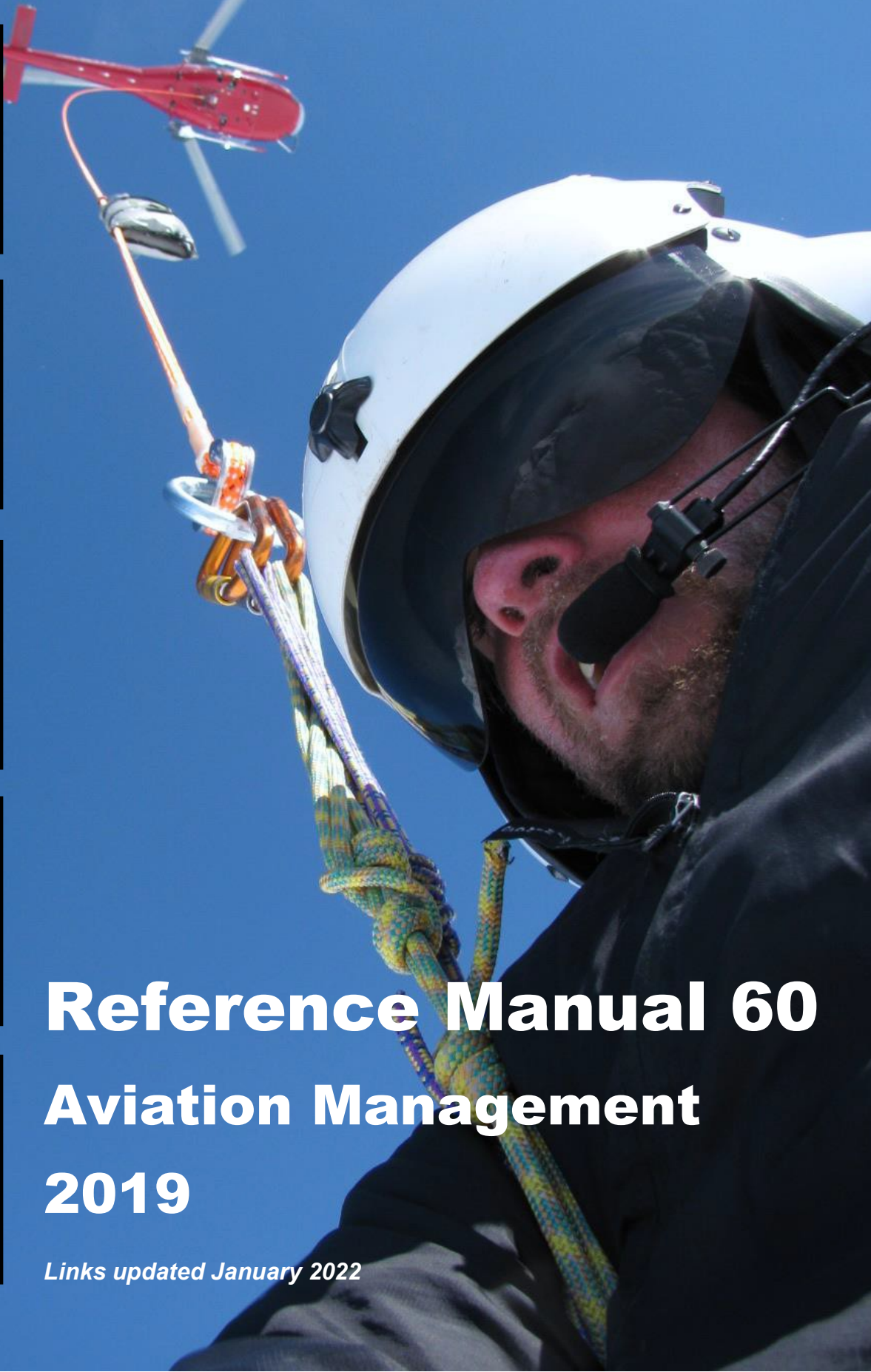


Aviation

National Park Service
U.S. Department of the Interior
Fire and Aviation Management



Reference Manual 60 Aviation Management 2019

Links updated January 2022

Reference Manual 60

Aviation Management

Branch of Aviation Management
Boise, Idaho

National Park Service

U.S. Department of the Interior
Washington, DC

ACRONYMS	9
DEFINITIONS	11
CHAPTER 1 – AVIATION MANAGEMENT OVERVIEW	12
1.1 Background and Purpose	12
1.2 NPS Management Policies	12
1.3 NPS Aviation Strategic Plan	13
1.4 Environmental Concerns	14
1.5 Organizational Responsibilities	14
1.6 Evaluation and Monitoring	20
1.7 Management of Aviation Mishaps	21
CHAPTER 2 – AVIATION DIRECTIVES	22
2.1 General	22
2.2 Office of Management and Budget Circulars	22
2.3 Federal Aviation Regulations	22
2.4 Departmental Manual	22
2.5 DOI Operational Procedures Memoranda	22
2.6 DOI Handbooks/Interagency Guides/NPS Operational Plans	22
2.7 DOI, Interagency and NPS Alerts & Bulletins	23
2.8 Enhancements, Policy Waivers and Exceptions	23
CHAPTER 3 – RECORDS AND REPORTS	25
3.1 Aircraft Use Reports	25
3.2 Use of Non-Federal Public Aircraft	25
3.3 Aviation Training Records	25
3.4 DO-11D: Records and Electronic Information Management	26

CHAPTER 4 – FLEET AIRCRAFT ACQUISITION, MARKING,	27
DISPOSITION AND FUNDING	27
4.1 Acquisition	27
4.2 Marking	27
4.3 Disposition	27
4.4 Funding	27
CHAPTER 5 – MANNED AIRCRAFT EQUIPMENT	29
5.1 General	29
5.2 Additions/Alterations	29
5.3 Wire Strike Protection Systems	29
5.4 Emergency Locator Transmitter	29
5.5 Satellite Based Tracking Systems	30
CHAPTER 6 – PERSONAL PROTECTIVE EQUIPMENT/AVIATION LIFE SUPPORT EQUIPMENT	31
6.1 Personal Protective Equipment	31
6.2 Personal Protective Equipment Waiver Authority	31
6.2 First Aid and Survival Kits	31
6.4 Personal Flotation Device (PFDs)	31
6.5 Personal Locator Beacon	31
6.6 Flight Helmets	32
CHAPTER 7 – MANNED AIRCRAFT MAINTENANCE AND INSPECTION	33
7.1 Maintenance	33
7.2 Inspection Programs	33
7.3 Returning an Aircraft to Service	33
CHAPTER 8 – AIRCRAFT SECURITY	34

8.1	General	34
8.2	Fuel	34
8.3	Facility Security	34
8.4	Aircraft Security	34

CHAPTER 9 – PILOT FLIGHT AUTHORITY, MANNED AIRCRAFT OPERATIONS 35

9.1	General	35
9.2	NPS Flight Authority Authorization	35
9.3	NPS GS-2181 Pilots	36
9.4	NPS Dual Function Pilots	36
9.5	Incidental Pilots	37
9.6	Auxiliary Pilots	37
9.7	Pilot Training	37
9.8	Developmental Pilot Program	38
9.9	Medical Certificates	39
9.10	Request for NPS Fleet Pilot Approval and Flight Evaluations	39
9.11	NPS Instructor Pilot	39
9.12	NPS Pilot Review Board (PRB)	40
9.13	Pilot Suspension/Revocation	40

CHAPTER 10 – FLIGHT OPERATIONS 41

10.1	General	41
10.2	DOI-Approved Aircraft and Pilots	42
10.3	Noise Impact Mitigation	42
10.4	Aviation Management Plan	42
10.5	Project Aviation Safety Plan	42
10.6	Flight Plan and Flight Following	43
10.7	Passenger Manifest	43

