appendix 1 – Interagency Aviation Mishap Response Guide and Checklist**

**Appendix 2 – Park Aviation Management Plan**

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**Appendix 4 – Flight Request Form**

**Appendix 5 – Enhancement Application**

**Appendix 6 – Pilot Assessment Process**

**Appendix 7 – NPS Approval Template and Guidance for the Use of Unmanned Aircraft Systems (UAS)**

**Appendix 8 – Annual Aviation Program Report and Assurance Statement**

**Appendix 9 – Web Links**
ACRONYMS

ABS - Aviation Business System
ACETA - Aerial Capture, Eradication and Tagging of Animals
AGL - Above Ground Level
AIM - Aeronautical Information Manual
ALSE - Aviation Life Support Equipment
AMC - Aviation Management Council
AMRB - Aircraft Mishap Review Board
OAS - Office of Aviation Services
AMIS - Aviation Mishap Information System
AMP - Aviation Management Plan
AMS - Aviation Management System
AAPRAS - Annual Aviation Program Report and Assurance Statement
ARA - Aircraft Rental Agreement
CFI - Certified Flight Instructor
CFR - Code of Federal Regulations
CWN - Call When Needed
DM - Departmental Manual
DFAM - Division of Fire and Aviation Management
DOI - Department of the Interior
ELT - Electronic Locator Transmitter
EAB - Executive Aviation Board
EAC - Executive Aviation Committee
EAS - Executive Aviation Subcommittee
EMS - Emergency Medical Services
FAA - Federal Aviation Administration
FAR - Federal Aviation Regulations
IAT - Interagency Aviation Training
IFR - Instrument Flight Rules
IHOG - Interagency Helicopter Operations Guide
IWP - Incident With Potential
LESH - Law Enforcement Short-Haul
NAAG - National Aviation Advisory Group
NAO - National Aviation Office
NASM - National Aviation Safety Manager
NFPA - National Fire Protection Association
NIAC - National Interagency Aviation Council
NPS - National Park Service
NTSB - National Transportation Safety Board
NWCG - National Wildfire Coordinating Group
OMB - Office of Management and Budget
OPM - Operational Procedures Memorandum
PAM - Park Aviation Manager
PFD - Personal Flotation Device
PAP - Pilot Assessment Process
PIC - Pilot-in-Command
PRB - Pilot Review Board
PPE - Personal Protective Equipment
SAR - Search and Rescue
STEP - Single Skid, Toe-In, Hover Exit/Entry Procedure
SOL - Office of the Solicitor
RAM - Regional Aviation Manager
UA - Unmanned Aircraft
UAS - Unmanned Aircraft Systems
USFS - United States Forest Service
DEFINITIONS

**Aircraft.** Aircraft means a machine or device that is used or intended to be used to carry persons or objects in flight through the air, including, but not limited to airplanes, helicopters and gliders.

**Aviation Park.** Parks that use aviation resources.
- Level 1 – Any park or combined aviation program that meets the definition of a complex aviation program.
- Level 2 – Any park that has 1 or 2 elements of a complex aviation program.
- Level 3 – Any park that uses aviation on an occasional basis beneath a regional aviation management plan, as determined by the regional aviation manager.

**Best Practices.** This is the set of practices designed and implemented to ensure operational and organizational success. These practices typically include additional safety and service margins, and are often adopted as industry standard. They tend to be cost beneficial. These practices are dynamic because they are perpetually evolving with changes in customer expectations, as well as advances in the general knowledge base.

**Complex Aviation Program.** Aviation programs with three or more of the following components shall be considered complex:
- Exclusive use aircraft.
- Assigned fleet (manned or unmanned aircraft).
- High risk missions (Examples include: ACETA, Short-haul, Rappel, STEP, Special Use activity e.g. on-going low level missions, unprepared landing sites, operations in high altitude environments).
- Cooperator aircraft.
- The National Aviation Manager may identify additional components that define a complex aviation program.

**Fleet Aircraft.** Aircraft, including unmanned aircraft, bailed by DOI, registered to DOI or leased by DOI with the intent to purchase are fleet aircraft. The Office of Aviation Services (OAS) acquires DOI fleet aircraft for the NPS.

**Operational Control.** With respect to flight services, this means the exercise of authority over initiating, conducting or terminating a flight. Using the following chart may help determine whether NPS has operational control, however the National Transportation Safety Board has the regulatory authority to determine operation control.

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**Quiet Technology.** For the National Park Service, this refers to aircraft that are quieter on a per flight basis due to technological improvements that result in a "quieter" aircraft as opposed to a seats per decibel level definition currently used by the Federal Aviation Administration.
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Chapter 1 – AVIATION MANAGEMENT OVERVIEW

1.1 Background and Purpose

National Park Service Reference Manual-60 (RM-60, 2013) is superseded and replaced by this Reference Manual-60, Aviation Management which is intended to provide detailed guidance to NPS personnel engaged in aviation management activities. This manual incorporates the policies contained in the latest version of the NPS Management Policies, and the instructions, requirements, and operational policies contained in Director’s Order (DO)-60. Pay and compensation issues are not addressed by this reference manual. Questions regarding pay and compensation should be forwarded to the servicing personnel office. The NPS Management Policies 2006, DO-60, and this manual are all supplemental to, and must be consistent with, policies, procedures, and instructions issued by the Federal Aviation Administration (FAA) and the Department of the Interior (DOI) where appropriate. FAA and DOI policies, procedures, and instructions are cited or attached as appendices to this manual. FAA regulations may be accessed at the Federal Aviation Administration website. DOI policies are posted at the Electronic Library of the Interior Policies page.

This manual is issued under authority of DO-60, which requires the associate director, Visitor and Resource Protection, to: (1) compile the most relevant information on aviation management; (2) issue other instructions as may be necessary to implement the Director’s Order; and (3) make the information and instructions available to NPS parks and programs in the form of this manual.

With minor exceptions as stated in this document, this manual 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 the National Park Service is responsible for flight crew members, aircrew members, and passengers on board aircraft and unmanned aircraft systems (UAS) under its operational control, this manual is applicable to all NPS parks and programs, NPS employees, NPS volunteers, persons supervised by NPS employees, and support service contractors (all hereinafter referred to as NPS employees) where the NPS has provided funding, management and operational support. 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 NPS. In that event, such persons will be subject to the policies and procedures contained herein.

U.S. Park Police helicopter operations will be conducted in accordance with the DOI and Service approved U.S. Park Police Aviation Guideline Manual. U.S. Park Police (USPP) helicopter operations are exempt from compliance with this manual when operating in accordance with the USPP manual.

1.2 NPS Management Policies

NPS Management Policies, Section 8.4 Overflights and Aviation Uses, reads, in part:

“A variety of aircraft, including military, commercial, general aviation, and aircraft used for National Park Service administrative purposes, fly in the airspace over national parks. While there are many legitimate aviation uses, overflights can adversely affect park resources and values and interfere with visitor enjoyment. The Service will take all necessary steps to avoid or to mitigate adverse effects from aircraft overflights.

Because the nation’s airspace is managed by the Federal Aviation Administration (FAA), the Service will work constructively and cooperatively with the Federal Aviation Administration and national defense and other agencies to ensure that authorized aviation activities affecting units of the national park system occur in a safe manner.
and do not cause unacceptable impacts on park resources and values and visitor experiences. The Service will build and maintain a cooperative and problem-solving relationship with national defense agencies to address the congressionally mandated mission of each agency and prevent or mitigate unacceptable impacts of military training or operational flights on park resources, values and the visitor experience. Cooperation is essential because the other agencies involved have statutory authorities and responsibilities that must be recognized by the Service.”

“8.4.1 Alaska and Remote Areas

Aviation can provide an important, and in some cases the preferred, means of access to remote areas in certain parks, especially in Alaska. In such cases, access by aircraft may make an important contribution to the protection and enjoyment of those areas. Dependence on aviation will be fully considered and addressed in the planning process for those parks. Alaska parks have specific regulations concerning fixed-wing aircraft, published at 36 C.F.R. § 13, and 43 C.F.R. § 36.11(f).”

“8.4.4 Administrative Use

Aviation is a necessary and acceptable management tool in some parks when used in a manner consistent with the NPS mission. Aviation activities will comply with all applicable policies and regulations issued by the Department of the Interior, the FAA, and the NPS.”

“8.4.6 Commercial Air Tour Management

The National Parks Air Tour Management Act of 2000, and implementing FAA regulations, provide for a joint FAA/NPS planning process that will lead to the management of commercial air tours over national parks by the FAA (with the exception of parks in Alaska and Rocky Mountain National Park, which are specifically excluded from the process...).”

“8.4.8 Airport and Landing Sites

...The National Park Service will also work with entities having jurisdiction over landing sites and airports adjacent to parks for the purpose of preventing, reducing, or otherwise mitigating the effects of aircraft operations. Whether landing sites or airports are situated within or adjacent to parks, the objective will be to minimize noise and other impacts, and confine them to the smallest and most appropriate portion of the park as possible, consistent with safe aircraft operations.”

1.3 NPS Strategic Safety Plan

To ensure safe and efficient aviation operations across the National Park Service, the NPS Aviation Branch has created the following Notice to Airmen (NOTAM) for aviation users to become familiar with the guiding philosophy of the national program. The FAA’s information portal for disseminating information to pilots and aviation users is through a NOTAM system.

• Never stop striving to achieve the highest standards of aviation safety and professionalism for NPS employees and cooperators engaged in aviation activities.

• Offer accurate and consistent leadership, establish policies that foster a positive culture assuring aviation safety and provide direction for the aviation program to increase the effectiveness of operations servicewide.

• Training will promote aviation safety while being relevant and readily available to meet policy requirements and field operation needs.

• Assurance of aviation policy implementation and accountability are essential to the success of the aviation program.

• Manage aviation risks effectively so that they are minimized to the greatest extent possible.

The five-year NPS Aviation Strategic Plan can be found on InsideNPS.

1.4 Environmental Concerns

Noise and visual impacts resulting from aircraft operations are a concern. Development of park aviation plans and specific mission planning must consider impacts on wildlife, the natural and cultural soundscapes and visual values of wilderness, historic and cultural scenes, American Indian sacred sites and traditional practices, as well as
specific local restrictions or exceptions provided for by law and policy.

These include but are not limited to the: National Park Service Organic Act (PL Ch 408, 16 USC 1), Endangered Species Act (PL 93-205, 16 USC 1531), National Historic Preservation Act (PL 89-665, 16 USC 470), American Indian Religious Freedom Act (PL 95-341, 42 USC 1996), Indian Sacred Sites Executive Order (No. 13007), Wilderness Act (PL 88-577 16 USC 1131 et seq.), Alaska National Interest Lands Conservation Act (ANILCA) (PL 96-487, 16 USC 3101 et seq.), and all aspects of NPS Management Policies. Director’s Orders of special note include #12 (Environmental Impact Analysis), #18 (Wildland Fire Management), #28 (Cultural Resources Management), #41 (Wilderness Stewardship), #47 (Soundscape Preservation and Noise Management), and #71B (Indian Sacred Sites).

Sec. 1110. (a) of ANILCA (PL 96-487) provides: “Notwithstanding any other provision of this Act or other law, the secretary shall permit, on conservation system units, national recreation areas, and national conservation areas, and those public lands designated as wilderness study, the use of snow machines…, motorboats, airplanes, and non-motorized surface transportation methods for traditional activities…and for travel to and from villages and home sites.” (Note: This is applicable only in the State of Alaska.)

1.5 Organizational Responsibilities

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

1.5.1 Department of the Interior

The Office of Aviation Services (OAS) works beneath the Department of the Interior (DOI) deputy assistant secretary of Public Safety, Resource Protection, and Emergency Services. (OAS was formerly known as the Office of Aircraft Services (OAS) and Aviation Management Directorate (AMD). References to AMD for printed material and form numbers will continue in field use until reissued by OAS. OAS is responsible for departmentwide functions related to aircraft services and facilities and exists to support DOI bureau aviation needs (see 350 DM 1).

The Executive Aviation Committee (EAC) incorporates a senior line manager at the associate director level from each bureau for the purpose of formulating department-wide aviation policies and procedures in conjunction with OAS. The Executive Aviation Subcommittee (EAS) comprises bureau national aviation managers and aviation safety managers who as aviation subject matter experts (SMEs) recommend changes in aviation policy to the EAC (see 350 DM 1). The EAC reports to the Executive Aviation Board (EAB) which is comprised of all bureau deputy directors and the DOI deputy assistant secretary for Public Safety, Resources Protection, and Emergency Services.

1.5.2 National Park Service

The associate director, Visitor and Resource Protection (AD-VRP), NPS is responsible for implementation of the NPS aviation operation and safety program, issuance of Reference Manual 60, and serves as a member of the EAC.

The National Aviation Advisory Group (NAAG) is composed of the regional aviation managers and representatives from park management and the National Aviation Office (NAO).

1. Provides input to the AD-VRP, regarding aviation policy at the departmental and bureau level.
2. Advises the national staff on responses to agency and departmental aviation issues.
3. Develops and facilitates implementation of annual programs of work in support of the NPS Aviation Strategic Plan.
4. Provides an avenue to achieve standardization for aviation operations and management related issues.
5. Establishes priority for NPS subject matter experts to participate on interbureau/interagency groups and committees.
6. Recommends level of financial support for participants and projects to the AD-VRP.

The chief, Division Fire and Aviation Management (DFAM) is responsible for overseeing the NPS Fire and Aviation Program, in which the aviation branch is organizationally located within the Washington Office of the NPS.

The branch chief, Aviation (national aviation manager, NAM) serves as the principal aviation advisor for NPS.
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1. Functions as the branch representative to the DFAM.

2. Serves as NPS representative to the DOI Executive Aviation Subcommittee (EAS) which reports to the Executive Aviation Committee (EAC).

3. Serves as NPS representative to the National Interagency Aviation Council (NIAC) which reports to National Wildfire Coordinating Group (NWCG).

4. Provides national direction to the aviation safety program.

5. Coordinates requests for program approvals, single skid, toe in, and hover exit/entry procedures (STEP), short-haul, and rappel, waivers, and exceptions to policy. Coordinates and recommends approval requests with the AD-VRP, for aviation operations requiring NPS-level approvals.

6. Disseminates aviation-related policy and technical information.

7. Coordinates with Office of Aviation Services (OAS) for NPS aviation program evaluations.

8. Assigns representatives to accident review boards; actively works with other program managers to ensure operational aviation issues are addressed in program and policy decisions.