10.8	Aircraft Preflight/Post Flight	43
10.9	Checklists	44
10.10	Interagency Aircraft Data Card	44
10.11	Interagency Pilot Qualification Card	44
10.12	Passenger Briefing	44
10.13	Crew Duty Time Limitation	44
10.14	Instrument Flight Rules	44
10.15	Night Flying	44
10.16	Transport of Hazardous Materials by Aircraft	44
10.17	Aviation Fuel Handling	44
10.18	Transport of Cargo/Equipment	45
10.19	Load Calculations/Weight and Balance	45
10.20	Environmental Considerations	45
10.21	Aviation Mishap Response Plan	45
10.22	Lap Belt/Shoulder Harness	45
10.23	Special Use Flight Operations	46
10.24	Law Enforcement Operations	47
10.25	Flights Outside the US, Trust Territories, and Possessions	48
10.26	Emergency Situations	48
10.27	Employee Prerogative	48
CHAPTER 11 – UNMANNED AIRCRAFT SYSTEMS		49
11.1	General	49
11.2	Aviation Directives	50
11.3	Records and Reports	51
11.4	Fleet Programs	51
11.5	Remote Pilot In Command (RPIC) and Visual Observers (VO)	52

11.6	Flight Operations	53
11.7	Contract, Rental and Charter Aircraft	54
11.8	Cooperator Aircraft	54
11.9	Aviation Training	54
11.10	Aircraft Mishap Procedures	54
CHAPTER 12 – USE OF GOVERNMENT AIRCRAFT		55
12.1	Administrative Travel Justification and Documentation	55
12.2	OMB Circular A-126	55
12.3	Requests for Solicitor Approval	55
12.4	Space Available Travel	56
CHAPTER 13 – CONTRACT, RENTAL AND CHARTER AIRCRAFT		57
13.1	General	57
13.2	Procurement	57
13.3	FBMS, Interagency and Cross Servicing Agreements	57
13.4	Procurement of Flight Services from DOI Bureaus and the USFS	58
13.5	Procurement of Flight Services from Non-federal Public Agencies	58
13.6	Contract Services	58
13.7	Emergency Aircraft Procurement	58
CHAPTER 14 – COOPERATOR AIRCRAFT		60
14.1	General	60
14.2	Use of Military Aircraft	60
14.3	Affiliate/Volunteer Aircraft	61
14.4	Cooperative Agreements	61
14.5	Letters of Authorization or Memoranda of Understanding/Agreements	61
CHAPTER 15 – AVIATION TRAINING		62

15.1	Aviation Training Equivalencies	62
15.2	Required Aviation Training	62
15.2	Specialty Training	63
15.4	NPS Pilot Training	64
CHAPTER 16 – AVIATION AWARDS PROGRAM		65
16.1	NPS Aviation Awards Program	65
16.2	DOI Aviation Awards Program	66
CHAPTER 17 – AIRCRAFT MISHAP PROCEDURES		67
17.1	Aircraft Mishaps	67
17.2	Mishap Notification Procedures	67
17.3	Aviation Mishap Response Plan	68
17.4	Aircraft Mishap Investigations	68
17.5	Aircraft Mishap Review Board	68
17.6	Aircraft Mishap Documentation	69

Appendix 1 – Interagency Aviation Mishap Response Guide and Checklist

Appendix 2 – Park Aviation Management Plan

Appendix 3 – Project Aviation Safety Plan

Appendix 4 – Flight Request Form

Appendix 5 – Enhancement Application

Appendix 6 –NPS Pilot Review Board

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

[Link to appendices on NPS Aviation website](#)

ACRONYMS

AAPRAS- Annual Aviation Program Report and Assurance Statement

ABCS – Aviation Business Case Study

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

AMIS - Aviation Mishap Information System

AMP - Aviation Management Plan

AMRB - Aircraft Mishap Review Board

AMS - Aviation Management System

ARA - Aircraft Rental Agreement

CFI - Certified Flight Instructor

CFR - Code of Federal Regulations

CWN - Call When Needed

DFAM - Division of Fire and Aviation Management

DM - Departmental Manual

DOI - Department of the Interior

EAB - Executive Aviation Board

EAC - Executive Aviation Committee

EAS - Executive Aviation Subcommittee

ELT - Electronic Locator Transmitter

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

NAM – National Aviation Manage

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
OAS - Office of Aviation Services
OMB - Office of Management and Budget
OPM - Operational Procedures Memorandum
PAM - Park Aviation Manager
PFD - Personal Flotation Device
PIC - Pilot-in-Command
PPE - Personal Protective Equipment
PRB - Pilot Review Board
RAM - Regional Aviation Manager
SAR - Search and Rescue
SOL - Office of the Solicitor
STEP - Single Skid, Toe-In, Hover Exit/Entry Procedure
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, gliders and unmanned aircraft systems (UAS).

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. Procedures 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 (NAM) 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 National Park Service (NPS).

Operational Control. This means the exercise of authority over initiating, conducting or terminating a flight. OPM-35, "Identification of End Product/Service and Flight Service Procurement" provides additional guidance, however only the National Transportation Safety Board has the final authority to determine who had operational control of an aviation operation.

Quiet Technology. For the NPS, this refers to aircraft that are quieter on a per flight basis to technological improvements that result in a "quieter" aircraft as opposed to the definition used by Federal Aviation Administration (FAA) which calculates quiet technology based on the overall noise level of the aircraft divided by the number of passenger seats.

Chapter 1 – AVIATION MANAGEMENT OVERVIEW

- 1.1 Background and Purpose
- 1.2 NPS Management Policies
- 1.3 NPS Aviation Strategic Plan
- 1.4 Environmental Concerns
- 1.5 Organizational Responsibilities
- 1.6 Evaluation and Monitoring
- 1.7 Management of Aviation Mishaps

1.1 Background and Purpose

National Park Service Reference Manual-60 (RM-60, 2016) is superseded and replaced by this Reference Manual-60, Aviation Management 2019 which is intended to provide 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](#). The NPS Management Policies -, 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 aviation policies are posted at the [DOI - Office of Aviation Services Library page](#) as well as 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.

Because the NPS is responsible for flight crew members, aircrew members, and passengers on board aircraft 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 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.

DEVIATIONS FROM POLICY: NPS personnel are authorized to deviate from this policy manual for emergencies when there is a clear and imminent threat to life and property, per 350 DM 1.3B. All deviations must be reported as expeditiously as possible to the regional and national aviation offices via phone or email. Deviations from policy require a DOI SAFECOM to be filed based on the nature of the incident. For further guidance see chapter 12.

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 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 Aviation Strategic Plan

To ensure safe and efficient aviation operations across the NPS, the Aviation Branch has created the following philosophy based on the FAA "Notice to Airmen" acronym "NOTAM" for aviation users to become familiar with the guiding philosophy of the national program. This NOTAM can be found within the 5 year NPS [Aviation Strategic Plan](#).

1. **N**ever stop striving to achieve the highest standards of aviation safety and professionalism for NPS employees and cooperators engaged in aviation activities.
2. **O**ffer 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 service-wide.
3. **T**raining will promote aviation safety while being relevant and readily available to meet policy requirements and field operation needs.
4. **A**ssurance of aviation policy implementation and accountability are essential to the success of the aviation program.
5. **M**anage aviation risks effectively so that they are minimized to the greatest extent possible.

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 (P.L. 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 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 department-wide functions related to aircraft services and facilities and exists to support DOI bureau aviation needs.

The **Executive Aviation Committee (EAC)** incorporates a senior line manager at the associate director level from each DOI 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. 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 NPS leadership 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.

1. Functions as the branch representative to the DFAM.
2. The NAM or designee is the primary point of contact within the NPS, OAS, and with other bureaus for notification of significant aviation-related events and policy-related matters.
3. Serves as NPS representative to the DOI Executive Aviation Subcommittee which reports to the Executive Aviation Committee
4. Serves as NPS representative to the National Interagency Aviation Council (NIAC) which reports to National Wildfire Coordinating Group (NWCG).
5. Provides national direction to the aviation safety program.
6. Coordinates requests for new aviation program approvals, e.g. single skid, toe in, and hover exit/entry procedures (STEP), short-haul, rappel, waiver requests, and exceptions to policy. Coordinates and recommends approval requests with the AD-VRP.
7. Disseminates aviation-related policy and technical information.
8. Coordinates with OAS for NPS aviation program evaluations.
9. Assigns representatives to accident review boards; actively works with other program managers to ensure operational aviation issues are addressed in program and policy decisions.
10. Coordinates fleet aircraft acquisition, replacement, and disposal to support agency programs.
11. Responsible for budget submissions, tracking, and branch expenditures.
12. Assigns a liaison to accident investigation teams.
13. The NAM is responsible for Regional Aviation Program Reviews.
14. Convenes NPS Pilot Review Board (PRB).
15. Issues and compiles the results of the *Annual Aviation Program Report and Assurance Statement (AAPRAS)* for submission to the AD-VRP.
16. Issues Letters of Authorizations and rescinds, as necessary. These letters are NPS pilot *Flight Authority* and *Instructor Pilot Authority*. Requests issuance, suspension or revocation of DOI pilot qualification cards from OAS regional director

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.
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 the 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 hoist, 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 and EAS.
2. Serves as NPS representative on DOI specific projects to include law enforcement short-haul (LESH), hoist, ACETA, search and rescue (SAR) short-haul, rappel, and aviation riskmanagement.
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 regional aviation managers (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 Unmanned Aircraft Systems (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. Conducts site visits and provides coordination between the national office 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 Developmental Pilot Program contained in DOI 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 manned and unmanned 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 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.

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

1. Ensure risk assessments are performed for all aviation activities.
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.
9. Approves waivers to a limited number of DOI aviation policy such as ALSE.

Regional Aviation Managers (RAMs) provide technical expertise and aviation safety oversight of the parks in their geographic area. Each region has a designated RAM. Regions may partner to share a RAM.

1. Observe regional aviation activities and provide liaison with the NAM, NASM, HOS, fleet pilot, aircraft & UAS specialist, and other agencies as appropriate.
2. Serve as NPS representative to aviation committees such as NAAG.
3. Provide assistance to aviation users 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. May act as the NPS representative on interagency committees and to OAS.
14. Ensure timely completion of the AAPRAS by Level 1, 2 and as appropriate, 3 parks. Compiles for submission to the NAM.
15. When requested, assist parks in preparing and reviewing project aviation safety plans (PASP).
16. Conducts aviation base and operational reviews at parks.

Superintendents/park managers will ensure that 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.
6. Ensure completion of the AAPRAS.
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.
9. Ensure 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 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 Aviation Manager (PAM)*** is responsible for providing operational oversight to all flight operations conducted in the park unit. Level 1 aviation parks (See Definitions, page xi) with complex aviation programs are required to have a non-collateral duty PAM. Level 2 aviation parks shall assign a PAM who may have collateral duties.

* (Some parks or regions may use different terminology than PAM to indicate an aviation manager who oversees more than one unit e.g. hub manager, unit aviation officer, interagency aviation officer. NPS Units with adjacent DOI or USFS managed lands may benefit by creating a shared unit aviation manager who can provide safety assurance, safety promotion, risk management and policy guidance. For more information, visit the DOI and US Forest Service (USFS) Service First webpage.)

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

1. Responsible for writing and implementing the park aviation management plan. See [Appendix 2, Park Aviation Management Plan](#) for an example of topics that may be included in the plan.
2. Reviews PASPs, coordinates the planning and completion of project plans and risk assessments, see [Appendix 3, Project Aviation Safety Plan](#) for an example of topics that may be included in the plan)
3. Ensures that aircraft and pilots for both manned and unmanned missions 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."

6. Where applicable, validates fleet aircraft operations per [OPM-22, "Manned Aircraft, Pilot-Training Program,"](#) and [OPM-11, "DOI Use of Unmanned Aircraft Systems \(UAS\)."](#)
7. Ensures that a qualified fixed-wing or helicopter manager is designated for all 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 **pilot-in-command (PIC)** is responsible for conducting aviation operations in accordance with applicable policy and directives or a contract, maintaining proficiency and currency appropriate to the missions performed, overall safety of the aircraft and personnel, has sole authority for operations of the aircraft, ensures airworthiness and operates aircraft for maximum safety and efficiency, provides aircraft briefing, reports unsafe operations, conditions, and situations using the AMIS system, when required complies with ALSE, and completes payment documents.

Project aviation managers, in rare cases, NPS uses this position (per OPM-04) to plan and manage aviation projects. However, in most instances, a **project manager** plans and manages projects that use aircraft and works with a qualified aviation manager to develop project plans, risk assessments, and assures a fixed-wing or helicopter manager is assigned to the project.

Helicopter flight manager position per OPM-04, *Aviation User Training*, is not recognized by the NPS.

An all-hazard/resource helicopter manager shall be assigned to all non-fire NPS helicopter flights. The manager is responsible for coordinating, scheduling, and supervising all-hazard and resource helicopter operations. The manager 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. All-hazard/resource helicopter managers must meet the requirements of the training and currency listed in Chapter 15. An approved PIC may load and unload passengers and cargo when rotors are not turning.

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. An approved PIC may fill this role (*see the Interagency Aviation Training (IAT) Guide to determine what level of training is required*).

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 working in, around and under a helicopter with turning rotors.

All-hazards/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 with rotors turning. All-hazards/resource helicopter crew members must meet the requirements of the training and currency listed in Chapter 15.

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

Flight followers are responsible for monitoring aircraft flight activities in accordance with DOI and 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 OPM-04.

All NPS 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 operational 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 1 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 reviews, 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 for each park with an aviation program. These reviews shall occur at a minimum of five-year intervals. This review will be accomplished in accordance with the AAPRAS or the OAS review per 352 DM 2.

1. 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.
2. The NPS programmatic 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 [NWCG Standards for Helicopter Operations, PMS 510, 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 the 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 determining causal and contributing factors which preceded NPS aviation mishaps, incidents or accidents; The NPS is responsible for determining the active and latent organizational conditions which contributed to the mishap, incident or accident and developing findings/recommendations. Parks/units will respond to any findings in a timely manner. For more specific procedures, see Chapter 17.

Chapter 2 – AVIATION DIRECTIVES

- 2.1 General
- 2.2 Office of Management and Budget Circulars
- 2.3 Federal Aviation Regulations
- 2.4 Departmental Manual
- 2.5 DOI Operational Procedures Memoranda
- 2.6 DOI Handbooks/Interagency Guides/NPS Operational Plans
- 2.7 DOI, Interagency and NPS Alerts & Bulletins
- 2.8 Enhancement, Policy Waivers and Exceptions

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 \(FAA\)](#).

2.4 Departmental Manual

[Departmental Manual \(DM\) Parts 350-353](#) are the aviation policies for all DOI agencies. 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 aviation policy directives. They also may be viewed at the [DOI OAS Library](#).

2.6 DOI Handbooks/Interagency Guides/NPS Operational Plans

The current version of the following handbooks and guides constitute NPS aviation policy, unless otherwise noted. They may also be viewed online at the OAS Document Library.

2.6.1 DOI and Interagency Handbooks

[Interagency Aviation Life Support Equipment Handbook \(ALSE\)](#)

[Aviation Fuel Handling Handbook](#)

[Interagency Helicopter Rappel Guide \(IHRG\)](#)

[Law Enforcement Short Haul \(LESH\) Policy](#)

[Military Use Handbook](#)

2.6.2 Guides (aka, NWCG “Standards”)

[NWCG Standards for Aerial Ignition, PMS 501](#)

[NWCG Standards for Aerial Supervision, PMS 505](#)

[NWCG Standards for Airtanker Base Operations, PMS 508](#)

[NWCG Standards for Helicopter Operations, PMS 510](#)

[NWCG Standards for Aviation Transport of Hazardous Materials, PMS 513](#)

[NWCG Standards for Fire Unmanned Aircraft Systems Operations PMS 515](#)

[NWCG Standards for Airspace Coordination, PMS 520](#)

[NWCG Standards for Wildland Fire Position Qualifications, PMS 310-1](#)

[Interagency Standards for Fire and Fire Aviation Operations \(Redbook\)](#)

2.6.3 NPS Operational Plans

[NPS National Aviation Strategic Plan](#) - while not policy, this is the guiding philosophy of NPS Aviation

[NPS National Short-haul Operations Plan](#)

[NPS National ACETA Operations Plan](#)

2.7 DOI, Interagency and NPS Alerts & Bulletins

1. Information bulletins contain material of a general nature and do not have a defined expiration date. These can be found at the [OAS & Interagency Aviation “Information Bulletins” web page](#).
2. Safety alerts are time-sensitive documents that are published as needed. These can be found at the [DOI & Interagency Aviation “Safety Alerts” web page](#).
3. These bulletins contain material with wide application and are issued as needed. These can be found at the [DOI & Interagency Aviation “Accident Prevention Bulletins” web page](#).
4. Technical data and recommendations regarding aircraft are published in tech bulletins when warranted. These can be found at the [OAS & Interagency Aviation “Tech Bulletins” web page](#).
5. NPS Alert & Bulletins are intermittently issued and will be provided by RAMs and posted to InsideNPS.