9. Coordinates fleet aircraft acquisition, replacement, and disposal to support agency programs.

10. Responsible for budget submissions, tracking, and branch expenditures.

11. Assigns a liaison to accident investigation teams.

12. The NAM is responsible for a Regional Aviation Program Review process.


14. Issues and compiles the results of the Annual Aviation Program Report and Assurance Statement (AAPRAS) for submission to the AD-VRP.

The national aviation safety manager (NASM) serves as the principal aviation safety advisor for the NPS.

1. Primary responsibility is to implement the NPS aviation safety program.

2. Coordinates with DOI-OAS for NPS aviation program evaluations and safety.

3. Performs as the principal NPS representative for accident investigations and review boards.

4. Manages the overall aviation safety effort of the NPS and serves as principal advisor on all technical and administrative aviation safety matters.

5. Analyzes accident and incident trends, monitors Aviation Mishap Information System (AMIS), SAFECOM reports, and incidental serious safety concerns.

6. Recommends and develops servicewide aviation safety policies covering all phases of the highly complex and diversified mix of bureau aviation activities such as law enforcement; search and rescue (including short-haul, heli-rappel); aerial capture, eradication and tagging of animals (ACETA); fire management activities; and natural resource support.

The national helicopter operations specialist (HOS) serves as principal helicopter technical safety advisor for NPS.

1. Serves as NPS representative to aviation committees tasked under NIAC.

2. Serves as NPS representative on DOI specific projects to include law enforcement short-haul (LESH), ACETA, search and rescue (SAR) short-haul, rappel, and aviation risk management.

3. Conducts site visits for existing and new programs, providing technical expertise in the preparation of program approval requests (STEP, short-haul, rappel) waivers, and exceptions to policy.

4. Coordinates and recommends approval requests, to the NAM, for aviation operations requiring agency level approval.

5. Disseminates aviation related policy, safety, and technical information.
6. Coordinates with OAS for NPS aviation program evaluations and safety.
7. Performs as NPS representative for accident investigations and review boards.
8. Actively works with other program managers and RAMs to ensure operational aviation issues are addressed in program and policy decision.
9. Responsible for helicopter budget tracking and preparing submissions, assisting regions with requests.
10. NPS representative on DOI-specific aviation projects to include LESH, ACETA, SAR, and short-haul.

The National fleet pilot, aircraft, and UAS specialist serves as a principal fleet aircraft and pilot training advisor for NPS.

1. Serves as NPS representative to aviation committees tasked under NIAC and the EAS.
2. Serves as NPS representative on DOI-specific aviation projects to include pilot training, fleet aircraft, and unmanned aircraft system (UAS) management.
3. Provides coordination between the NAM, and all NPS units concerning safety, operations, investigation, direction, training, and compliance for the conduct of aircraft operations and program activities.
4. Provides national coordination for the NPS Trainee Pilot Program contained in Operational Procedures Memorandum (OPM)-22.
5. Analyzes NPS aircraft and pilot needs.
6. Serves as the point of contact for the Aviation Business Case Study (ABCS) process for NPS fleet aircraft.
7. Coordinates and recommends approval requests, to the NAM, for aviation operations requiring agency level approvals.
8. Disseminates aviation related policy, safety and technical information; performs as an NPS representative for accident investigations and review boards.
9. Actively works with other program managers and regional aviation managers (RAMs) to ensure operational aviation issues are addressed in program and policy decisions.
10. Serves as primary NPS contact with DOI-OAS Technical Services for fleet and pilot specific projects.

Aviation management specialist

1. Provides technical advice related to the development of aviation policy at the national and regional level.
2. Serves as NPS representative to aviation committees tasked under NIAC and the EAS.
3. Assists in the formulation of national aviation budget and project priorities.
4. Works to enhance the communication, safety, efficiency, and effectiveness of aviation operations to the NPS regions, and parks assigned.
5. Participates in and provides technical assistance to ongoing departmental or NPS aviation evaluations.
6. Maintains departmental credentials to assist the NPS and other agencies as an interagency aviation trainer and member of safety oversight and departmental aviation mishap investigation teams.

Regional directors (RDs) are responsible for ensuring that a safe and efficient aviation program exists in their region.

1. Ensure all aviation activities are assessed for risk.
2. Support and disseminate aviation policies and information.
3. Ensure that aviation training is in compliance with requirements and that proper equipment is used.
4. Ensure availability of aviation expertise to field managers who are responsible for aircraft operations.
5. Assign a liaison to aviation accident investigation teams.
6. Promote and support the Aviation Mishap Information System (AMIS).
7. Participate in or assign a senior line officer from the region to participate in an Aircraft Mishap Review Board, (AMRB) for incidents occurring within their region.
8. Responsible for developing a comprehensive park aviation program review process.

**Regional aviation managers (RAMs)** provide technical expertise and aviation safety oversight of the parks in their geographic area. Each region should designate a RAM. Regions may partner and share a RAM.

1. Observe regional aviation activities and provide liaison with the NAM, NASM, HOS, fleet and pilot aviation specialists, and other agencies as appropriate.
2. Serve as NPS representative to aviation committees such as NAAG.
3. Provide assistance for the implementation of departmental policy, DO-60 and this reference manual.
4. Review proposed changes in policy and procedure.
5. Coordinate or instruct aviation training courses as requested.
6. Review requests for new flight services such as on-call contacts, aircraft rental agreements, exclusive use contracts, or call-when-needed (CWN) contracts.
7. Review, as requested, park aviation management plans.
8. May be delegated to perform as NPS representative for accident investigations and review boards.
9. Serve as regional point of contact for UAS development, planning, and process.
10. Review and correct if necessary NPS SAFECOM submissions prior to release.
11. Where applicable, manage quality assurance, quality compliance (QAQC) process for fleet aircraft maintenance.
12. Assist parks in drafting and staffing letters of agreement, program enhancements, waivers to DOI policy and memorandums of agreement/understanding.
13. Act as NPS representative on interagency committees and with OAS.
14. Ensure timely completion of the Annual Aviation Program Report and Assurance Statement (AAPRAS) by Level 1, 2 and as appropriate, 3 parks. Compile for submission to the NAM.

**Superintendents/park managers** will ensure that conservative decision-making and risk assessment are used in determining the appropriateness of using aviation resources. Superintendents are responsible for all NPS flight operations conducted in their park units and shall ensure aviation activities are conducted in compliance with applicable policies/directives and the park aviation management plan (AMP).

1. Designate, in writing, the park aviation manager (PAM)—a required position at Level 1 aviation parks.
2. Ensure employee and public safety is considered foremost for all aviation activities, with full consideration given to resource and visitor impacts.
3. Direct development and approval of the park’s AMP in consultation with the RAM.
4. Ensure adequate funding exists to support the level of aviation activity at the park.
5. Confirm aviation activities are conducted in compliance with applicable policy/directives.
7. Ensure options such as the incorporation of quiet technology aircraft and the establishment of flight corridors and other protocols governing administrative use of aircraft are evaluated and used when appropriate.
8. Promote and use the Aviation Mishap Information System (AMIS).
9. Direct that appropriate aviation training is completed.
10. Verify that aviation safety hazards are mitigated and flight following is accomplished.

11. Verify that aviation life support equipment (ALSE) requirements are followed.

12. Ensure records related to the aviation program are maintained.

13. Confirm significant operational problems are reported to the RAM.

14. Ensure aviation resources are procured, managed, and operated within the scope of the contract.

The park or unit aviation manager (PAM/UAM*) is responsible for providing operational oversight to all flight operations conducted in the park unit. Level 1 aviation parks with complex aviation programs are required to have a non-collateral duty Park Aviation Manager. Level 2 aviation parks with non-complex aviation programs, a PAM will be assigned and may have collateral duties.

(* some parks or regions may use different terminology than PAM or UAM, e.g. hub manager (multiple parks), unit aviation officer, etc.)

The PAM position will be designated in writing by the park superintendent. In the absence of the PAM, an acting must be designated in writing.

1. Responsible for writing and implementing the park aviation management plan (AMP) (see Appendix 2, Park Aviation Management Plan for an example of topics that may be included in the plan).

2. Reviews project aviation safety plans (PASPs) (see Appendix 3, Project Aviation Safety Plan for an example of topics that may be included in the plan), coordinates the planning and completion of project plans and risk assessments.

3. Ensures that aircraft and pilots are appropriately approved for the mission.

4. Requests technical assistance for aviation problems.

5. Validates that all aviation users meet the training requirements of the Interagency Aviation Training Guide and OPM-04, “Aviation User Training Program.”


7. Ensures that a qualified fixed-wing or helicopter manager is designated for all special use flights.

8. Ensures that a qualified flight manager is assigned for charter, contract, or rental flights.

9. Requests waivers, exemptions, or exceptions to policies, standards, procedures, or other instructions (request must be submitted to the appropriate authority through the RAM).

10. Ensures that project aviation managers, individuals who plan, organize, and manage the aviation operations of a project utilizing aircraft, are qualified per OPM-04.

11. Apprises the superintendent and the RAM of aviation concerns and problems.

12. Serves as the park’s primary representative with the RAM on the QAQC team where a QAQC program is employed.

13. When directed by the superintendent, ensures completion of the AAPRAS.

The project aviation manager plans and manages aircraft use according to applicable directives and policies, develops and submits project plans and risk assessments, and assigns fixed-wing or helicopter managers to projects (see the Interagency Aviation Training Guide for required training for this role).

The pilot-in-command (PIC) is responsible for conducting aviation operations in accordance with applicable policy and directives; responsible for maintaining proficiency and currency appropriate to the missions performed; responsible for safety of the aircraft and personnel onboard; has sole authority for operations of the aircraft; ensures airworthiness and operates aircraft for maximum safety and efficiency; provides aircraft briefings; reports unsafe operations, conditions, and situations using the AMIS system; complies with ALSE requirements; and completes payment documents.
NOTE: During most NPS-manned missions there is only one pilot on board an aircraft and therefore only one pilot to assume the role of PIC. However, during training missions, if a two-pilot crew is used or if two pilots onboard each occupy a seat with controls, the PIC for the mission shall be determined and documented in the form aboard the aircraft, OAS-2, “Aircraft Status Log,” before takeoff. In-flight changes of authority may be accomplished verbally.

**Helicopter flight manager** position per Interagency Aviation Training (IAT) is not recognized by the NPS (see Resource Helicopter Manager description below).

**Fixed-wing flight manager** must be assigned to all NPS fixed-wing flights. Fixed-wing managers are responsible for ensuring flight following is completed, scheduling flights, passenger briefing and manifests are completed. Managers are not required to be on all flights. A DOI PIC may fill this role (see the IAT Guide to determine which training is required [special use or non-special use]).

**Aircrew member** is a person working in and around aircraft and essential to ensure the safety and successful outcome of the mission (see the IAT Guide for training requirements and additional duties). NOTE: Additional training is required for helicopter crew member duties (see the resource helicopter crew member listing below).

**Resource helicopter manager** shall be assigned to all NPS helicopter flights. The manager is responsible for coordinating, scheduling, and supervising non-fire resource helicopter operations. This person supervises operations involving transport of groups of personnel or cargo from/to unimproved landing sites, external load operations, or other complex special-use project operations. Managers are not required to be on board all flights. Resource helicopter managers must meet the requirements of the training and currency listed in Chapter 14. A DOI PIC may load and unload passengers and cargo.

**Resource helicopter crew member** assists the helicopter manager in the performance and completion of helicopter missions. This person may be on board the aircraft in lieu of a manager if unqualified personnel will need to be loaded/unloaded. Resource helicopter crew members must meet the requirements of the training and currency listed in Chapter 14.

**Dispatch personnel** are responsible for dispatching and flight following aircraft in accordance with DOI and NPS policies. Some of their duties include procuring, scheduling, initiating flights, flight following, and processing payments.

**Flight followers** are responsible for monitoring aircraft flight activities in accordance with DOI/NPS policies. They may work in a dispatch center or at a remote location where they have the ability to monitor a flight by radio or a satellite tracking system and the means to initiate an aircraft mishap emergency response should the need arise. Flight followers must meet the requirements of the training listed in Chapter 14.

**Employees** are responsible for knowing and following applicable policy and directives, maintaining currency by attending required aviation training in accordance with DOI and NPS 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.

### 1.6 Evaluation and Monitoring

Periodic internal reviews of NPS aviation operating procedures and readiness are necessary in order to enhance safety, identify program strengths and weaknesses, help identify fiscal and personnel needs, and ensure the efficient use of aircraft under NPS control. These reviews are supplemental to those conducted periodically by the department.

#### 1.6.1 Annual Aviation Program Report and Assurance Statement (AAPRAS)

Annually, Level and Level 2 parks, and at the discretion of the RAM, Level 3 parks will complete the AAPRAS. The RAMs will compile these reports for submission to the NAM at the beginning of each calendar year. The NAM will provide a summarization to the AD-VRP (see Appendix 8, Annual Aviation Program Report and Assurance Statement).

#### 1.6.2 Regional Aviation Program Review

Each region’s overall aviation program will be reviewed at least once every five years by the NAM. The periodic
DOI program review, conducted by the OAS per 352 DM 2, *Aviation Program Evaluation*, may serve in lieu of a separate NPS-initiated review.

### 1.6.3 Park Aviation Program Review

Regional directors are responsible for the development of a comprehensive park aviation program review process. These reviews shall occur at a minimum of five-year intervals. This review will be accomplished in accordance with templates that can be found on InsideNPS.

- NPS programmatic areas such as Inventory and Monitoring, WASO Branch of Emergency Services, Exotic Plant Management, etc. that are not directly associated with a park and conducting aviation operations require periodic operational reviews.

- These reviews conducted by the NAM shall occur at a minimum of five-year intervals.

### 1.6.4 Local Facility Inspection

Superintendents will ensure that readiness inspections are conducted annually for all permanent rotary and fixed-wing bases. This requirement will include permanent helipads in those parks with rotary wing operations but lacking helibases. The preparedness evaluation process, found in the *Interagency Helicopter Operations Guide (IHOG)* Appendix E, will be the basic tool for evaluating rotary wing facilities. Readiness evaluations will be in writing and a copy will be forwarded to the RAM.

**NOTE:**

- Occasionally concerns regarding some aspect of the aviation program are discovered requiring immediate investigation and possible action by RAMs or the NAM.

- When these infrequent situations occur, written documentation will be provided to park superintendent who must then respond in writing to the reviewers within 30 days of the receipt of the documentation.

- If warranted, the response will include corrective actions, a timeframe, and responsible party.

- Any finding identified as a serious safety concern will be responded to in writing by the park superintendent within 30 days to the RAM. The response will include corrective actions, effective date, and individual responsible for the correction.