2.8 Enhancements, Policy Waivers and Exceptions

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 UAS, or when new aviation missions are initiated (e.g. ACETA, short-haul, etc.). Initial enhancement applications are approved by the associate director, Visitor and Resource Protection. Once an enhancement is approved, it is deemed valid in perpetuity unless there is substantial change to the program. 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](#).
2. Waiver requests from NPS aviation policies found in this reference manual must use the enhancement application. Waivers are valid for a specific period of time and must be renewed.

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 and waivers for personal protective equipment requirements are found in the [ALSE Handbook](#).
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
- 3.2 Use of Non-Federal Public Aircraft
- 3.3 Aviation Training Records
- 3.4 DO 11D: Records and Electronic Information Management

3.1 Aircraft Use Reports

3.1.1 DOI Aircraft Use Reports

1. For each flight of a government-owned manned or unmanned fleet aircraft an electronic Aircraft Utilization Report (AUR), must be completed and submitted per OPM-02, "Fleet Aircraft Use Reporting."
2. For each flight of a government-owned manned aircraft an OAS-2, "Aircraft Status Log," which indicates flight history and maintenance status, must be completed and retained in the aircraft. 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.
3. For each flight of a government-owned unmanned fleet aircraft an OAS-2U, UAS Flight Use Reporting Form must also be completed for recording purposes.
4. For each flight of a contract, rental, or charter aircraft, an OAS-23E must be completed, signed and provided to the pilot for billing and recording purposes (see Chapter 13).

3.1.2 U.S. 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 U.S. Forest Service (USFS) contracted aircraft. The data shall be entered and reviewed by the government and the contractor's representative (see [IATB 2018-02](#)). NPS employees who serve as flight or aircraft managers with responsibility for inputting flight use data into ABS will need to register with the USFS for access to ABS.

3.2 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, timeframe, and comparably equipped, as the non-federal public aircraft. Documentation must be maintained with the incident records (see Chapter 13.5).

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.

3.3 Aviation Training Records

Aviation training records for NPS employees must be maintained by the respective units in order to ensure training currency. Parks may use the Interagency Aviation Training (IAT) records database to meet this requirement or may use their own method provided that such method is readily accessible to at least two supervisory employees.

All-Hazards/Resource Helicopter Manager and All-Hazards/Resource Helicopter Crewmember task books (and previous versions of non-fire task books and task sheets) will be maintained as determined by the RAM in accordance with 15.2.5.

In addition, NPS fleet pilot training records must be maintained in accordance with 351 DM 3 and OPM-11 DOI Use of Unmanned Aircraft Systems.

3.4 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
- 4.2 Marking
- 4.3 Disposition
- 4.4 Funding

4.1 Acquisition

The addition of an aircraft to a national park or National Park Service program, to include UAS through purchase, transfer, lease or loan must be requested through the RAM, NAO and AD-VRP (or delegated person). The relative merits of purchase versus contracting must be evaluated according to the requirements set forth in OMB Circular A-11, Part 7, and 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 enhancement, funding and financial reserves for aircraft replacement purposes. Proposals must also include information on opportunities for sharing use with other NPS offices or DOI Bureaus.
3. Reassignment of manned fleet aircraft is conducted between the releasing unit and the receiving unit. Coordination with the OAS Tech Service fleet accountant and maintenance personnel is necessary.
4. Reassignment of UAS is conducted between the releasing unit and receiving unit. Coordination with the UAS division at OAS may be necessary.

4.2 Marking

All departmental aircraft must be marked in accordance with Federal Aviation Regulations (FAR) Part 45, Subparts A-C and Part 7.

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.

Parks transferring or selling a fleet aircraft must annotate on the OAS 75 Aircraft Disposal Request and work with the OAS fleet managers to assure all NPS markings e.g. Arrowhead, NPS Patrol, NPS Ranger etc. are removed before release of the aircraft.

4.4 Funding

4.4.1 Establishing a Fleet Working Capital Fund (WCF) Account

Prior to the acquisition of a fleet aircraft, either manned or unmanned, a WCF account must be established with OAS Fleet Accountant in Boise. A [Fleet Information Document \(FID\)](#) available in the OAS forms library is completed between the park or program budget officer and fleet accountant transferring the NPS funds into the no year WCF. Once in the WCF the funds cannot be used for any purpose other than purchase of aircraft and its associated equipment nor can the funds be transferred back to the originator. The funds may be transferred internally by OAS to another WCF account.

4.4.2 Request to not fund an Aircraft Replacement Reserve Account

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 and 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 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 the information that the replacement reserve account is not being funded and the date the aircraft will be released. All future FID, until the aircraft is released, will contain this information.

4.4.3 Time-Between-Overhaul Reserve for Fleet Aircraft

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

1. These reserves are calculated for each individual aircraft based on estimated future cost of overhauling the time-based components.
2. 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.
3. Funding overage or deficit is rolled into the calculation of the next engine cycle through the TBO reserve amount set aside.

Chapter 5 – MANNED AIRCRAFT EQUIPMENT

- 5.1 General
- 5.2 Additions/Alterations
- 5.3 Wire Strike Protection Systems
- 5.4 Emergency Locator Transmitter
- 5.5 Satellite Based Tracking Systems

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 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 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 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

All DOI helicopters will have wire strike protection systems (WSPS) installed. These systems have proven to be an effective mishap prevention tool for low-level helicopter operations operating in the wire environment.

Where applicable, all contracts for NPS helicopters will adequately address this requirement. In certain operations, WSPS may not be feasible for make and model of aircraft. In those cases, exceptions to this policy may be warranted with concurrence by the NPS RAM, NAM and approval by DOI-OAS.

5.4 Emergency Locator Transmitter

An emergency locator transmitter (ELT) meeting *Aviation Life Support Equipment Handbook* requirements must be installed in all manned 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 DOI approved personal aircraft used for passenger transport shall be equipped with 406 MHz ELTs.

ELT serial numbers are registered with the National Oceanic Atmospheric Administration (NOAA). Upon activation, the serial number as well as location data is transmitted by satellite and routed through NOAA. NOAA calls the DOI-OAS aircraft fleet manager who in turn calls the appropriate emergency contact information provided by the NPS unit which operates the aircraft. The emergency contact information must be confirmed annually by NPS personnel 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, Park aviation officer, or RAM cell phone, or satellite communication device (inReach) 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.

5.5 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 inoperable, an aircraft will normally remain available for service, using radio and/or voice (satellite or cell phone) systems for flight following.

Chapter 6 – PERSONAL PROTECTIVE EQUIPMENT/AVIATION LIFE SUPPORT EQUIPMENT

- 6.1 Personal Protective Equipment
- 6.2 Personal Protective Equipment Waiver Authority
- 6.3 First Aid and Survival Kits
- 6.4 Personal Flotation Device
- 6.5 Personal Locator Beacon
- 6.6 Flight Helmets

6.1 Personal Protective Equipment

Flight crew members, aircrew members, and passengers are required to wear personal protective equipment on all special use flights as per the Aviation Life Support Equipment Handbook.

6.2 Personal Protective Equipment Waiver Authority

Waivers from PPE requirements are delegated from the NPS Director to NPS regional directors:

1. These waivers are limited to instances where protection for the individual is deemed more critical for personal safety than provided by standard PPE.
2. A waiver must have an expiration date and cannot exceed three years.
3. Flight helmet requirements cannot be waived except as noted in the ALSE handbook.