### 1.7 Management of Aviation Mishaps

The National Transportation Safety Board (NTSB) is responsible for the factual investigation of aircraft accidents. DOI-OAS has responsibility for management of NPS aviation mishaps, incidents or accidents; parks/units will respond to findings in a timely manner. For more specific procedures, reference *Chapter 16*. 
Chapter 2 – AVIATION DIRECTIVES

2.1 General

The following documents must be made available to all park managers using aviation resources.

2.2 Office of Management and Budget Circulars

Office of Management and Budget (OMB) Circulars No. A-11, A-123, and A-126 prescribe procedures for acquisition of fleet aircraft, internal program controls, and the management and use of federal government aircraft. Department of the Interior (DOI) policy is found in OPM-08, “Planning, Budgeting and Acquisition of Aircraft Assets.”

2.3 Federal Aviation Regulations

These regulations are the basic guide for piloting and aircraft operations within DOI. Federal Aviation Regulations (Title 14, Chapter 1 of the Code of Federal Regulations) may be obtained from the Government Publishing Office, commercial bookstores selling pilot and aviation materials, or may be viewed online at the Federal Aviation Administration.

2.4 Departmental Manual

Departmental Manual (DM) Parts 350-353 are the aviation policies for all DOI agencies. The DM is available in the document library located at the Office of Aviation Services’ OAS Document Library. OAS publications and forms and the OMB circulars may be obtained from OAS or viewed at the same website.

2.5 DOI Operational Procedures Memoranda

Operational Procedures Memoranda (OPMs) are temporary or interim policy directives. They also may be viewed on the OAS Library webpage.

2.6 DOI Handbooks/Interagency Guides

The current version of the following handbooks and guides (as annotated) constitute NPS aviation policy, except where noted. They may also be viewed online at the OAS Document Library.

2.6.1 DOI and Interagency Handbooks

• Aviation Life Support Equipment Handbook (ALSE).
• Aviation Fuel Handlers Handbook.
2.6.2 Guides

- Interagency Aerial Ignition Guide (IAIG).
- Interagency Aerial Supervision Guide (IASG).
- Interagency Airspace Coordination Guide (IACG).
- Interagency Airtanker Base Operations Guide (IATBOG).
- Interagency Helicopter Rappel Guide (IHRG).
- Wildland Fire Qualifications System Guide.
- Interagency Standards for Fire and Fire Aviation Operations (Redbook).
- USFS/BLM Aviation Risk Management Workbook.

2.7 NPS Plans

(NPS plans are considered directives under policy)

- NPS National Aviation Strategic Plan.
- NPS National Short-haul Operational Plan (in draft at time of publication of this reference manual).
- NPS National ACETA Operational Plan (in draft at time of publication of this reference manual).
- NPS regional aviation plans.
- NPS park aviation plans.
- NPS project aviation safety plans.

2.8 DOI and Interagency Information Bulletins

Information bulletins contain material of a general nature and do not have a defined expiration date. They can be found at the OAS & Interagency Aviation “Information Bulletins” web page.

2.9 DOI and Interagency Safety Alerts

Safety alerts are time-sensitive documents that are published as needed. They can be found at the DOI & Interagency Aviation “Safety Alerts” web page.
2.10 DOI and Interagency Aviation Accident Prevention Bulletins

These bulletins contain material with wide application and are issued as needed. They can be found at the DOI & Interagency Aviation “Accident Prevention Bulletins” web page.

2.11 DOI and Interagency Technical Bulletins

Technical data and recommendations regarding aircraft are published in tech bulletins when warranted. They can be found at the OAS & Interagency Aviation “Tech Bulletins” web page.

2.12 Enhancements, Policy Waivers and Exceptions

(See Appendix 5, Enhancement Application)

1. An enhancement refers to a deliberate risk assessment decision making process used anytime an NPS unit initiates a new aviation program such as acquiring fleet aircraft or unmanned aircraft systems (UAS), or when new aviation missions are initiated (e.g. ACETA, short-haul, etc.). Once an enhancement is approved, it is deemed valid in perpetuity unless there is substantial change to the program.

2. Waivers from NPS aviation policies found in this reference manual must use the enhancement application for that request.

3. Regional directors are delegated the authority to grant waivers from departmental personal protective equipment (PPE) using the process outlined in the ALSE handbook.

4. Exceptions per the ALSE handbook are found at the OAS Document Library.

5. Exception(s) to the DOI Departmental policy are found in 350 DM 1.10.
Chapter 3 – RECORDS AND REPORTS

3.1 Aircraft Use Reports

3.1.1 DOI Aircraft Use Reports

1. For each flight on government-owned fleet aircraft an electronic Aircraft Use Report (AUR), must be completed and submitted per Operational Procedures Memorandum (OPM)-02, “Fleet Aircraft Use Reporting,” for billing and record purposes. A paper form, Office of Aviation Services (OAS)-2, “Aircraft Status Log,” which indicates recent flight history and maintenance status, should be filled out and the book containing a paper copy left in the aircraft.

2. For contract, rental, or charter aircraft, Form OAS-23E, “Aircraft Use Report,” must be used for billing and recording the purposes (see Chapter 17).

3.1.2 Forest Service Aviation Business System (ABS)

Flight time, daily availability, and other authorized charges or deductions shall be recorded on a Flight Use Report in ABS for all United States Forest Service (USFS) contracted aircraft. The data shall be entered and reviewed by the government and the contractor’s representative.

National Park Service employees who are flight or aircraft managers with responsibility to input flight use data into the USFS ABS will need to register with the U.S. Forest Service Aviation Business System.

3.2 Non-Revenue Flights

Each non-revenue flight on approved cooperator aircraft (military, other public agencies) or approved privately owned aircraft used for personal transportation on government travel will be reported annually to the National Aviation Office through the Regional Aviation Manager.

3.3 Use of Non-Federal Public Aircraft

NPS reimbursement for the use of a state/local government owned and operated public aircraft as a first responder resource must be documented to show that consideration was given to commercial operators and that no commercial operator was available to respond to the incident in the same manner and timeframe as the non-federal public aircraft. Documentation must be maintained with the incident records (see Chapter 12.5). NOTE: This section refers to the operation of an aircraft by a government agency that does not meet civil standards or that does not have a commercial operating certificate (if one is required). Operations conducted by a government agency using civil certificated aircraft that do not require an operating certificate may be utilized when approved as a cooperator aircraft by OAS.

3.4 Aviation Safety Training Records

Aviation training records for NPS employees must be maintained by the respective units. Parks may use the Interagency Aviation Training (IAT) records database to meet this requirement to track employee currency. IAT modules received in National Wildfire Coordinating Group (NWCG) or other training may be entered in the IAT records database. Parks may also use their own method to track the employee training currency, but that method must be readily accessible to at least two supervisory employees.

In addition, NPS fleet pilot training records must be maintained in accordance with 351 DM 3.
3.5 DO-11D: Records and Electronic Information Management

Recordkeeping associated with aviation activities will be in accordance with the requirements of Director's Order 11D: Records and Electronic Information Management.
Chapter 4 – FLEET AIRCRAFT ACQUISITION, MARKING, DISPOSITION and FUNDING

4.1 Acquisition

The addition of an aircraft to a national park or National Park Service program, to include unmanned aircraft systems (UAS) through purchase, transfer, lease or loan must be requested through the Regional Aviation Manager (RAM) and National Aviation Office (NAO). The relative merits of purchase versus contracting must be evaluated according to the requirements set forth in OMB Circular A-11, Part 7, and Aviation Business Case Summary (ABCS) Process.

1. The application in Appendix 5, Enhancement Application will be used to justify the addition of an aircraft to a park or program.

2. The justification must include mission purpose, the amount and kind of usage, pilot arrangements, acquisition and operating costs, equipment enhancements, and financial reserves for aircraft replacement purposes. Proposals must also include information on opportunities for sharing use with other NPS offices or agencies.

3. The NPS director may request the director, Office of Aviation Services (OAS), to reassign excess fleet aircraft to NPS units.

4.2 Marking

All departmental aircraft must be marked in accordance with Federal Aviation Regulations (FAR) Part 45, Subparts A-C.

4.3 Disposition

OAS is responsible for disposing of aircraft in accordance with federal property management regulations. Parks disposing aircraft, to include UASs, must coordinate with the national and/or regional aviation staff for possible reassignment to another park or transfer of the aircraft and its’ working capital accounts.

4.4 Funding

The decision to not fund a current fleet aircraft’s replacement reserve account is a decision with long-term consequences potentially well beyond current management’s tenure. Parks that are considering not funding replacement reserve accounts must:

1. Submit a written request through the RAM to the NAM stating the reason for not funding the replacement reserve account. Include a statement that the aircraft will not be replaced at the end of its useful life. Request will include:
   a. Current aircraft usage and additional aircraft at park, if any.
   b. The reasoning behind the request.
   c. The reduction in monthly rate by not funding the replacement reserve account and the projected cost savings over the remainder of the aircraft’s life cycle.
   d. The projected date the aircraft will be released.

2. Upon receipt of the information and concurrence by the regional director via the RAM and NAM the package will be forwarded to the associate director, Visitor and Resource Protection (AD-VRP) for final approval and a memorandum issued to the director, OAS.
3. The park or program must update their Fleet Information Document (FID), annotated with information that the replacement reserve account is not being funded and the date that the aircraft will be released. All future FID, until the aircraft is released, will contain this information.
5.1 General

Aircraft used in support of aviation activities within the Department of the Interior (DOI) must be equipped in accordance with 351 DM 2.

5.2 Additions/Alterations

No equipment or device may be permanently added to any aircraft without the concurrence of the regional aviation manager (RAM). Final approval requires completion of OAS-74 and authorization from chief, Office of Aviation Services (OAS), Technical Services Division. Parks should be aware that approved additions may become a permanent part of the aircraft. Parks are advised not to consider any aircraft or equipment additions as part of the park’s property inventory regardless of how purchased or funded.

All aircraft with external devices, such as tracking antennas must be operated in accordance with the limitations of Federal Aviation Administration (FAA) approval: Form FAA-8110-2, “Supplemental Type Certificate,” for the aircraft make and model, or Form FAA-337, “Major Repair and Alteration.” Additional requirements for tracking antennas are found in 351 DM 2.2 H.

5.3 Wire Strike Protection Systems

Effective January 2013, DOI’s aviation policy requires that all DOI contract helicopters have wire strike protection systems (WSPS) installed. These systems have proven to be an effective preventative safety tool for low-level helicopter operations.

Where applicable, all new contracts for National Park Service helicopters will adequately address this requirement. In certain operations, WSPS may not be feasible. In those cases, exceptions to this policy may be warranted and must be approved by DOI-OAS.

5.4 Emergency Locator Transmitter

An emergency locator transmitter (ELT) meeting Aviation Life Support Equipment Handbook (ALSE) requirements must be installed in all aircraft owned or operated by the NPS. This installation must be in the cabin or conspicuously placarded indicating its location(s). NPS fleet aircraft and personal aircraft used for passenger transport shall be equipped with 406 MHz ELTs.

ELTs are registered with the National Oceanic Atmospheric Administration by OAS and will include contact information in the event of activation, however the emergency contact information must be checked by NPS personnel on an annual basis and updated as needed.

5.4.1 Primary Contact Information

The 24-hour emergency contact number should be the dispatch center or office with flight following responsibility. A PAM, unit aviation officer, or RAM cell phone may also be used as an alternative if that person has direct knowledge of the daily operation and the location of the aircraft. Alternative primary contacts may be listed but must be accessible on a 24-hour basis. Office telephones not staffed on a 24-hour basis and that do not automatically roll over to a cell phone should not be used. The pilot flying the aircraft will not be listed as a primary contact number.
### 5.4.2 Alternate Contact Information

The 24-hour emergency contact should include the DOI aircraft accident reporting number, 1-888-4MISHAP (1-888-464-7427). Alternate telephone numbers may also include park offices and the aircraft primary pilot, but only if multiple primary contacts are listed.

**NOTE:** Inadvertent activation of ELTs is the source of many false reports. The pilot can often quickly resolve a false report. Therefore, listing the pilot and aircraft satellite telephone, as an alternate 24-hour emergency contact, is a viable strategy.
Chapter 6 – PERSONAL PROTECTIVE EQUIPMENT/AVIATION LIFE SUPPORT EQUIPMENT

6.1 Personal Protective Equipment

Flight crew members, aircrew members, and passengers are required to wear personal protective equipment (PPE) on all special use flights as per the Aviation Life Support Equipment Handbook (ALSE). Programmatic exceptions are found in the ALSE handbook.

6.2 Personal Protective Equipment Waiver Authority

Waivers from PPE requirements are delegated to National Park Service regional directors (RDs)

- These waivers are limited to instances where protection for the individual is deemed more critical for personal safety than provided by standard PPE.

- A waiver must have an expiration date and cannot exceed three years.

- Flight helmet requirements cannot be waived except as noted in the ALSE handbook.

- Copies of waivers must be provided to the national aviation manager and appropriate Office of Aviation Services (OAS) RD.

6.3 First Aid and Survival Kits

All aircraft flying special use missions under the operational control of the NPS must carry first aid kits and survival kits in compliance with the minimum items listed in the ALSE handbook onboard. Flights occurring in Alaska or Canada must have additional items in accordance with the requirements of the government of the territory being over flown.

6.4 Personal Flotation Device

6.4.1 Single Engine Aircraft

For operations beyond power-off gliding distance to shore, personal flotation devices (PFDs) will be worn for all flights.

6.4.2 Multi-engine Aircraft

PFDs must be immediately available to each seated occupant. NOTE: When performing takeoffs or landings to water, occupants of all aircraft must wear PFDs.

This policy includes seat fare operations except as noted below:

PFDs need not be worn but must be immediately available to each seated occupant in multiengine-land aircraft which meet the over water performance capability required for Federal Aviation Administration (FAA), Part 121 Air Carrier and Part 135 Air Taxi and Commercial Operators.
6.5 Emergency Locator Transmitter

An emergency locator transmitter (ELT) that meets ALSE handbook requirements must be installed in all aircraft owned or operated by the NPS. This installation must be in the cabin or conspicuously placarded indicating its location(s). NPS fleet aircraft and personal aircraft used for passenger transport shall be equipped with 406 MHz ELTs. The ELT shall be registered with the National Oceanic Atmospheric Administration to include contact information in the event of activation. “Emergency Contact Information” must be checked on an annual basis and updated as needed.

6.5.1 Primary Contact Information

The 24-hour emergency contact number should be the dispatch center or office with flight following responsibility. A Park Aviation Manager’s, Unit Aviation Officer’s or Regional Aviation Manager’s cell phone may also be used as an alternative if that person has direct knowledge of the daily operation and the location of the aircraft. Alternative primary contacts may be listed but must be accessible on a 24-hour basis. Office telephones not staffed on a 24-hour basis and that do not automatically roll over to a cell phone should not be used. The pilot flying the aircraft will not be listed as a primary contact number.

6.5.2 Alternate Contact Information

The 24 hour emergency contact should include the DOI aircraft accident reporting number, 1-888-4MISHAP (1-888-464-7427). Alternate telephone numbers may also include park offices and the aircraft primary pilot, but only if multiple primary contacts are listed.

NOTE: It is recognized that inadvertent activation of ELT’s is the source of many false reports. The pilot is can often most quickly resolve a true false report. Therefore, listing the pilot and aircraft satellite telephone as alternate 24-hour emergency contact is a viable strategy.

6.6 Flight Helmets

Instructions for fitting and maintenance/inspection of flight helmets may be found in the ALSE handbook and the Flight Helmet User’s Guide. Flight helmets may be repaired/refurbished by Bureau of Land Management Ramp Services via a national interagency agreement maintained by the Divison of Fire and Aviation or by certified technicians.

6.7 Satellite-Based Tracking Systems

Aircraft procured or operated by the NPS require a satellite-based tracking system. This system must be monitored by a dispatch office or flight following by qualified personnel during all flight operations. If satellite-based tracking becomes temporarily inoperable, an aircraft will normally remain available for service, using radio and/or voice (satellite or cell phone) systems for flight following.

This requirement will apply to all vendor aircraft used by the NPS, to include FAR Part 121, Seat Fare Operations, as well as end product contracts and UAS operations.
Chapter 7 – AIRCRAFT MAINTENANCE AND INSPECTION

7.1 Maintenance

Department of the Interior (DOI) -owned or -operated aircraft, and privately-owned aircraft conducting government business, must be maintained in accordance with the maintenance programs outlined in 351 DM 2.

7.2 Inspection Programs

DOI-owned or -operated aircraft and privately-owned aircraft conducting government business must be inspected in accordance with the inspection programs outlined in 351 DM 2.

7.3 Returning an Aircraft to Service

Fleet aircraft shall not be operated until it has been approved for return to service in accordance with 14 C.F.R. § 43. A functional flight test must be performed by a pilot certificated in accordance with 14 C.F.R. § 61 following: aircraft overhauls, major repairs or replacement of engine, power train, rotor system, retractable landing gear system, flight controls, or adjustment of the flight control system. Flight test results shall be recorded in the aircraft maintenance record. No passenger shall be carried during a flight test. Questions regarding rental and/or contract aircraft should be directed to the contracting officers representative (COR).

7.4 Time-Between-Overhaul Reserve

Time-Between-Overhaul (TBO) Reserves are funds set aside for engine-propeller overhaul.

- These reserves are calculated for each individual aircraft based on estimated future cost of overhauling the time-based components.

- The amount of TBO reserves set aside currently in a given aircraft’s account is 75 percent of the recommended overhaul hours for the engine.

- Funding overage or deficit is rolled into the calculation of the next engine cycle through the TBO reserve amount set aside.
Chapter 8 – AIRCRAFT SECURITY

8.1 General

The pilot-in-command is responsible for the security and tie down of the aircraft. It is recommended that Department of the Interior (DOI) aircraft be hangared whenever practical.

8.2 Fuel

The pilot must verify security, type, and quantity of fuel.

8.3 Facility Security

Each National Park Service location used for aircraft landing and takeoff at which DOI-owned or -controlled aircraft are permanently based shall have a current written security evaluation in accordance with 352 DM 5, and the Field Reference Guide for Aviation Security for Airport or other Aviation Facilities (AAF). The AAF is available at the Office of Aviation Services’ website, under Aviation Handbooks, Guides & Booklets.

Parks may choose to conduct a park-wide evaluation that is inclusive of all landing areas if there is no significant difference in risk at each site. Park aviation plans shall address AAF security evaluations and establish a schedule for review. NOTE: If your AAF evaluation score is higher than 6, consult with the national aviation manager for guidance before taking further action.

8.4 Aircraft Security

(See 352 DM 5 for Military/Cooperator Aircraft exemption)

Aircraft must be dual-locked whenever they are not under the direct control of an NPS employee. At any time DOI owned or controlled aircraft are not directly attended by department-authorized flight or ground personnel, the aircraft will be physically secured and disabled via the dual-lock method. Examples of acceptable dual-lock devices and their conditions of use are listed in 352 DM 5, Appendix 2.
Chapter 9 – PILOT FLIGHT AUTHORITY, MANNED AIRCRAFT OPERATIONS

9.1 General

When training or hiring National Park Service pilots, managers must carefully consider the risks, the position qualifications, ongoing training requirements, and fiscal issues associated flight operations. Managers will consult with NPS regional and national aviation managers as well as human resource specialists when hiring pilots. Managers must use the NPS Hiring Officials Pilot Requirements Checklists to help determine the skills needed for the operations performed by the unit hiring the pilot. These checklists are found on InsideNPS or by contacting the national aviation office (NAO).

Prior to a final offer of employment, there are requirements per 351 DM 3 for Federal Aviation Administration (FAA) or military records checks. All applicants must present a logbook for examination, and a pre-employment flight evaluation is required. Applicants with military pilot experience must complete an FAA Military Competency Knowledge Test and present an appropriate FAA pilot certificate.

NOTE: Since an applicant is not an authorized DOI pilot and hence not authorized to manipulate the controls of DOI aircraft, authorization must be acquired from the appropriate Office of Aviation Services (OAS) regional director (RD) prior to an applicant being administered a pre-employment flight evaluation. (Contact the NPS fleet and pilot specialist for assistance.)

9.2 Technical Oversight of NPS Pilots

The technical oversight of NPS pilots rests with the regional aviation manager (RAM). In the event the RAM lacks the expertise, the oversight can be delegated to an NAO technical specialist, e.g. the national helicopter operations specialist or the national fleet aircraft, pilot and UAS aviation specialist. At parks with park aviation managers (PAMs), this oversight can be provided by the PAM with RAM concurrence.

The oversight is exercised to ensure a safe and professional aviation program and service. The oversight applies only to the employee’s aviation duties. Technical oversight consists of:

1. Participation in the initial hiring.
2. Development of aviation training.
3. Advisement of flight operations, e.g. mission planning.
4. Mentoring skills for DOI fleet aircraft management to include:
a. Aircraft use reports.

b. Aircraft maintenance.

c. Fuel management.

9.3 **NPS GS-2181 Pilots**

Pilots must meet all DOI criteria for flight authorization, currency, and flight check requirements listed in the 351 DM 3 that applies to the operations they will perform.

- Piloting aircraft is the primary duty and comprises more than 50 percent of the employee’s duties.
- Position descriptions are classified in the 2181 (pilot) series.
- Minimum pilot time requirements are 1,500 hours total time.

9.4 **NPS Dual Function Pilots**

A dual function employee’s piloting aircraft comprises a significant amount of employee’s work, but is less than 50 percent of total duties.

- Position may be classified into any job series.
- Piloting duties are stated in employee’s position description.
- Minimum pilot time requirements are 500 hours pilot-in-command (PIC).

9.4.1 **Dual Function Pilots With Less Than 1,000 Hours PIC**

Dual function pilots with less than 1,000 hours PIC are required to have written approval from the RAM and the national aviation manager (NAM) prior to flight evaluation for conducting unprepared site operations and other special use activities.

9.4.2 **Stage Check Requirement for Dual Function Pilots**

To ensure the ongoing development and proficiency for NPS pilots, any pilot with 500-1,200 hours PIC will at a minimum of every six calendar months, receive a stage check.

At a minimum, this stage check will consist of one hour of flight training and one hour of ground training in appropriate areas of operation and tasks applicable to the pilot’s operating environment.

Discretion is delegated to the person administering the stage check to determine the area of operation and tasks.

The stage check requirement can be met by one of the following conditions:

1. Pass an FAA pilot proficiency check for a pilot certificate, rating, or operating privilege.

2. Complete a Federal Aviation Regulations (FAR) 61.56 Flight Review administrated by OAS, bureau instructor pilot, inspector pilot or FAA certified flight instructor authorized by OAS and the NAM to perform the task*.

3. Complete a DOI flight evaluation per 351 DM 3.

4. Attend a DOI- or bureau-sponsored clinic that includes both ground and flight training. Clinic must include a minimum of one hour of flight training and one hour of ground training and be documented via OAS-50, “Flight Instruction Form”, or logbook entry.

* If a non-governmental certified flight instructor is used to fulfill the requirements for a stage check, a letter of authorization from the appropriate OAS regional director (RD) for the certified flight instructor (CFI) to manipulate the controls per 31 DM 1.2 B. (2) must be requested and approved.
9.5 **Incidental Pilots**

The NPS does not authorize incidental pilot duties as described in 351 DM 3. NPS employees conducting pilot operations, other than under the Federal Travel Regulations, will have those duties included in their position descriptions.

9.6 **Auxiliary Pilots**

Auxiliary pilots are volunteers or contractors, not government employees, but they may serve as a pilot of DOI aircraft per 351 DM 3 if they meet the GS-2181-11 requirements.

9.7 **Pilot Training**

Initial and ongoing training requirements for NPS GS-2181, Dual Function and Auxiliary Pilots, can be found in 351 DM 3 and OPM-22, “Manned Aircraft, Pilot-Training Program.”

Failure to meet flight experience and training requirements will result in withdrawal of NPS pilot authorization.

Pilots who fail to meet FAA practical test standard and DOI interagency practical test standard standards during initial or recurring flight evaluations are not authorized to manipulate the controls of DOI aircraft or act as PIC for flight operations.

Parks, in collaboration with the RAM and NAO, are encouraged to provide additional training to cultivate pilot skills and professional development. Examples of training include Airline Transport Pilot or CFI ratings.

Pilots with CFI ratings are extremely important to the NPS because this provides the ability to meet pilot training requirements internally, reduce training costs by avoiding reliance on outside vendors, and provide continuing education units to both the instructor and pilot.

9.8 **Trainee Pilot Program**

NOTE: Until an employee has been formally accepted into a DOI-developmental pilot training program, approved by the NAM, it is prohibited for a park to fund any portion of flight training, to include salary. This policy does not prohibit an employee from pursuing flight training on their personal time.

Requests for employees to enter a training program designed to develop them as a dual function pilot in lieu of 351 DM 3 will follow the procedures outlined in OPM-22. This request will be initiated in writing through the superintendent to the RAM for approval from the NAO in order to construct a training plan and ensure that adequate funding is available for the trainee pilots’ development.

The following information must be included in the request:

1. Pilot’s name.
2. Copy of FAA pilot certificate.
3. Copy of FAA medical certificate.
4. Brief resume of pilot experience and background, OAS 64D.
5. Type of aircraft the pilot is to be qualified to fly.
6. Missions that will be flown.
7. Name of the park aviation managers (PAMs) or supervisors, their currency per OPM-04 and the level of supervisory oversight they will provide to the flight operation.
8. Indication of whether the employee is in a developmental position and if pilot training is included in the person’s employee developmental plan.

NPS employees will meet the following minimum requirements before being considered for the trainee pilot program. An approval to manipulate the controls is required from the OAS RD prior to a flight evaluation takes place:

1. Must hold a commercial pilot license in category with instrument rating.
2. Must possess a current Class II FAA Medical Certificate.
3. Must have logged 100 hours PIC in category.
4. Have successfully passed an FAA or military pilot record check.
5. Received a flight evaluation conducted in accordance with 351 DM 3.

The appropriate NPS regional and national specialists develop a written training program for the trainee based on OPM-22.

Once approval is received from the national offices, the RAM will submit a manipulation of control’s request to the OAS RD that the trainee be authorized to fly DOI aircraft. A copy of this authorization will be forwarded to the NAO, pilot’s supervisor, and instructor pilot.

9.9 Medical Certificates

Pilots will maintain a minimum Class II FAA medical certificate; pilots who fail to maintain an FAA Class II medical certificate or higher are not authorized to manipulate the controls of DOI aircraft or act as PIC for flight operations.

9.10 Request for NPS Pilot Carding and Flight Evaluations

Request for flight evaluation for pilot carding must be routed through the RAM to OAS to maximize aviation safety compliance specialists’ time and availability.

9.11 NPS Instructor Pilot

NPS instructor pilots are responsible and authorized to provide flight and ground instruction. The instructor pilot acts as the PIC of the aircraft. Instructor pilots are authorized to provide written endorsements (e.g., in the pilot’s logbook and/or on OAS Forms 50/51).

9.11.1 Instructor Pilot Qualifications

DOI flight-instruction duty should be documented in the employee’s job description as a secondary or tertiary responsibility relative to the primary flying duty. NPS instructor pilots must:

1. Hold a current FAA Certified Flight Instructor pilot certificate with appropriate ratings.
2. Be current and carded as PIC in the aircraft when providing initial qualification training.
3. Be recommended in writing by their RAM and approved by the NAM. Nomination and approval documentation must be forwarded to OAS headquarters for inclusion in the pilot’s permanent records.
4. Successfully complete an initial one-time OAS flight evaluation while flying in the instructor position. If the evaluation is conducted in an aircraft with side-by-side cockpit seating, the instructor pilot must also pass an OAS flight evaluation from the rear seat to instruct in tandem aircraft.

9.11.2 Instructor Pilot Privileges and Limitations

The instructor pilot is authorized to:

1. Provide initial flight and ground training to DOI pilots who are not currently carded in the aircraft.
2. Provide recurrent flight training to DOI pilots.
3. Train fleet pilots to perform special use missions for which the instructor pilot holds a current card. Instructor pilots must not provide training on any special use mission for which the instructor is not current and qualified.
4. Provide written endorsements and/or recommendations for fleet pilots to receive initial OAS aircraft flight evaluations.
5. Provide recommendations to the DOI pilot and the pilot’s supervisor when additional training or a different approach is advised.
6. Instruct OAS-approved pinch-hitter courses in accordance with 351DM.
7. Perform flight reviews of DOI pilots to satisfy the requirements of 14 C.F.R. § 61.56.
9.11.3 Renewal or Reinstatement of Instructor Pilots

1. Instructor pilot authorization is valid for two years.
2. Renewal of instructor status must be initiated in writing by the PAM or Supervisor and the RAM with concurrence of the NAM.

9.12 Pilot Assessment Process (PAP)

The pilot assessment process, found in Appendix 6, is an internal NPS process designed to serve two purposes. 9.12.1 Pilot-Requested Assessment Process

NPS pilots may request a PAP to consider the potential for the pilot to benefit from additional training or mitigate a serious safety or operational concern the pilot may have.