6.2 First Aid and Survival Kits

All manned aircraft flying missions other than point-to-point under the operational control of the NPS must carry first aid kits and survival kits meeting specifications found in the ALSE Handbook. Aircraft flying in Alaska or Canada must carry additional survival equipment in accordance with the requirements of the government of the territory being over flown.

6.4 Personal Flotation Device (PFDs)

6.4.1 Single Engine Aircraft

For operations beyond power-off gliding distance to shore, PFDs will be worn for all flights. Seat Fare operations authorized under OPM-15, *Acquisition of Seat Fares*, must follow the certified commercial carrier's requirements.

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 performance capability required for FAA Part 121 Air Carrier and Part 135 Air Taxi and Commercial Operators.

6.5 Personal Locator Beacon

Personal Locator Beacons (PLB), Satellite Messengers and to some degree depending on location, cell phones provide an additional means of locating persons and aircraft. However, their possession and use does not waive the requirements for installed Emergency Locator Transmitters and Satellite-Based Tracking Systems or flight plans and flight following procedures in DOI and NPS aviation policy.

6.6 Flight Helmets

The ALSE Guide identifies approved helmets. The *DOI/USFS Aviation Helmet Standard* identifies inspection process for flight helmets. Flight helmets may be repaired/refurbished by interagency agreements with agencies that have certified technicians or factory personnel.

Chapter 7 – MANNED AIRCRAFT MAINTENANCE AND INSPECTION

- 7.1 Maintenance
- 7.2 Inspection Programs
- 7.3 Returning an Aircraft to Service

7.1 Maintenance

Department of the Interior (DOI) owned or operated aircraft, and privately owned aircraft (not to include travel under the Federal Travel Regulations (FTR)) 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 (not to include travel under the Federal Travel Regulations (FTR)) 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 COR.

Chapter 8 – AIRCRAFT SECURITY

- 8.1 General
- 8.2 Fuel
- 8.3 Facility Security
- 8.4 Aircraft Security

8.1 General

The PIC is responsible for the security and tie down of the aircraft. It is recommended that DOI aircraft be hangared whenever practical.

8.2 Fuel

The pilot must verify security, type, and quantity of fuel. Reference Chapter 10 Sec. 10.17 Aviation Fuel Handling.

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 NAM 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
- 9.2 NPS Flight Authority Authorization
- 9.3 NPS GS-2181 Pilots
- 9.4 NPS Dual Function Pilots
- 9.5 Incidental Pilots
- 9.6 Auxiliary Pilots
- 9.7 Pilot Training
- 9.8 Developmental Pilot Program
- 9.9 Medical Certificates
- 9.10 Request for NPS Fleet Pilot Approval and Flight Evaluations
- 9.11 NPS Instructor Pilot
- 9.12 NPS Pilot Review Board
- 9.13 Pilot Suspension/Revocation

9.1 General

When training or hiring NPS pilots, managers must carefully consider the risks, the position qualifications, ongoing training requirements, and fiscal issues associated with fleet aircraft and pilot 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 determine the skills needed for the operations performed by the unit hiring the pilot. These checklists are found on [SharePoint](#) or by contacting the national aviation office.

Prior to a final offer of employment by human resources for an NPS pilot position, the hiring official must ensure:

1. Complete the requirements per 351 DM 3 for an FAA Accident/Incident and Enforcement Action History.
2. Examine the applicant's log book/military training records for qualifying flight and PIC time.
3. Ensure a pre-employment flight evaluation has been administered and the results documented.
4. Ensure that applicants with military pilot experience 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 OAS regional director prior to an applicant being administered a pre-employment flight evaluation. Contact the NPS fleet and pilot specialist for assistance.

9.2 NPS Flight Authority Authorization

The NAM will issue a NPS *Flight Authority Letter* for all NPS pilots recognizing the individual as authorized to fly for the NPS. Once issued the letter remains in effect for the duration of the pilot's NPS career. NPS flight authority can be suspended or revoked following an accident, incident with potential or actions which result in convening an NPS Pilot Review Board per Appendix 6.

9.2.1 Technical Oversight of NPS Pilots

The technical oversight of NPS pilots rests with the RAM. In the event the RAM lacks the expertise, the oversight is delegated to a NAO technical specialist (e.g., the appropriate National Aviation Management Specialist). At parks with 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, but is not limited to:

1. Initial hiring.
2. Design and development of aviation training.
3. Advisement of flight operations, e.g. mission planning.
4. DOI fleet aircraft management skills to include:
 - a. Aircraft use reports.
 - b. Aircraft maintenance.
 - c. Fuel management.
5. Input to the pilot's annual performance appraisal should be provided.

9.3 NPS GS-2181 Pilots

GS-2181 pilots meet the following criteria:

1. Piloting aircraft is the primary duty and comprises more than 50 percent of the employee's duties.
2. Position descriptions are classified in the 2181 (pilot) series.

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

The following minimum amount of flight hours must be accomplished prior to hiring:

1. 1,500 hours total flight time.
2. 1200 hours PIC in category.
3. Additional minimum requirements apply, see [Pilot Hiring Checklist](#).

9.4 NPS Dual Function Pilots

Dual function Pilots must meet the following criteria:

1. Piloting duties are stated in employee's position description.
2. Piloting aircraft is not the primary duty and comprises less than 50 percent of the employee's duties.
3. Positions are typically classified into the appropriate LE and biological sciences job series.
4. The following minimum amount of flight hours must be accomplished prior to hiring. Minimum pilot time requirements to be considered for hiring are:
 - a) 500 hours PIC in Category.
 - b) Additional minimum requirements apply, see Pilot Hiring Checklist.

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 NAM prior to flight evaluation for Off Airport (Airplane) or Low Level Operations.

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. An authorized DOI Instructor Pilot must provide the instruction in a DOI aircraft unless a non-DOI FAA certificated flight instructor (CFI) is approved by the OAS Regional Director for manipulation of controls of a DOI aircraft.

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 FAR 61.56 Flight Review administered by OAS, bureau instructor pilot, inspector pilot or FAA CFI 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-DOI/USFS certified flight instructor is used to fulfill the requirements for a stage check, a letter of authorization from the appropriate OAS regional director for the CFI to manipulate the controls of a DOI aircraft per 351 DM 1.2 B. (2) must be requested and approved.

9.5 Incidental Pilots

The NPS does not recognize 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. They may serve as a pilot of DOI aircraft per OPM-34, *Auxiliary Pilots-Manned Aircraft*. Flight evaluations per 351 DM 3 apply.

9.7 Pilot Training

New hires and developmental pilot training requires approval by the NAM. Initial and ongoing training requirements for NPS GS-2181 and Dual Function pilots can be found in 351 DM 3 and OPM-22. Requirements for Auxiliary Pilots are in OPM-34.

New hire pilots who fail to meet FAA Practical Test Standard and DOI interagency Practical Test Standards during initial or recurring flight evaluations are not authorized to manipulate the controls of DOI aircraft without a CFI onboard or act as PIC for flight operations. Failure to meet flight experience and training requirements may result in withdrawal of NPS flight authorization.

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.

DOI and NPS pilots with CFI ratings who can become DOI Instructor Pilots (IP) are extremely important to the bureaus. DOI operational and special use mission skills are not normally found in civil FAA pilots or CFIs. An NPS IP provides the bureau the ability to meet pilot training requirements internally, reduce training costs by avoiding reliance on outside vendors, bureaus or OAS, and IP provided instruction fulfills continuing education requirements for both the bureau instructor and pilot.

9.8 Developmental Pilot Program

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 DOI/NPS Pilot 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 program manager/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 ([OPM-22](#)).
7. Name of the PAM 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 development plan.
9. Letter of commitment, is encouraged to help ensure the NPS that the sizable commitment of funds and time invested in a pilot's development will be returned by continued service.