9.12.2 Service Requested PAP

To determine an NPS pilot’s or pilot trainee’s fitness for duty based on the identification of a serious safety concern, an accident, or an incident with potential or employment or performance-based concern that indicates they are unfit to pilot NPS aircraft. This does not include circumstances that are under an OAS convened Pilot Review Board (PRB).

9.13 Pilot Suspension/Revocation

DOI Pilot Qualification Cards will be suspended temporarily or revoked by OAS after an aircraft accident or Incident With Potential, (IWP). Failure of the pilot to conform to prescribed DOI standards may result in revoking the DOI Pilot Qualification Card. Revocation, suspension, and re-issuing process for DOI pilot authorization is outlined in the DOI Flight Crewmember policy 351 DM 3. Under some circumstances, such as a recommendation from an Aviation Mishap Review Board (AMRB), OAS may be requested to convene a PRB or opt to do so on their own as outlined in OPM-24, “Pilot Review Board.”
Chapter 10 – FLIGHT OPERATIONS

10.1 General
10.2 DOI-Approved Aircraft and Pilots
10.3 Noise Impact Mitigation
10.4 Aviation Management Plan
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10.1 General

All aircraft under operational control of NPS will comply with applicable Federal Aviation Regulations (FARs), Department of the Interior (DOI) aviation policy, DOI handbooks, and interagency guides as listed in Chapter 2.5.

Anyone has the right to refuse a mission. Park employees have the authority to stop work for any National Park Service mission; to stand down flight operations for any reason is not considered a suspension/revocation of a pilot’s DOI Pilot Qualification Card.
10.2 DOI-Approved Aircraft and Pilots

NPS employees must use only aircraft and pilots approved or otherwise authorized by the Office of Aviation Services (OAS) or the United States Forest Service (USFS) for all flight services. Use of USFS-carded aircraft for non-wildland fire missions must be approved in advance by OAS.

10.3 Noise Impact Mitigation

With safety of flight the first priority, certain pilot techniques and planning can reduce noise impacts over parks. Flight operations over and adjacent to sensitive areas must be avoided whenever possible. Frequency of flight operations must be minimized to the extent possible.

Power settings, ascents, and descents will consider noise impacts. Studies, such as the Aviation Business Case Study, for replacement of existing fleet aircraft should consider the potential to reduce noise impacts through quiet technology enhancements to the aircraft when feasible.

10.4 Aviation Management Plan

Parks that either meet the definition of a complex aviation program (Level 1) or have elements of a complex aviation program (Level 2) are required to have aviation management plans (AMPs). Level 3 parks must consult with their regional aviation manager (RAM) to determine whether an AMP is required.

- AMPs must be approved by the superintendent and reviewed annually. If no changes are necessary after the annual review, an AMP must be initialed and dated.

- Regional and/or park plans may be tiered off this reference manual; if there are no specific additions, the regional AMP or this reference manual may function as a standalone document.

- (See Appendix 2, Park Aviation Management Plan, for an example of the minimum elements required in an AMP).

10.5 Project Aviation Safety Plan

Project aviation safety plans (PASPs) are used to conduct mission planning for aviation projects and will be developed for all special use missions. It’s not anticipated PASPs will be completed for emergency situations (e.g. SAR, fire, LE), however a documented risk assessment must be performed before such a flight takes place.

1. For those parks or units that perform similar special use aviation missions on a recurring or routine basis, the required PASP may be incorporated into an AMP.

2. Project managers and/or management-level project approvers are responsible for ensuring PASPs are completed.

3. Written risk assessments are required to be included in all PASPs. The level at which a PASP is approved is based on the risk level as determined by the written risk assessment within the PASP.

4. One of the following risk assessment methods may be used or an alternative method, approved by the Park Aviation Manager and the RAM:

   a. GAR risk assessment model.

   b. NPS flight plan and preflight operation risk management checklist.

   c. NPS pre-flight operational risk analysis worksheet.

   d. FWS aviation risk assessment matrix.

- (See Appendix 3, Project Aviation Safety Plan, for an example of the minimum elements required in a PASP).

10.6 Flight Plan and Flight Following

Flight plans must be prepared and flight following must be conducted for all NPS aviation activities as outlined in 351 DM 1.4.
10.6.1 Flight Plan

An example of a flight plan can be found in Appendix 4, Flight Request Form.

10.6.2 Flight Following

All NPS exclusive-use and fleet aircraft require a satellite-based tracking system.

Pilot must initiate contact with the dispatcher or flight follower to ensure satellite tracking is positive.

Tracking must be monitored and aircraft location documented, at a minimum of every 30 minutes, by dispatch or flight following qualified personnel during all flight operations.

NOTE: If satellite-based tracking becomes temporarily inoperable, an aircraft will normally remain available for service, e.g., using radio and/or satellite phone, text device or cell phone systems for flight following. Each occurrence will be evaluated individually and will be mutually agreed to by the pilot and aircraft manager/dispatcher. If positive communication cannot be established the aircraft must return to base.

If a pilot is in continuous communication with a ground crew or in visual range of a ground crew, in visual range of another aircraft (known as “local” or “on-site” flight following), operating in the immediate vicinity of an airport, or is conducting Instrument Flight Rules (IFR) operations on a Federal Aviation Administration (FAA) IFR flight plan, monitoring is not required by dispatch personnel.

These requirements apply to all NPS aviation operations including the Lower 48, Alaska, Hawaii and territories with the exception of FAR 121, seat fares, end product contracts or UAS.

10.7 Passenger Manifest

The pilot-in-command (PIC) must ensure that a manifest of all crewmembers and passengers has been completed. A copy of this manifest must remain at the point of initial departure. Manifest changes will be left at subsequent points of departure when practical. In those instances, where multiple short flights will be made in a specific geographic area which involves frequent changes of passengers, a single manifest of all passengers involved may be left with an appropriate person to preclude unreasonable administrative burden.

10.8 Aircraft Preflight/Post Flight

Pilots must conduct a visual inspection of the aircraft prior to and after completion of each flight.

10.9 Checklists

Pilots are required to use written checklists for all phases of flight, per 351 DM 1.1 E.

10.10 Interagency Aircraft Data Card

An Interagency (DOI/USFS) Aircraft Data Card must be maintained in the aircraft and physically inspected prior to each mission. Approval of cooperator aircraft may be by letter or agreement process (see Chapter 13.5).

10.11 Interagency Pilot Qualification Card

The DOI Pilot Qualification Card must be carried by pilots and physically inspected by flight managers prior to each mission. If the card is unavailable, the pilot’s authorization to fly the mission must be verified prior to flight. Approval of cooperator flight crewmembers may be by letter or agreement process (see Chapter 13.5).

10.12 Passenger Briefing

The PIC must ensure that each passenger receives a briefing prior to each mission per FAR 135.117 and 351 DM 1.5 B. It is the responsibility of the NPS employee to ensure he/she receives a passenger briefing.

10.13 Crew Duty Time Limitation

All activities must be conducted in accordance with 351 DM 3.6, and/or the procurement document that crew are working under.
10.14 Instrument Flight Rules

Flights are permitted in accordance with FAR 61.57, 91.167 through 91.193, applicable areas of the FAR-Aeronautical Information Manual (AIM) and 351 DM 1.

10.15 Night Flying

Night flights inherently are more dangerous and are permitted only in accordance with FAR 61.57, 351 DM 1, and the procurement document.

10.16 Transport of Hazardous Materials by Aircraft

Transport is allowed in accordance with the special permit granted DOI by the Department of Transportation, provided activities are conducted as stipulated in the Interagency Aviation Transport of Hazardous Materials Handbook/Guide. A current copy of that special permit and other documents as stated in the special permit must be in the aircraft and at the place of loading when utilizing the special permit.

NOTE:

1. All involved employees, pilot and ground crew, must have completed the mandatory Hazardous Materials (HazMat) training, A-110, Aviation Transport of Hazardous Material.
2. Written notification to the pilot of the carriage of HazMat is required.
3. Except for law enforcement officers with a duty belt holster specific to a chemical agent, e.g. pepper spray, mace, etc., chemical agents may not be carried internally in an aircraft unless secured in a sealed non-porous container (e.g. ammunition can).

10.17 Aviation Fuel Handling

Superintendents are responsible for ensuring that park units that have aviation fuel storage or facilities shall manage the program in accordance with the Aviation Fuel Handling Handbook, National Fire Protection Association (NFPA) 407, Standard for Aircraft Fuel Servicing, OPM-20, “Drum Fuel Management,” and when applicable, the Interagency Helicopter Operations Guide (IHOG).

At a minimum, NPS facilities that maintain an aviation fueling facility, either fixed or mobile, or have drummed fuel, must be inspected by the OAS, quality assurance specialist (fuel) or a properly qualified individual every two years.

This biennial inspection does not relieve the supporting facility of required daily, monthly checks or of addressing problems identified during these checks. The audit will include a review of quality control procedures related to fuel receipts. Those inspections will be documented and sent to the RAM.


10.18 Transport of Cargo/Equipment

Only cargo and/or equipment necessary for mission accomplishment are permitted onboard aircraft under operational control of NPS and must be transported in accordance with FARs and DOI policies. (For helicopters, refer to the IHOG, Chapter 11, Cargo Transport.)

Fixed-wing external load operations will not be permitted except when authorized by OAS.

10.19 Load Calculations/Weight and Balance

Load calculations/weight and balance will be accomplished prior to each NPS flight by the PIC. These calculations will consider weight of cargo and passengers, center of gravity, etc., relative to environmental conditions and performance capabilities of the aircraft. (For helicopters, refer to the IHOG, Chapter 7, Helicopter Load Calculations and Manifests.)
10.20 Environmental Considerations

Weather is the primary environmental factor affecting aviation operations. The minimum weather standard for fleet and vendor fixed-wing VFR flights is a 500-foot ceiling and two statute miles of ground visibility. Flight visibility will be used in areas without weather reporting capability. Employees are required to terminate flight operations if the weather is below the applicable minimum by returning to the starting point or landing at the nearest safe spot. Flight operations are prohibited until the weather improves above the minimums. The pilot may set a more restrictive weather minimum if necessary for the safe conduct of the flight.

Flights may be restricted due to environmental conditions such as cold weather below -40 degree Fahrenheit, high winds and volcanic dust. Refer to 351 DM 1 for specifics, additional helicopter guidance can be found in the IHOG.

10.21 Aviation Mishap Response Plan

Each park unit or other NPS office using flight services must maintain a current and complete aviation mishap response plan in a readily accessible location. Appendix 1, Interagency Aviation Mishap Response Guide and Checklist, provides direction. This plan must be readily available to the person flight following the aircraft.

10.21.1 Aerial Hazard Maps

Aerial hazard maps are to be reviewed prior to flight. Any new hazards found in the area flown must be added to the hazard map.

10.22 Lap Belt/Shoulder Harness

Lap belts, shoulder, or approved secondary restraint system must be worn during all flights. Configuration of lap belt/shoulder harness and/or secondary restraint system must meet standards set in 351 DM 1 supplement, the Aviation Life Support Equipment Handbook.

10.23 Special Use Flight Operations

“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. OAS authorization for both pilot and aircraft is required for special use operations.

Special use flight operations require, at a minimum:

- Project aviation safety plans (see 10.5 of this chapter).
- A written risk assessment, required on the day of the mission.
- If a PPE waiver is needed, all necessary enhancement applications must be signed and waivers and/or exceptions approved.

10.23.1 Aerial Capture, Eradication and Tagging of Animals (ACETA)

Safe, effective, and efficient ACETA operations blend together aviation management, weapon/firearms use, and biological considerations. For non-aviation procedures, training, and certifications refer to Director’s Order-77 and its related Reference Manual-77, Natural Resource Protection. The planned aerial (fixed-wing and helicopter) capturing, eradication, tagging, and gathering of animals must be coordinated with the RAM and be conducted in accordance with the DOI ACETA handbook (351 DM 2-351 DM 3), the NPS ACETA operational plan and this reference manual.

10.23.2 Low-Level Search and Rescue (SAR) and Emergency Medical Services (EMS)

Providing aviation resources for SAR and EMS missions must follow applicable FARs, Departmental and NPS aviation policy, and be addressed in the park AMP. Deviation from these policies must include management involvement and superintendent approval or higher in addition to submission of a SAFECOM.
10.23.3 Human External Loads (Short-haul and Rappel)

Short-haul and rappel programs may be established for wildland fire, SAR, and law enforcement operations. Hoist operations are limited to SAR functions unless the aircraft used fully meets the requirements of 14 C.F.R. § 133 D for commercial operators. These operations must be conducted in accordance with departmental and NPS aviation policy, Interagency Helicopter Rappel Guide, NPS Short-haul Operations Plan, and Law Enforcement Short-haul Policy.

10.23.4 Single Skid, Toe In, and Hover Exit/Entry Procedures (STEP)

These landings, as defined below, are also prohibited except when approved in writing.

1. Toe-In: Landings that are used to drop off or pick up passengers or cargo by resting the helicopter on the toes of the skids.

2. Single-Skid: Landings that are used to drop off or pick up passengers or cargo while holding the helicopter with one full skid on the ground and the other suspended in the air.

3. Hover Entry/Exit Procedures: Landings that are used to drop off or pick up passengers and cargo, other than rappel/short-haul, while holding the helicopter in a hover.

10.23.5 Unprepared Landing Areas

Fixed-wing aircraft operations using unprepared landing areas are considered a special use operation by the departmental manual and require special pilot and or equipment qualifications.

10.23.6 Aircraft Operations Below 500’ Above Ground Level (AGL)

Also known as “low level flight,” when authorized, may be conducted in accordance with FAR 91.119, subpart D of part 135, part 137, or FAA Exemption 3017B or further grant of exemption if applicable.

10.23.7 Wildland Fire

Fire management activities that use aviation resources will be conducted in accordance with applicable guides, handbooks, and departmental manuals 350-353 (see also Director’s Order- and Reference Manual-18, Wildland Fire Management).

10.23.8 All Hazard

NPS aviation resources and personnel may be asked to respond to all hazard incidents. Response to all hazard incident flight operations may fall under special use flight activities for NPS response, e.g. search and rescue, law enforcement, marijuana eradication, earthquakes, hurricanes, tornadoes, oil spills, floods, or declared national or state disasters. Other reference manuals may be applicable.

10.24 Law Enforcement Operations

All NPS law enforcement personnel must adhere to all departmental and NPS aviation policy except for approved undercover operations as specified in 351 DM 1.6. NPS law officers are required by RM-9, Law Enforcement, to wear certain defensive equipment while engaged in law enforcement duties. The minimum defensive equipment to be worn includes authorized firearm and holster, spare ammunition, handcuffs, and authorized intermediate defensive equipment. On-duty law enforcement employees in active status and who are involved in law enforcement duties cannot be directed to remove defensive equipment.