9.8.1 Developmental Pilot Program Requirements

NPS employees will meet the following minimum requirements before being considered for the trainee pilot program. The park initiates a request through the RAM to the NAM for entry into the trainee pilot program. In addition, an approval to manipulate the controls is required from the OAS RD prior to a flight evaluation; the pilot must:

1. Hold an FAA commercial pilot certificate in category with instrument rating.
2. Possess a current FAA Medical Certificate Second Class.
3. Have logged at least 100 hours PIC in category.
4. Pass an FAA or military pilot record check.
5. Received a flight evaluation conducted by a DOI Instructor Pilot (IP) for basic skills and aptitudes in accordance with [351 DM 3](#).
6. Had their logbooks/military records reviewed for qualifying time by RAM or NAM.

9.8.2 Developmental Pilot Curriculum

The NPS national fleet aircraft, pilot and UAS specialist and/or RAM develops the training curriculum for the pilot candidate with funding and time line concurrence.

Upon concurrence, the NPS will request the pilot candidate be authorized to manipulate the controls of a DOI aircraft via the OAS RD. 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 Fleet Pilot Approval and Flight Evaluations

Request for flight evaluation for pilot approval 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 (IP), when providing instruction in DOI aircraft, must be authorized by the NAM by a letter of authorization, which will be included in the pilot's DOI pilot file. NPS instructor pilots are:

1. Responsible and authorized to provide flight and ground instruction.
2. Act as PIC of the aircraft anytime a trainee is onboard the aircraft.
3. Authorized to provide written endorsements (e.g., in the pilot's logbook and/or on OAS Forms 50/51) and certifications in the FAA Integrated Airman Certification and Rating Application system for new ratings.

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 and maintain a current FAA Certified Flight Instructor pilot certificate with appropriate ratings.
2. Be current and carded as PIC in the aircraft when providing training to include initial qualification, special use or configuration 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 is currently authorized. 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 [351 DM](#).
7. Perform flight reviews of DOI pilots to satisfy the requirements of 14 C.F.R. § 61.56.
8. Endorse applicants for new pilot certifications in the FAA's Integrated Airman Certification and Rating Application.

9.11.3 Renewal or Reinstatement of Instructor Pilot Privileges

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

9.11.4 Suspension or Revocation of Instructor Pilot Privileges

Should it become necessary to suspend or revoke an NPS IP designation, the NAM will inform the IP in writing with a notification to the OAS Regional Director in which the pilot was carded. Suspension or revocation of NPS IP authority automatically prohibits the IP from providing instruction in a DOI aircraft to any DOI pilot or developmental pilot.

Suspending or revoking NPS IP authority does not affect the IP's FAA CFI certification, however FAA CFI status does not allow the IP to instruct without the NAM's NPS IP authorization while on duty.

9.12 NPS Pilot Review Board (PRB)

The NPS PRB is an administrative, fact-finding proceeding conducted to ensure all information relevant to a pilot's qualifications are reviewed and evaluated in a knowledgeable, fair, and impartial manner. The NPS PRB, found in [Appendix 6](#), is an internal NPS process to determine an NPS pilot's or developmental pilot'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 perform duties as an NPS pilot.

Note: The NPS PRB does not include circumstances that are under an OAS convened DOI Pilot Review Board found in [351 DM3](#). The PRB is not meant to replace any supervisory performance or conduct review effort.

Under some circumstances, such as a recommendation from an Aviation Mishap Review Board (AMRB), OAS may be requested to convene a DOI Pilot Review Board or opt to do so on their own as outlined in [DOI OPM-24, Pilot Review Board](#).

9.13 Pilot Suspension/Revocation

DOI Pilot Qualification Card will be suspended by OAS after an aircraft accident, mishap or incident with potential, (IWP. Failure of the pilot to conform to prescribed DOI standards may result in suspension/revocation of the DOI Pilot Qualification Card. If applicable, at this time the NAO will also suspend or revoke the NPS pilot's *Flight Authority Letter*.

The process for the NAM to request suspension or revocation of a DOI Pilot Qualification Card is contained in 351 DM3.6 G (1. Under some circumstances, such as a recommendation from an Aviation Mishap Review Board (AMRB), OAS may be requested to convene a DOI PRB or opt to do so on their own as outlined in OPM-24, *Pilot Review Board*. Revocation, suspension, and re-issuing process for DOI pilot authorization is outlined in the DOI Flight Crewmember policy [351 DM 3](#).

Chapter 10 – FLIGHT OPERATIONS

- 10.1 General
- 10.2 DOI-Approved Aircraft and Pilots
- 10.3 Noise Impact Mitigation
- 10.4 Aviation Management Plan
- 10.5 Project Aviation Safety Plan
- 10.6 Flight Plan and Flight Following
- 10.7 Passenger Manifest
- 10.8 Aircraft Preflight/Post Flight
- 10.9 Checklists
- 10.10 Interagency Aircraft Data Card
- 10.11 Interagency Pilot Qualification Card
- 10.12 Passenger Briefing
- 10.13 Crew Duty Time Limitation
- 10.14 Instrument Flight Rules
- 10.15 Night Flying
- 10.16 Transport of Hazardous Materials by Aircraft
- 10.17 Aviation Fuel Handling
- 10.18 Transport of Cargo/Equipment
- 10.19 Load Calculations/Weight and Balance
- 10.20 Environmental Considerations
- 10.21 Aviation Mishap Response Plan
- 10.22 Lap Belt/Shoulder Harness
- 10.23 Special Use Flight Operations
- 10.24 Law Enforcement Operations
- 10.25 Flights Outside the U.S., Trust Territories, and Possessions
- 10.26 Emergency Situations
- 10.27 Employee Prerogative

10.1 General

All missions under operational control of NPS will comply with applicable Federal Aviation Regulations (FARs), DOI aviation policy, DOI handbooks, and interagency guides as listed in Chapter 2. Prior to conducting NPS aviation operations, to the maximum extent possible, operational control must be clearly identified.

NPS personnel issuing permits: e.g. Special Use, Scientific Research and Collection or Commercial Use Authorization must not add aviation language e.g. routes, altitudes, aircraft types, operational procedures that may potentially/inadvertently put the NPS in operational control of the flight. If a permitting request involves an aviation component, the RAM must be involved in the process.

Anyone has the right to refuse a mission. Park employees have the authority to stop work for any NPS mission. Standing 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 only use aircraft and pilots approved or otherwise authorized by the 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 noise sensitive areas must be avoided whenever possible. Examples of such areas include campgrounds, heavily used trails or recreation/visitor areas (amphitheaters, visitor centers, permitted hunting and fishing areas), sensitive wildlife habitat, culturally sensitive areas (including ceremonial areas), and areas managed as wilderness. Frequency of flight operations must be minimized to the extent possible.

Power settings, ascents, and descents (during departure, climb and arrivals), turns, en route, and maneuvering will consider noise impacts (noise mitigation techniques for helicopter operations are available through FAA course ALC-500: Fly Neighborly). 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 RAM to determine whether an AMP is required.

1. 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.
2. 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 standalonedocument.
3. [Appendix 2, Park Aviation Management Plan](#), contains 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 that 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 OR a documented process (as approved by the RAM) to capture the unique and special circumstances will be incorporated into the park AMP (OPM 6).

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. Risk assessments are required to be included in all PASPs. The risk assessment/hazard analysis shall be included in every preflight/pre-mission briefing. At a minimum, preflight briefings will be documented in the daily diary/flight log. For SARs and other emergencies where time precludes preparation of a written PASP, a hasty risk assessment which leads to a go/no go decision and can be produced after the fact is acceptable.

4. One of the following risk assessment methods (found on InsideNPS) may be used or an alternative method, approved by the PAM 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.
 - e) BLM/USFS Risk Assessment Management Workbook.

(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 60 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/flight follower. If continuous 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, and the entity has a responsible person dedicated to the flight following duties who has access to the mishap response plan or can communicate with someone that does 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 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. DM 351 1.1E.

10.9 Checklists

Pilots are required to use applicable written/electronic cockpit 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 of authorization or previously established Memorandum of Understanding.(MOU) MOU's affecting DOI aviation are found at the [DOI OAS website](#) (see Chapter 14.5).

10.11 Interagency Pilot Qualification Card

The Interagency or DOI Pilot Qualification Card must be carried by fleet, contractor and cooperator pilots and physically inspected by flight managers prior to each mission. The card may be physical or digital. 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 of authorization or previously established Memorandum of Understanding (MOU). MOUs affecting DOI aviation are found at the [DOI OAS website](#) (see Chapter 14.5).