The IHOG provides guidance in Chapter 16 regarding the transport of weapons. Pilot authority is clearly stated in the FARs and DOI policy and contracts, and is pertinent to the safe operation of the aircraft. Weapon safety of armed officers is addressed in commercial airline operations (TSA 49 C.F.R. § 1544.219) and is not to be considered a pilot prerogative in NPS aircraft operations.

10.24.1 Transport of Weapons

When law enforcement personnel carry firearms in an aircraft, the following safety precautions shall be taken:

1. Brief pilots on weapons type(s) and safety policy.
2. Long guns (shotguns, rifles, etc.) shall not have a round in the chamber except in emergency circumstances, as determined by the law enforcement officer in charge in consultation with the pilot, and shall follow all agency guidelines and requirements. The safety shall be on and under the control of the law enforcement officer.
   a. Whether or not the long gun is physically carried by the officer, stowed in a case or placed in a cargo compartment will be dictated by the situation.
   b. The decision to stow or carry is left to the law enforcement office as dictated by the tactical situation.
   c. It is recommended that the long gun be stowed if at all possible to prevent injury from the gun becoming a projectile should the aircraft encounter turbulence or become involved in a mishap.

3. Hand guns may be loaded and shall be holstered.

4. Fully automatic weapons shall have an empty chamber and the bolt locked in safe position.

5. Keep all weapons pointed in a safe direction as determined by the pilot or aircraft manager during the preflight briefing.
   a. This guidance is included primarily to prevent damage to the aircraft, such as a rotor strike.
   b. Muzzle control remains the primary concern of the law enforcement officer.

6. Personal defense sprays properly holstered are allowed aboard DOI aircraft in accordance with the Interagency Aviation Transport of Hazardous Material Handbook/Guide.

10.25 Enhancements and Policy Waivers

An enhancement application is required for the start-up of fleet, exclusive-use, or UAS program; addition of new aviation missions such as helicopter rappel, short-haul, ACETA, LE, and cargo let-down; and reinitiating a suspended program. This process also applies to requests for waivers from NPS policy.

Initial enhancement applications are approved by the associate director, Visitor and Resource Protection. Existing enhancements should be “reaffirmed” if there are significant changes in personnel or program operations. These “reaffirmations” will be approved by the appropriate NPS regional director.

The “Enhancement Application Form” can be found in Appendix 5, Enhancement Application Form.

10.26 Flights Outside the US, Trust Territories, and Possessions

Such flights will comply with the flight regulations of the country in which the operation occurs. Applicable DOI and NPS aviation policy should be used for employee guidance for PPE when participating in flights of this nature. Fleet aircraft flights also will comply with applicable DOI aviation policy, OAS handbooks, and this reference manual. Additional personal liability insurance is required for agency pilots flying outside the United States.

10.27 In-flight Emergency Situations

Pilots will take actions necessary to ensure the safety of personnel and aircraft. Any resulting deviation from applicable FARs, DOI aviation policy, and this reference manual must be reported in writing to the RAM.

10.28 Employee Prerogative

Without fear of reprisal, NPS personnel should not fly under any condition they consider to be unsafe. It is the employee’s responsibility to immediately report any unsafe condition or aviation hazard that compromises the safety of personnel or equipment via a Safety Communiqué, (SAFECOM).

10.29 Wire Strike Protection Systems

Departmental policy requires wire strike protection systems (WSPS) for all helicopters conducting special use missions that have WSPS available. WSPS may not be warranted for all operations and an enhancement application may be submitted to request a waiver.
Chapter 11 – USE OF GOVERNMENT AIRCRAFT

11.1 Administrative Travel Justification and Documentation

The primary intent of this process is that taxpayers should pay no more than necessary to transport government officials. This chapter discusses official travel on government aircraft and when the Department of the Interior (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 SES employees.
- Non-federal travelers include members of Congress and their staff, state and cooperating agency officials, contractors or their representatives to include those employed by such agencies, and private citizens.

11.2 OMB Circular A-126

This circular, Improving the Management and Use of Government Aircraft, breaks official travel into three categories:

1. Mission travel is transporting people whose presence aboard an aircraft is required to perform, or is associated with the performance of a governmental function such as firefighting, search and rescue, law enforcement, aeronautical research, or biological or geological resource management. This OMB definition is a departure from what NPS would consider a “mission.”

2. Required use travel is rare; an employee is a ”required use” traveler if the president or the head of the agency has determined that the person’s travel qualifies as such.

3. Other travel for the conduct of agency business – The SOL considers almost all departmental travel at SES level and above, non-mission official travel. Even when air travel is the only practical means of transportation to remote or roadless areas, SOL approval is required unless the flight is mission travel.

NOTE: If an SES or senior federal official boards an aircraft at point A and returns to point A without any stops, with the exception of fuel or bathroom stops, SOL approval is not required (see Information Bulletin 09-01, Revision 1, “Guidelines for Requesting Approval from the Office of the Solicitor for SES Travel on Government Aircraft”).

11.3 Requests for Solicitor Approval

OPM-7, “Improving the Management and Use of Government Aircraft,” will be used for documenting cost comparisons for administrative travel on government aircraft.

1. All travel on government aircraft must have advanced authorization.

2. There are two documents that may be required:


The chart below lists the documents and signatures required for approval for the various individuals who may fly on NPS-owned or -operated aircraft.

<table>
<thead>
<tr>
<th>Who Signs</th>
<th>Travel Authorization</th>
<th>OAS-110</th>
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<tbody>
<tr>
<td></td>
<td>Next Level Supervisor</td>
<td>File*</td>
</tr>
<tr>
<td>NPS and other federal</td>
<td>✓</td>
<td></td>
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<tr>
<td>Senior executive</td>
<td>-</td>
<td>✓</td>
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<tr>
<td>Senior federal</td>
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<td>✓</td>
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<tr>
<td>GS-level employees</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Non-federal individuals</td>
<td>-</td>
<td>✓</td>
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</tbody>
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File – Maintain a copy on file for at least 3 years

SOL – Office of the Solicitor

* Copy to be provided to the RAM

### 11.4 Space Available Travel

Space-available travel is using aircraft capacity that would otherwise be unused on an already scheduled flight. It is generally limited to federal personnel and their families in remote locations who do not have reasonable access to regularly scheduled commercial airline service.

1. Space-available travel using NPS-operated aircraft is not allowed on special-use flights.

2. The use of space-available travel, for other than the transportation of federal personnel and their families in remote locations, requires trip-by-trip approval by the secretary of the Interior and requires reimbursement at the full coach rate fare (see OMB A-126).

3. Such requests must be processed through the regional aviation manager to the SOL at least ten days prior to planned travel.
Chapter 12 – CONTRACT, RENTAL and CHARTER AIRCRAFT

12.1 General

Aircraft operators providing contract, individual charter, or hourly rental service to Department of the Interior (DOI) bureaus must be approved by Office of Aviation Services (OAS). Pilots must meet DOI experience requirements and adhere to flight time and duty limitations.

12.2 Procurement

All aircraft services required by any NPS unit must be acquired through the OAS procurement process as outlined below with the following exceptions:

12.2.1 Seat Fare

Flights with scheduled air carrier; this may include Part 135 operators (On Demand Operators).

12.2.2 End Product/Service Contracts

These contracts are used to obtain services and products such as aerial photographs, per head animal capture or seeding/fertilization. Aircraft, including unmanned aircraft (UAS), may be used to obtain the product or services; however, there are limits on specifying controls or specific types of aircraft in the solicitation.

1. These types of contracts are not flight service contracts and do not need to be obtained through OAS.
2. There are very strict guidelines that include "operational control" for the use of these types of contracts.
4. Use the “End Product and Best Value Determination Tool” found on the Aviation Management page on InsideNPS to determine how to obtain the service or product.

12.3 Interagency Agreements and Financial and Business Management System

All DOI IBC-Acquisitions Division (AQD) contract/ARA aviation services procured by the NPS will be funded by an interagency agreement (IAA) with AQD. Each region or individual park must have a funded IAA in place for non-fire, non-emergency flights.

12.3.1 Aviation Services Acquired in Support of Non-Fire Activities

Aviation users must work with their regional aviation manager (RAM) to ensure that non-fire aviation services are ordered in accordance with departmental policy.

12.3.2 Aircraft Services Acquired in the Support of Fire Management Activities

A National IAA is established for NPS fire management activities (suppression, severity, fuels (Rx), emergency
stabilization, burned area rehabilitation, and preparedness).

12.3.3 Aircraft Services Acquired in the Support of Search and Rescue

A National IAA is established for NPS search and rescue (SAR). A standing task order through the Interior Business Center, Acquisition Services has been issued to vendors in support of all SARs.

12.3.4 Aircraft Services Acquired from the U.S. Forest Service in the Support of Search and Rescue

Do not delay a SAR response in the event of life threatening circumstances. Payment for use of aviation resources can be addressed after the rescue and/or medevac. The United States Forest Service (USFS) and the national aviation office have each established a national IAA to fund SARs. Contact a RAM for payment procedures.

12.4 Cross Service Agreements

Cross service agreements suffice in lieu of an IAA with AQD; this agreement reduces the workload for NPS contracting and budget/finance personnel. Funds are obligated immediately, vendors are paid more quickly, and real-time tracking is available for expenditures for NPS and AQD staff.

12.5 Procurement of Flight Services from DOI Bureaus and the USFS

Prior to use of fleet aircraft assigned to other DOI bureaus or the USFS, park units are responsible for determining if an IAA or cross service agreement can be used for the aircraft, pilot services, per diem, etc., with the provider of the service.

12.6 Procurement of Flight Services from Non-federal Public Agencies

NPS procurement of and reimbursement for flight services from non-federal public agencies is generally not authorized unless:

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

The decision not to use a commercial operator must be documented in writing and made part of the permanent incident record (14 C.F.R. § 1.1). Park units that anticipate using resources belonging to other government agencies must establish the appropriate approval and agreement documents or cooperator aircraft approval with that unit through their RAM and OAS.

Services are acquired on an hourly rate basis and can be used when the cost of services is $25,000 per transaction or less. OAS provides an approved list of rental sources based on a standard aircraft rental agreement from which all vendors must be selected. Contact the RAM for assistance.

12.7 Contract Services

If the cost of the use of non NPS-owned aircraft will exceed $25,000, the aircraft service must be via contract rather than Aircraft Rental Agreement and submitted on Form AQD-13, “Request for Contract Services,” approved by RAM and an official who has authority to certify that funds are available and submitted to OAS.

12.8 Emergency Aircraft Procurement

Authorized personnel from a requesting NPS unit can contact the appropriate OAS office, use the DOI On Call Small Helicopter contract or ARA for requests for charter aircraft services to meet emergency needs.

12.8.1 Definition of Emergency

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

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

12.8.2 Ordering Emergency Aircraft Services

Pilot and aircraft will be approved (carded) for the intended mission. If due to the nature of the emergency the pilot and/or aircraft are not approved for the intended mission, a SAFECOM will be submitted immediately after the mission.

12.8.3 Risk Assessments

All such procurements will have a written risk assessment completed (per Chapter 10.5).
Chapter 13 – COOPERATOR AIRCRAFT

13.1 General

A cooperator can be:

1. Any branch of the military,
2. Other government agency, or
3. A private entity (affiliate).

Aircraft and pilots must meet Department of the Interior (DOI) standards for general or special-use flights, and NPS employees may not use such aircraft and pilots without prior Office of Aviation Services (OAS) approval. Any costs incurred by OAS in approving cooperator aircraft, including an onsite inspection and pilot check ride for special-use flights, may be charged to the requesting unit.

Parks that would like approval to fly with cooperators, must follow the process in 351 DM 4, Cooperator Operations. The following items, at a minimum must be provided to the regional aviation manager (RAM) who will forward the request through the national aviation manager (NAM) to OAS.

1. Name of cooperator agency and point of contact.
2. Requested aircraft and pilots: aircraft make and model, pilot(s) name, and support equipment.
3. Intended use: (e.g. reconnaissance resource, low level (below 500 ft. AGL), etc.)
4. Reimbursement: If reimbursement is agreed to by both parties, it will be up to the benefiting agency/bureau to establish the reimbursable agreement or payment vehicle with the servicing party.
5. The requesting park point-of-contact.
6. Period of need: one time, repetitive, multi-year, etc.

13.2 Use of Military Aircraft

In addition to the responsibilities identified above, the park identifying a projected need for the use of military aircraft shall:

1. Coordinate with the appropriate OAS regional director (RD) to assist in a search for commercial resource availability.
2. Identify and locate military aircraft capable of meeting mission needs.
3. Initiate a written request for non-emergency use to the appropriate OAS RD.
   a. Requests shall include statements that clearly demonstrate that the requirement is in the national interest and indicates action taken toward obtaining commercial resources.
   b. Military support specifically authorized by statute negates the requirement for a statement concerning national interest. The requesting agency must furnish a reference to the appropriate statute.
13.3 Affiliate/Volunteer Aircraft

Parks may be able to utilize privately-owned aircraft donated by citizens for projects and missions required to support park operations. Before accepting any such offers, consult with the appropriate RAM who will ensure compliance with this plan and 351 DM 4.2.

13.4 Cooperative Agreements

Cooperative Agreements is the mechanism NPS uses to fund research by cooperators, such as the work by universities that is done in parks. Those agreements that involve the use of flight services must contain language stating that people onboard aircraft under the operational control of NPS are subject to this reference manual and DOI policies.

13.5 Letters of Authorization or Memoranda of Understanding/Agreements

Letters of authorization (LOA) may be issued for aircraft and pilots. In situations involving numerous aircraft and pilots (military facilities, state Fish and Game agencies, etc.), a memorandum of understanding (MOU) by OAS may negate the need for an LOA listing individual aircraft and pilots. Contact RAMs for specific DOI and NPS requirements prior to use.

13.5.1 LOAs for Cooperators

LOAs are used for short-term approval of a cooperator (12-18 months).

- These are required for use of cooperators when there is not an MOU in place for the unit or the existing MOU does not cover the mission requested.

- Some MOUs require, at least annually, that the cooperator will provide a list of aircraft and pilots that support the MOU. OAS will issue an LOA based on the information provided.

- All LOAs must be carried onboard the aircraft in lieu of an interagency aircraft or pilot qualifications card.

13.5.2 MOUs/MOAs for Cooperators

MOUs/MOAs are used as long-term documents for formal approved uses of aircraft and pilot(s) minimums, payment and ordering protocols, the terms of the MOUs/MOAs, and how they can be renewed/cancelled.

- Responsibility falls to the Park to ensure that all MOU/MOA terms are met and that missions occur according to the MOUs/MOAs.

- The local/regional aviation management plans and park aviation safety plans must address MOUs/MOAs.