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. Deviations from this policy will be documented using the SAFECOM system.

10.14 Instrument Flight Rules

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

10.15 Night Flying

Night flights are permitted in accordance with [FAR 61.57](#), [351 DM 1](#), and the procurement document.

10.16 Transport of Hazardous Materials by Aircraft

Transport is allowed only in accordance with the special permit and the [NWCG Standards for Aviation Transport of Hazardous Materials](#). All other types of transport of hazardous materials must be carried in accordance with 49 CFR 170-174 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:

- All involved employees, pilot and ground crew, must have completed A-110, *Aviation Transport of Hazardous Materials* prior to handling or transporting hazardous materials by aircraft.
- 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 [DOI Aviation Fuel Handling Handbook](#), National Fire Protection Association (NFPA) 407, Standard for Aircraft Fuel Servicing, [OPM-20, Drum Fuel Management](#), and when applicable, the [NWCG Standards for Helicopter Operations](#).

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 trained 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.

Additional information is available from FAA Advisory Circulars (AC) 20-125 "Water in Aviation Fuels" and AC 150/5230-4A "Aircraft Fuel Storage, Handling and Dispensing on Airports," Air Transportation Association specification 103 "Standard for Jet Fuel Quality Control at Airports, Revision 2006.1," and American Society for Testing and Materials MNL 5 "Aviation Fuel Quality Control Procedures."

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 [NWCG Standards for Helicopter Operations](#), Chapter 11, Cargo Transport).

Fixed-wing external load operations will be conducted in accordance with FAA authorization and [OPM-29, Special Use Activities for Manned Aircraft](#).

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, [351 DM 1.9H](#). For helicopters, refer to the [NWCG Standards for Helicopter Operations](#), 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 1.3](#) for specifics, additional helicopter guidance can be found in the [NWCG Standards for Helicopter Operations](#).

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

Current 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 [Interagency Aviation Life Support Equipment Handbook](#).

10.23 Special Use Flight Operations

“Special use” is defined in [350 DM 1](#) and [OPM 29, *Special Use Activities for Manned Aircraft*](#) 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:

1. Project aviation safety plans (*see 10.5 of this chapter*).
2. A written risk assessment, required on the day of the mission OR the risk assessment/hazard analysis from the PASP shall be included in every preflight/pre-mission briefing.
3. 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 [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 [NPS ACETA Operational Plan](#) and this reference manual.

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

The [National Park Service Management Policies 2006](#), state that “The saving of human life will take precedence over all other management actions as the Park Service strives to protect human life and provide for injury-free visits” (Section 8.2.5.1, Visitor Safety and Emergency Response). The NPS ability to respond to incidents is essential to the safety of all who enter NPS areas, and is implemented in this policy.

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 Cargo (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 the US Park Police at this time.. These operations must be conducted in accordance with departmental guidance and the *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 a park has an approved program.

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 Off Airport Operations-Wheels (Airplane)

Fixed-wing aircraft conducting off airport operations shall comply with OPM-29, *Special Use Activities for Manned Aircraft*. Some landing areas utilized in parks require approval by the RAM and listing in the *DOI Airport Directory*.

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

Low level flight, when authorized, may be conducted in accordance with FAR 91.119, FAR Part 135 Subpart D, Part 135, Part 137, FAA Exemption 3017B or further grant of exemption if applicable. While low level flight operations are authorized under the above auspices, consideration of minimum safe altitudes for other than low level operations must always be considered.

10.23.7 Wildland Fire

Fire management activities that use aviation resources will be conducted in accordance with applicable guides, handbooks, and [RM-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. See [RM-55, Incident Management Program](#).

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 [NWCG Standards for Helicopter Operations](#) 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. Handguns 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 are allowed aboard DOI aircraft in accordance with the [NWCG Standards for Aviation Transport of Hazardous Materials](#).
7. When other authorized personnel (e.g., designated shooters, ACETA gunners) carry weapons onboard aircraft, the above applies.

10.25 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. DOI DM 350-353 and RM-60, do not apply to international DOI and NPS operations, except for fleet operations. NPS employees should attempt to follow NPS aviation policies to the extent practical.

Fleet aircraft flights also will comply with applicable DOI aviation policy, handbooks, and this reference manual. Additional personal liability insurance may be required for agency pilots flying outside the United States.

10.26 Emergency Situations

Pilots and NPS employees will take action necessary in life threatening and urgent situations to ensure the safety of personnel and aircraft. Any resulting deviation from applicable FARs, DOI aviation policy, and this reference manual must be reported via SAFECOM and communicated to the RAM as soon as practical.

10.27 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 condition, observation, act, maintenance problem, or circumstance involving personnel or the aircraft, that has the potential to cause an aviation-related mishap via SAFECOM.

Chapter 11 – UNMANNED AIRCRAFT SYSTEMS

- 11.1 General
- 11.2 Aviation Directives
- 11.3 Records and Reports
- 11.4 Fleet Programs
- 11.5 Remote Pilot in Command and Visual Observer Selection Process
- 11.6 Flight Operations
- 11.7 Contract, Rental, and Charter Aircraft
- 11.8 Cooperator Aircraft
- 11.9 Aviation Training
- 11.10 Aircraft Mishap Procedures

11.1 General

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 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.

All UAS operations are considered aircraft operations and are subject to the FAR's and DOI DM policies set forth in this reference manual. While their methods of control and airspace utilization procedures are different than manned aircraft, the overall responsibility for aviation activities within DOI rests with the OAS. Procurement and oversight of aircraft, including UAS, is a function and responsibility of OAS.

11.1.1 Limitations

1. Personally owned UAS/Remote Control model aircraft may not be used by NPS employees in the conduct of government business.
2. Possession of an FAA Part 107 Remote Pilot rating for Small Unmanned Aircraft Systems (sUAS) by itself does not authorize NPS personnel to conduct sUAS operations for the NPS.
3. Organizations or individuals whose interests support NPS activities, may offer to fly unmanned aviation missions (i.e. aerial surveys, fire reconnaissance, infrared missions, etc.) at no cost to the NPS. NPS cannot accept these services unless they meet FAA, and/or DOI policy and are authorized by OAS via a cooperator approval or MOU.

11.1.2 NPS Management Policies

Policy Memorandum [14-05 Unmanned Aircraft – Interim Policy](#) was issued by the NPS director in June 2014. This memo outlined process and procedures for:

1. Specific closure language to be added to park compendiums about visitor use of UAS.
2. Continuation of previously authorized recreational model aircraft activities under special use permits or compendium provisions.
3. Administrative use of UAS for the NPS.
4. Administrative use of UAS and activities conducted under scientific research and collection permits. (Follow the procedures outlined in [Appendix 7, NPS Approval Template and Guidance for the Use of Unmanned Aircraft Systems \(UAS\)](#)).

5. Activities conducted under Special Use Permit (SUP) or Commercial Use Authorizations (CUA) follow the procedures outlined in Exhibit B of the interim policy.

11.1.3 Exceptions to Policy

Emergency UAS operations are situations or occurrences of a serious nature, developing suddenly, unexpectedly and demanding immediate action to prevent loss of life. If a non-DOI approved UAS and operator is available to an operation, the superintendent may authorize its use. These situations shall be reported to the RAM/NAO in the most expeditious manner possible and a SAFECOM filed.

The NPS Approval Template and Guidance for the Use of Unmanned Aircraft Systems has an exception for emergencies when there is an imminent threat to health and safety of persons, property, or natural, cultural, or historic resources. The approving official, superintendent or program manager may utilize UAS without the approval process established via the Approval Template. Without compromising operational deployment, the approving official must notify the RAM in the most expeditious manner possible.