- Unless specified, an MOU/MOA does not have an LOA associated with it unless the terms in 13.5.1 are met.
Chapter 14 – AVIATION SAFETY TRAINING

14.1 Aviation Training Equivalencies

The national aviation manager (NAM), working with the Office of Aviation Services (OAS) Training Division, is authorized to determine Interagency Aviation Training (IAT) equivalencies for training that has been acquired from sources other than IAT. This authorization may be delegated (see OPM-04).

14.2 Required Aviation Safety Training

Superintendents are responsible for assuring that all employees involved in the use or control of aviation resources receive the required level of aviation safety training. Qualifications and currency requirements can be found in the handbooks and interagency guides listed in Chapter 2.5 of this document, and OPM-04, “Aviation User Training Program.”

14.2.1 Line Manager

Regional directors and their deputies, superintendents and their deputies, and those acting in these positions are required to complete M3, Aviation Management Training for Supervisors, or M2, Line Managers Briefing, every three years.

14.2.2 Supervisors

First- and second-level supervisors of those employees who use aircraft to accomplish agency programs or missions (e.g., fire management officers (FMOs), assistant FMOs, chiefs of resources, chief rangers, chiefs of maintenance, SAR coordinators, helitack supervisors, assistant helitack supervisors, and helitack leads), are required to complete, at a minimum, M3, Aviation Management Training for Supervisors or M2, Line Managers Briefing, and A-200, Aviation Mishap Review every three years.

14.2.3 Park Aviation Managers

Shall complete the aviation manager training as outlined in OPM-04.

14.2.4 Air Crew Members

Aviation users who participate in aviation as an aircrew member must complete A-100, Basic Aviation Safety. Additional training requirements can be found in OPM-04.

14.3 Initial and Currency Training Requirements

1. A-100, Basic Aviation Safety.
   • Initial A-100 training must be taken in the classroom unless otherwise approved by the RAM.
   • Recurrent training for these classes is required every three years and may be taken outside a classroom setting.

2. M3, Aviation Management Training for Supervisors, initial and recurrent training may be completed outside a classroom setting.
14.4 Specialty Training

The following NPS aviation requirements are in addition to any training requirements specified by departmental or interagency requirements.

14.4.1 Short-haul, ACETA, Rappel, and STEP

Training provided by sources outside qualified NPS personnel for short-haul, ACETA, rappel and STEP must be requested through RAMs and approved by the national aviation office.

14.4.2 Water Ditching and Survival Training

NPS employees acting as crewmembers in float-equipped aircraft or on over-water flights beyond gliding distance to shore will complete Water Ditching and Survival training every three years. This requirement can also be satisfied by completing an equivalent course, e.g. airline, military, bureau, or interagency provided.

14.4.3 Flight Followers

Must have as a minimum the following training: A-100, A-107, A-109, A-115, A-200, A-204, A-207 (all available online), and an orientation by the park dispatcher/park aviation manager/Chief Ranger, with emphasis on how to initiate a response to aircraft mishaps, overdue and missing aircraft. The Park will identify in the park aviation plan the difference between a flight follower and an aircraft dispatcher (aircraft dispatcher training can be found in the IAT Guide).

14.4.4 Resource Helicopter Manager and Crewmember Task Sheets

Task sheets can be found on the Aviation Management page of InsideNPS or by requesting a copy from the RAM. These task sheets are applicable to non-fire helicopter positions. Fire positions should use the appropriate National Wildfire Coordinating Group (NWCG) taskbook.

Users unfamiliar with these procedures should contact the RAM prior to initiating a task sheet for these positions. Once completed and approved, the task sheet(s) should be retained in the employee’s permanent training records, and the RAM should be provided an email notification of completion. The RAM will determine how records will be maintained in each region. Employees currently qualified in these positions are not required to complete the task sheet.

Resource Helicopter Manager/Crew Training, Qualifications, and Experience Requirements

<table>
<thead>
<tr>
<th>POSITION</th>
<th>PREREQUISITES</th>
<th>TRAINING REQUIREMENTS</th>
<th>CURRENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Helicopter Manager¹</td>
<td>Fully qualified as a resource helicopter crew member.</td>
<td>S-372²</td>
<td>Experience in the position, either on project or incident, every three years, and attendance at RT-372 (every 3 years). Or meet the “A” course requirements listed in the Interagency Aviation Training Guide.</td>
</tr>
<tr>
<td></td>
<td>Successful training assignment(s) under the supervision of a helicopter manager and completion of the Interagency Resource Helicopter Manager Task Sheet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource Helicopter Crew Member</td>
<td>None</td>
<td>S-271²</td>
<td>Experience in the position, either on project or incident, every three years, and completion of A-209, Helicopter Operations (or a RAM-approved course equivalent.)</td>
</tr>
</tbody>
</table>

¹ Position supervises operations involving transport of groups of personnel or cargo from/to unimproved landing sites, external load operations, or other complex special-use project operations. In 2016, personnel who become resource helicopter managers must have proof, e.g. a course certificate, that they have completed Interagency Helicopter Crewmember (S-271), resource helicopter crew member taskbook/sheet and have met the requirements of this position.

² For resource missions, the S-271 and/or S-372 courses should be tailored to the type of operation being conducted. However, the course must be maintained to meet the NWCG course standards and length requirement.
14.4.5 Helicopter Longline Remote Hook Training

NPS fire personnel who will be qualified as helicopter long line remote hook specialists are required to meet the training requirements per NWCG PMS#310-1.

Non-fire personnel involved in external load work must be qualified aircrew members and must complete A-219 training.

14.5 NPS Pilot Training

See Chapter 9 of this reference manual for manned aircraft training and Chapter 17 of this reference manual for unmanned aircraft systems.
Chapter 15 – AVIATION SAFETY AWARDS PROGRAM

15.1 NPS Aviation Awards Program

The NPS National Aviation Awards Program recognizes four areas of excellence in aviation.

15.1.1 Wright Brothers National Aviation Safety Award

- Recognizes an individual or organization who proactively promotes an open-minded attitude in the prevention of aviation mishaps and accidents, works diligently to correct and improve aviation safety deficiencies, and communicates the actions and results to others.

- Open to any individual or organization in the aviation community who shows exemplary qualities in the area of aviation safety.

15.1.2 Tom Clausing (prior GRCA employee) Aviation All Risk (Hazard) Programs Award

- Recognizes an individual or organization who through professional interactions with coworkers, cooperators, and patients while rendering all risk services promotes innovation, professionalism, and advancements in policy, procedures, techniques, and equipment to further aviation all-risk (hazards) programs.

- Open to any individual or organization in the aviation community who while performing their duties as an aviation crewmember, rescuer, care provider, or for the organization as a whole shows exemplary qualities in the area of all risk services.

15.1.3 Excellence in Mentorship Aviation Award

- Recognizes an individual or organization who, through training and mentorship of aviation personnel goes above and beyond normal expectations to assist others in developing their personal or professional aviation growth.

- Open to any individual or organization in the aviation community who exhibits these qualities.

15.1.4 NPS Aviator of the Year

- Recognizes an individual who has performed mission(s) of significant consequence or valor or has actively promoted the advancement or recognition of an NPS aviation program, mission or service.

- Open to all government personnel both within and outside of the NPS, civilians, and contractors.

NOTE: These awards shall be awarded from the NPS Aviation Branch Office. Selection will be made based on the criteria for each individual award by a panel consisting of national office personnel, RAMs and field personnel.

In addition, the NPS recognizes that individuals or organizations may be deserving of an award that is not covered in the NPS Aviation Awards Program or worthy of departmental recognition.

15.2 DOI Aviation Awards Program

NPS will use the DOI Safety Award qualification standards and procedures to recognize aviation safety practices, per 352 DM 4, Aviation Safety Awards Program.

15.2.1 Award for In Flight Action

Recognizes crew members and passengers who materially contribute to the successful recovery from an emergency or minimize or prevent aircraft damage or injury to personnel during an emergency.
15.2.2 Award for Safe Flying

Recognizes pilots who have distinguished themselves by flying accident-free for specific periods of time.

15.2.3 Award for Significant Contribution to Aviation Safety

Recognizes an individual, group, or organization for significant contribution to aviation safety or aircraft accident prevention within DOI. This award is restricted to DOI employees.

15.2.4 Secretary’s Award for Outstanding Contributions to Aviation Safety

Recognizes any individual or group, including other agencies and non-government individuals, for outstanding contribution in aviation safety or aircraft accident prevention.

15.2.5 Airwards

This award is established to provide timely recognition to any individual who has demonstrated positive behavior or actions promoting Interior aviation safety such as correcting a hazardous situation, submitting a good idea, or just making a difference.
Chapter 16 – AIRCRAFT MISHAP PROCEDURES

16.1 Aircraft Mishaps

All aircraft incidents and accidents will be reported via SAFECOM. There is a range of aircraft mishap definitions.

16.1.1 Accidents

Accidents involve death or serious injury to an individual or substantial damage to the aircraft. All aviation accidents will be reported immediately to the national aviation manager (NAM), NPS regional director (RD), and the Office of Aviation Services (OAS) in accordance with 352 DM 3, Aircraft Mishap Notification, Investigation and Reporting and NPS policy.

16.1.2 Incidents with Potential (IWP)

IWPs are those in which the circumstances indicate significant potential for substantial damage or serious injury. Final classification will be determined by the OAS chief, Aviation Safety, Program Evaluations and Training.

16.1.3 Aircraft Incidents

Aircraft incidents are occurrences that may affect the safety of operations.

16.1.4 Accident/Incident NPS Review Process

The NPS RD will determine within 14 days whether an internal NPS review of an aviation mishap is necessary per Director’s Order-50B.

16.2 Mishap Notification Procedures

16.2.1 Initial Notification

In the event of an aircraft accident or an incident with potential, 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, NPS RAM, and the OAS 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.

16.2.2 NPS Internal Aviation Notification and Routing Procedures

1. The national aviation manager (NAM) or designee is the primary focal point of contact within the NPS, between OAS and the NPS, and with other bureaus for notification of significant aviation-related events and policy-related matters.

   NOTE: Nothing in this procedure should be interpreted to delay 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.

2. For accidents, incidents with potential, serious safety concerns, aviation events of significant policy impact, or aviation events or actions with the potential to cause widespread interest both inside and outside the NPS the NAM will contact the chief, Division of Fire and Aviation Management. The chief will in turn notify the associate director, Visitor and Resource Protection, who will notify the director, NPS. In the event the RAM has not been notified, the NAM will contact the RAM who serves as primary focal...
point of contact. The RAM will determine and ensure that the appropriate personnel are notified.

3. Concurrently the NAM will contact the appropriate person in DOI/OAS. For accidents and incidents with potential this will usually be the OAS chief, Aviation Safety, Program Evaluations and Training or an appointed designee.

16.3 Aviation Mishap Response Plan

Each unit will develop an “Aviation Mishap Response Plan” that will 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 in the sample Interagency Aviation Mishap Response Guide and Checklist (see Appendix 1, Interagency Aviation Mishap Response Guide and Checklist).

1. Take necessary action to rescue survivors.
2. Secure the site and surrounding area to protect the wreckage from further damage and avoid injury to persons nearby.
3. 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 or NPS/NTSB public information official.
4. Secure all NPS records pertaining to the operation, flight, maintenance, crewmembers, etc.
5. 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 the RAM.

16.4 Aircraft Mishap Investigations

All DOI accidents are the domain of the NTSB whether they participate in the field investigation or not. NTSB may designate the OAS as a party to the investigation. In this case, the OAS is working for the NTSB and is bound by rules 49 C.F.R.§§ 830-831. NPS will offer a qualified individual to assist with the investigating agency and may also independently review the mishap internally. The NPS RD, in conjunction with the NAM, will assign the appropriate individuals.

16.5 Aircraft Mishap Review Board

An Aircraft Mishap Review Board (AMRB) is responsible for developing mishap prevention recommendation 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.

16.5.1 DOI Aircraft Mishap Review Board, (AMRB) NPS Attendance, Report Routing and Follow-up Actions

Per 350 DM 1, Appendix 4 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.

1. NPS policy requires that whenever an AMRB that involves a NPS employee is convened by the director of OAS, in response to an aircraft mishap, 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 NPS participant on the AMRB.

2. Upon receipt of the AMRB report and final recommendations from the director of OAS, the NAM will route the report to senior NPS management through the chief, Division of Fire and Aviation who will in turn route to the AD-VRP and director. The NAM will concurrently route copies to the RAM in the affected region for distribution to the RD and the superintendent of the involved park.

3. Within 30 days of the issuance of an AMRB report, at the discretion of the RD of the region involved, a Board of Review (BOR) may be convened that will include the regional senior line officer present at the AMRB, RAM, park superintendent and NPS flight, air or ground crew involved in the mishap. The BOR will task the responsible parties with responding to and/or implementing the AMRB recommendations in addition to any the BOR may develop.
16.6 Aircraft Mishap Documentation

16.6.1 Pilot/Operator Aircraft Accident Report

Upon request of an OAS safety investigator, the aircraft operator will complete NTSB Form-6120.1/2, “Pilot/Operator Aircraft Accident Report.” In the case of DOI-owned/bureau-operated aircraft, a copy of the report must be sent to the OAS safety manager within ten days following an aircraft accident or when requested by NTSB following any of the occurrences listed in 16.2 above.

16.6.2 Aviation Mishap Information System

The aircraft operator, flight manager, or any other person noting an aviation hazard, maintenance deficiency, airspace conflict, or incident should complete a SAFECOM Report electronically.

NPS 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.</td>
<td>Fill out completely and accurately. Report only the facts. Narratives should be brief and concise.</td>
</tr>
<tr>
<td>Park Aviation Manager</td>
<td>Submission</td>
<td>If only a hardcopy has been completed, will send that copy 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, modified and completed SAFECOMs identifying their NPS field office as having operational control.</td>
<td>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. Includes job title (do not enter personal information).</td>
<td>Must treat all corrective action descriptions as if they were public.</td>
</tr>
<tr>
<td>POSITION</td>
<td>AUTHORITY</td>
<td>RESPONSIBILITIES</td>
<td>CRITICAL NOTES</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Regional Aviation Manager</td>
<td>E-Mail Notification</td>
<td>Receives e-mail notification of all initial, corrective action, modified, and completed SAFECOMs identifying NPS operational control within their state.</td>
<td>Coordinate with PAM.</td>
</tr>
<tr>
<td>Corrective Actions</td>
<td></td>
<td>Reviews all information. May take and document additional corrective actions.</td>
<td>Coordinate with PAM.</td>
</tr>
<tr>
<td>Modify Actions</td>
<td></td>
<td>Authority to sanitize references in the &quot;Narrative&quot; block to parties involved, including aircraft N numbers, company names, and names of individuals except for the submitter's name.</td>
<td>Coordinate with PAM. Verify and amend all info for accuracy.</td>
</tr>
<tr>
<td>Operational Control</td>
<td></td>
<td>Makes final determination of the agency, region, and park unit that have operational control.</td>
<td>Determines who will receive e-mail notification.</td>
</tr>
<tr>
<td>Category</td>
<td></td>
<td>Selects the appropriate category to classify the SAFECOM.</td>
<td>Multiple categories possible.</td>
</tr>
<tr>
<td>Make Public</td>
<td></td>
<td>Copies original text into the public text area for both the narrative and corrective action fields. Makes the SAFECOM &quot;public&quot; (if overly sensitive, consult with NAO before making public).</td>
<td>Ensures all public text is sanitized in narrative and corrective action fields prior to making public.</td>
</tr>
<tr>
<td>Make Public</td>
<td></td>
<td>Has the authority to sanitize information and make the SAFECOM &quot;public&quot; (if not already done at the state level). Coordinates with OAS.</td>
<td>Ensures all public text is sanitized in narrative and corrective action fields prior to making public.</td>
</tr>
<tr>
<td>POSITION</td>
<td>AUTHORITY</td>
<td>RESPONSIBILITIES</td>
<td>CRITICAL NOTES</td>
</tr>
<tr>
<td>----------</td>
<td>-----------</td>
<td>------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>National Aviation Manager or National Aviation Safety Manager</td>
<td>E-Mail Notification</td>
<td>Receives e-mail notification of all initial, corrective action, modified, and completed SAFECOMs nationwide that identify NPS operational control.</td>
<td>Coordinate with RAM.</td>
</tr>
<tr>
<td>Corrective Actions</td>
<td>Takes additional corrective actions, if necessary, and documents actions 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 RAM's comments and the original narrative).</td>
<td>Coordinate with RAM.</td>
<td></td>
</tr>
<tr>
<td>Make Public</td>
<td>Has authority to sanitize information and make the SAFECOM &quot;public&quot; (if not already done at the regional level). Coordinates with OAS.</td>
<td>Ensures all public text is sanitized in narrative and corrective action fields prior to making public.</td>
<td></td>
</tr>
<tr>
<td>Completion</td>
<td>Delegates authority to the RAMs to make the SAFECOM &quot;complete.&quot;</td>
<td>Ensures all public text is sanitized in narrative and corrective action fields prior to making public.</td>
<td></td>
</tr>
<tr>
<td>Distribution</td>
<td>Distributes all &quot;public&quot; NPS SAFECOMs to NPS RAMs and other agencies.</td>
<td>Coordinates with OAS.</td>
<td></td>
</tr>
<tr>
<td>Designates Users</td>
<td>Authority to identify all NPS users and their appropriate permission levels. Must notify OAS of additional users/changes/updates.</td>
<td>Coordinates with OAS.</td>
<td></td>
</tr>
<tr>
<td>Out of Agency</td>
<td>Authorized to review other agency &quot;public&quot; SAFECOMs. Read Only!</td>
<td>Coordinates with OAS.</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 17 – UNMANNED AIRCRAFT SYSTEMS

17.1 General

All unmanned aircraft systems (UAS) operations are considered aircraft operations and are subject to the policies set forth in this reference manual and this chapter. While their methods of control and airspace utilization procedures are different than manned aircraft, the overall responsibility for management within DOI rests with the Office of Aviation Services (OAS). Ownership of all aircraft, including UAS, is a function and responsibility of OAS.

NOTE:

• Personally owned UAS or RC model aircraft may not be used by National Park Service employees in the conduct of government business.

• Cooperators, pilot associations and volunteer aviation groups or individuals may offer to fly unmanned aviation missions (i.e. aerial surveys, fire reconnaissance, infrared missions, etc.) at no charge to the IMTs. Although these offers seem very attractive, NPS cannot accept these services unless they meet FAA, USFS and/or DOI policy.

17.1.1 NPS Management Policies

Policy Memorandum 14-05 Unmanned Aircraft – Interim Policy was issued by the NPS director in June 2014. This memo specified:

• Specific closure language to be added to park compendiums about visitor use of UAS.

• Continuation of previously authorized model aircraft activities under special use permits or compendium provisions.

• Administrative use of UAS and activities conducted under scientific research and collecting permits. (Follow the procedures outlined in Appendix 7, NPS Approval Template and Guidance for the Use of Unmanned Aircraft Systems (UAS).)

NOTE: Exception for Emergencies. In an emergency where there is an imminent threat to health and safety of persons, property, or natural, cultural, or historic resources, the approving official may authorize the immediate use of UAS, to be followed by written approval through the process described in Appendix 7, NPS Approval Template and Guidance for the Use of Unmanned Aircraft Systems (UAS).

• For activities conducted under special use permits, follow the procedures outlined in Exhibit B of the interim policy.
17.1.2 Minimizing Effects to Natural and Cultural Resources and Visitor Experience

With safety of flight the first priority, certain operator techniques and planning can reduce the noise impacts over parks. Flight operations over and adjacent to the sensitive areas must be avoided whenever possible. Frequency of flight operations must be minimized to the extent possible. Power settings, ascents, and descents will consider noise impacts. The NPS encourages the acquisition and use of UAS with a low-noise-footprint mapping technology for all operations.

17.2 Unmanned Aircraft Systems

UAS are defined as aircraft regardless of size or weight (14 C.F.R. § 1.1 Aircraft means a device that is used or intended to be used for flight in the air.) UAS, commonly referred to as drones, is the term used by the FAA, however the International Civil Aviation Organization has adopted the term “Remotely Piloted Aerial Vehicles” which may be used in the future.

17.3 Aviation Directives

Presidential Memorandum, February 15, 2015, Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems

- Data not essential to the mission of the NPS should be destroyed within 180 days.
- UAS will only be used to collect data consistent with the authorized mission of the NPS. Any data-sharing agreements or policies, data-use policies, and record-management policies applicable to UAS shall conform to applicable laws, regulations, and policies.
- UAS-collected information can only be shared outside of the NPS if it helps to meet the authorized mission of the NPS.
- It is prohibited to use UAS to collect, use, retain, or disseminate data in any manner that would violate the First Amendment or in any manner that would discriminate against persons based upon their ethnicity, race, gender, national origin, religion, sexual orientation, or gender identity.
- Program evaluations, per Chapter 1.6 of this reference manual, will include review of park unit’s compliance with UAS policies and regulations.

OMB Circulars: The acquisition and long-term programmatic budgeting for UAS can be found in Chapter 2.11 of this reference manual.

Federal Aviation Regulations (FARs): FARs related to UAS operations are contained in 14 C.F.R. 1.1 and can be found on the FAA’s Unmanned Aircraft Systems website.

Departmental Policy: Applicable DOI policy can be found in OPM-11, “DOI Use of Unmanned Aircraft Systems (UAS).”

NPS Requirement: The initiation of an NPS fleet UAS program requires advanced approval per the enhancement application as described in Chapter 2.12, 4.1 and 10.26. The application is found in Appendix 5, Enhancement Application.

17.4 Records and Reports

All NPS fleet and commercial UAS operations use must be reported in accordance with Chapter 3 of this reference manual. Regional aviation managers (RAMs) will compile a report annually for fleet, commercial, and cooperator UAS missions to be maintained for five years.

17.5 Fleet Aircraft

1. Acquisition: The process for acquiring UAS is outlined in Chapter 4.
2. Modification: UAS or their sensor packages may not be modified without the concurrence of the RAM. Final approval requires completion of OAS-74, Aircraft Modification Request, and authorization from chief, OAS, Technical Services Division. Parks should be aware that approved additions may become a
permanent part of the UAS. Parks are advised not to consider any UAS or sensor packages as part of the park’s property inventory regardless of how purchased or funded.

3. Marking: UAS must be marked in accordance with FAA/DOI requirements.

4. Disposition. OAS is responsible for disposing of UAS. Parks must coordinate with the national and/or regional aviation staff for possible reassignment to another park or transfer of the aircraft reserve funds.

5. Funding for acquisition/replacement: The procedures for acquisition and/or replacement of manned aircraft apply to UAS. This includes acquisition and monthly and hourly rates.

6. Maintenance: Maintenance will be in accordance with the approved procedures provided by OAS Technical Services. NPS UAS operators must contact OAS Technical Services to arrange for in-house or contract repair of damaged, inoperable UAS.

7. Inspection programs: UAS will be inspected annually or as directed by OAS Technical Services. Such inspections will be documented on OAS-36U. The inspector will use available military technical orders, FAA airworthiness guidance, and manufacturer’s developed checklists, as available.

8. Returning an aircraft to service: Returning a UAS to service post-accident will require coordination with OAS Technical Services and a UAS inspector for the appropriate procedure.

17.6 Operators and Observers

Due to the many considerations discussed in Chapter 9, managers must carefully consider position alternatives when selecting and training employees who will have UAS operator responsibilities. In making the decision to train or fill a position that has UAS operator duties, managers will consult with the NPS RAM, NAM and human resource specialists. All personnel in operator-training programs will be approved in writing by the RAM and National Aviation Office (NAO). Depending on the type of UAS and mission, additional manned aircraft FAA ratings and currency may apply.

NOTE: Failure to meet flight experience and training requirements will result in withdrawal of UAS operator authorization.

17.6.1 UAS Operator

The person who has completed a DOI-approved UAS ground and flight training program, has passed a DOI flight evaluation and been issued a UAS Operator authorization card for the particular UAS to be flown. Consistent with manned aircraft operations qualification and authorization to fly one UAS does not constitute authorization to fly any make and model of UAS on a NPS mission. The UAS operator:

1. Has final authority and responsibility for the operation and safety of the flight, and
2. Has been designated as operator-in-command before or during the flight, and
3. Holds the appropriate authorizations rating, if appropriate, for the conduct of the flight.
4. Duties are stated in employee’s position description.

17.6.2 UAS Observer

A UAS observer must meet training and medical certificate requirements, if any, per OPM-11.

17.6.3 Medical Certificates

An FAA medical certificate may be required for UAS operations (refer to OPM-11 for applicability).

17.6.4 UAS Flight Evaluations

UAS operators must pass an initial qualification evaluation administered by DOI-OAS. The evaluation will include an oral evaluation of subjects covered in the OAS UAS ground school and a minimum of one evaluation flight. Annual DOI-administered flight evaluations are required per 351 DM 1.

NOTE: Training and flight evaluations at non-DOI courses does not automatically grant DOI UAS flight authority.
17.6.5 Operator Suspension/Revocation

The process for manned aircraft applies to UAS operators. UAS operators have the option to request a pilot assessment process (see Appendix 6, Pilot Assessment Process and Chapter 9).

17.6.6 Technical Oversight of NPS Operators

The technical oversight of NPS operators rests with the RAM (see Chapter 9.2 for further direction).

17.7 Flight Operations

All aircraft under operational control of the NPS will comply with applicable FARs, DOI aviation policy, DOI handbooks, and interagency guides as listed in Chapter 2.5.

- **Aviation management plan (AMP).** Each park unit or program area that uses UAS will determine, with concurrence of the RAM, the level of operation, i.e., Level 1-3 (see the definition of Aviation Parks in this reference manual). The level of operation will determine whether a park AMP is required (see Appendix 2, Aviation Management Plan as an example).

- **UAS project aviation safety plans (PASPs).** Mission planning will be completed for all flights as identified in the AMP. The park aviation manager, project manager, or operator-in-command is responsible for completing mission planning (see Appendix 3, Project Aviation Safety Plan as an example).

- **Risk assessment.** Aviation mission planning for all flights will include a risk assessment (see Chapter 10.24 for examples of acceptable risk assessment methods). The UAS PASP shall contain applicable portion(s) of the “Interagency Mishap Response Plan” or other local standard operating procedures that apply in the event of an UAS mishap or emergency unless incorporated into the AMP (see Appendix 1, Interagency Aviation Mishap Response Guide and Checklist).

- **Line of sight operations.** Per OPM-11, UAS operations will be conducted within visual line of sight (LOS) of the operator or trained observer. UAS operations will follow the same right-of-way rules as any manned aircraft and shall give way to manned aircraft at all times. Additional procedures will apply for operations beyond LOS.

- **UAS preflight/post flight checks.** These will be conducted in accordance with the manufacturer’s operator’s operating handbooks and manuals.

- **DOI-approved aircraft and operators.** Consistent with manned-aircraft operations, for UAS operations, NPS employees must use only UAS aircraft and UAS operators approved or otherwise authorized by DOI OAS.

- **DOI UAS operator qualification card.** This must be carried by operators and mission operators and physically inspected by flight managers prior to each mission. If the card is unavailable, the operator’s authorization to fly the mission must be verified prior to the flight. Approval of cooperator flight crewmembers may be by letter or agreement process (see Chapter 13.5, Letters of Authorization or Memoranda of Understanding/Agreements).

- **Crew duty time limitation.** All activities must be conducted in accordance with 351 DM 3, and/or the procurement document they are working under.

- **Instrument flight rules (beyond line of sight).** (Follow guidance posted in OPM-11.)

- **Night flying.** (Follow guidance posted in OPM-11.)

- **Aerial hazard briefing.** This will occur before each mission; an aerial hazard map should be used if available.

- **Emergency UAS operations.** If an approved UAS and operator are available to a park during a life-threatening emergency, the superintendent may request assistance from the NAO for an emergency Certificate of Authorization (COA).
1. The NAO will coordinate with OAS to request an emergency COA from the FAA.
2. The request must be accompanied with a justification that no other aircraft exist for the mission and that there is imminent potential for loss of life, property, or critical infrastructure, or it is critical for the safety of personnel.

17.8 Contract, Rental, and Charter Aircraft

- Billing/payments: Processes are being developed; contact RAMs for more information.
- Procurement of flight services from other DOI bureaus: For fleet acquired UAS services, the NPS will be responsible for payment of hourly flight rate costs.

17.9 Cooperator Aircraft

NPS employees who use cooperators to operate on NPS lands and waters must follow the internal approval process as outlined in Director's Memo 14-05; contact RAMs for additional information. MOUs at the departmental level may apply with further caveats.

17.10 Aviation Safety Training

Line managers, supervisors, and park aviation managers are required to meet the training requirements of Chapter 14 of this reference manual for UAS operations that occur in their park.

NPS operator training: NPS operators shall meet the training requirements of OPM-11. For attendance at non-DOI training courses for qualification as a UAS operator, personnel MUST have prior approval from OAS.

17.11 Aircraft Mishap Procedures

See Chapter 16 and OPM-11.
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