1. Urgent situations are unforeseen combination of circumstances that calls for immediate action, but is not life threatening. Similar to the previous paragraphs, the use UAS may be determined the most efficient and effective means of gathering information that is perishable, subject to change, or needed to be gathered in an expeditious manner (e.g., LE evidence collection). In this instance, verbal authorization to the official in charge may be granted from the superintendent in lieu of the approval template. Post incident documentation summary must be provided to the RAM.
2. Approval authority for wildland fire and fleet UAS operations, authorized at a park with an enhancement, reside with the park superintendent.
3. Entities with authority and responsibility to provide emergency and routine services in a national park unit may utilize a UAS in the course of conducting those activities. NPS personnel should contact the RAM for guidance if they encounter a situation where an exception may apply.

11.1.4 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 noise sensitive areas should be avoided wherever possible. Examples of such areas include campgrounds, heavily used trails or recreation/visitor areas (amphitheaters, visitor centers, permitted hunting and fishing areas), sensitive wildlife habitat, culturally sensitive areas (including ceremonial areas), and areas managed as wilderness. Frequency of flight operations must be minimized to the extent possible. Power settings, routes, altitudes, ascents, and descents will consider noise impacts. Best practices for avoiding impacts to natural, cultural, and historic resources when using UAS are available on the [NPS Natural Sounds website](#).

11.2 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](#)

1. Data not essential to the mission of the NPS should be destroyed within 180 days.
2. 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.
3. UAS-collected information can only be shared outside of the NPS if it helps to meet the authorized mission of the NPS.

4. 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.

OMB Circulars: The acquisition and long-term programmatic budgeting for UAS can be found in Chapter 2.2 of this reference manual.

Federal Aviation Regulations (FARs): FARs related to UAS operations are contained in 14 C.F.R. Part 107 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 2.8. The application is found in [Appendix 5, Enhancement Application](#).

* Program evaluations, per Chapter 1.6 of this reference manual, will include review of park unit's compliance with UAS policies and regulations.

11.3 Records and Reports

All NPS fleet and commercial UAS operations use must be reported in accordance with Chapter 3 of this reference manual. UAS Fleet aircraft use will be reported on an OAS-2U Flight Use Reporting Form. RAMs will compile a report annually based on fiscal year for fleet, commercial, and cooperator UAS missions to be maintained for five years.

11.4 Fleet Programs

Before purchasing a UAS, a park or program must submit an enhancement to start a new program (see Appendix 5). The procedure for initiating a new UAS program can be found on InsideNPS, Aviation Management, Start up Process. Once the enhancement is approved, the following must occur:

1. Acquisition

- a. DOI approved UAS airframes must be purchased through OAS/Acquisitions Directorate.
- b. A working capital fund (WCF) account must be established at OAS with funds for the aircraft purchase transferred via a OAS 93U, *UAS Fleet Information Document* from the park/program to OAS.
- c. An OAS-13U, *DOI sUAS Acquisition Request Form* must be submitted.
- d. For program flexibility, parks may purchase approved sensors, tablets, and UAS parts directly from vendors. Alternately, OAS can purchase UAS accessories for parks from WCF accounts.

2. Airframe

- a. Registration: UAS must be marked in accordance with FAA/DOI requirements.
- b. Maintenance: Will be in accordance with the approved manufacturer and DOI procedures. NPS UAS remote pilots must contact OAS UAS fleet manager to arrange for in-house or contract repair of damaged or inoperable UAS.
- c. Inspection programs: UAS will be inspected in accordance with OPM-11.
- d. Any modifications of the UAS airframe or sensor packages must be in accordance with the list of approved modifications posted on the OAS website.
- e. Returning the UAS to service post-accident may require coordination with OAS UAS Fleet Manager.

- f. Disposition/Transfer: 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.

11.5 Remote Pilot In Command (RPIC) and Visual Observers (VO)

In making the decision to train or fill a position that has UAS pilot duties, managers will consult with the RAM and NAM. All personnel in pilot-training programs will operate under an approved enhancement.

11.5.1 NPS Flight Authority Authorization

The NAM will issue a NPS *Flight Authority Letter* for all NPS pilots recognizing the individual as authorized to fly for the NPS. Once issued the letter remains in effect for the duration of the pilot's NPS career. NPS flight authority can be suspended or revoked following an accident, incident with potential or actions which result in convening an NPS Pilot Review Board per Appendix 6.

11.5.2 Suspension/Revocation

The process to suspend or revoke privileges for UAS pilots applies per chapter 9 and [Appendix 6, NPS Pilot Review Board](#).

11.5.3 Technical Oversight of Fleet UAS Pilots

The technical oversight of Fleet UAS pilots rests with the RAM (*per chapter 9 for further direction*).

11.5.4 Remote Pilot in Command

The UAS Remote Pilot in Command (RPIC) has final authority and responsibility for the operation and safety of the flight. To perform duties as a remote pilot the person must:

1. Hold an [FAA RPIC Part 107](#) certification,
2. Completed the A-450, *Small Unmanned Aircraft System (sUAS) Basic Remote Pilot Course* or approved UAS ground and flight training program,
3. Pass a DOI flight evaluation and have been issued a DOI UAS RPIC authorization OAS-30U, Pilot Qualification card for the particular UAS to be flown. Qualification and authorization to fly one UAS does not constitute authorization to fly any make and model of UAS.
4. Some UAS missions may require more than one pilot, in which case a RPIC will be designated prior to the mission.
5. Failure to meet flight experience and training requirements will result in withdrawal of DOI and NPS UAS RPIC authorization.

11.5.5 Visual Observer (VO)

A UAS VO is not normally required for Part 107 operations. UAS operations under a FAA/DOI MOU or FAA Certificate of Authorization (COA) may require a VO for UAS operations. Operations specific training may be required when a VO is utilized.

11.5.6 Medical Certificates

Consult OPM-11 for any requirements.

11.5.7 Flight Evaluations

A UAS RPIC must pass an initial qualification evaluation administered by DOI-OAS or a designated bureau inspector pilot. The evaluation will include an oral evaluation of subjects covered in the A-450 course and a flight evaluation. Recurrent flight evaluations are as required per OPM-11.

Training and flight evaluations at a non-DOI course or vendor provided training does not automatically grant DOI UAS flight authority unless by prior arrangement and approval of OAS UAS Program Manager and NAM.

11.5.8 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 and maintain a current FAA Part 107 Remote Pilot in Command (RPIC) certificate.
2. Be current and carded as PIC for the UAS when providing training.
3. Be recommended in writing by their RAM and approved by the NAM. An NPS Lead Instructor Pilot Authorization Letter must be forwarded to OAS headquarters for inclusion in the pilot's records.

11.5.9 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 UAS.
2. Provide recurrent training to DOI pilots.
3. Train pilots to perform advanced UAS missions and UAS transition training for which the instructor pilot is currently authorized.
4. Provide endorsements and/or recommendations for fleet pilots to receive initial OAS aircraft flight evaluations.

11.5.10 Renewal or Reinstatement of Instructor Pilot Privileges

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

11.5.11 Suspension or Revocation of Instructor Pilot Privileges

Should it become necessary to suspend or revoke an NPS IP designation, the NAM will inform the IP in writing with a notification to the OAS UAS Division Chief. Suspension or revocation of NPS IP authority automatically prohibits the IP from providing instruction on any DOI UAS. Suspending or revoking NPS IP authority does not affect the IP's FAA RPIC.

11.6 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.

1. **Aviation management plan.** 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 per Chapter 10.4 and [Appendix 2, Park Aviation Management Plan](#).
2. **UAS project aviation safety plans.** Mission planning will be completed for all project flights except for those included in the AMP. (per Chapter 10.5 and [Appendix 3, Project Aviation Safety Plan](#)). 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](#)).
3. **Risk assessment.** Aviation mission planning for all flights will include a risk assessment (see Chapter 10.5 for examples of acceptable risk assessment methods).
4. **Additional operations.** In addition to the A-450 qualification, operations such as wildland fire, extended or beyond line of sight (EVLOS/BLOS), or night operations may require additional training and procedures.

5. **UAS preflight/post flight checks.** These will be conducted in accordance with the manufacturer's operator's operating manuals, handbooks and checklists.
6. **Required documents.** The following documents must be present during DOI Fleet Operations and available for inspection:
 - a. FAA Part 107 Remote Pilot
 - b. DOI UAS Remote Pilot Qualifications Cards OAS-30U
 - c. Aircraft FAA registrations
 - d. DOI Aircraft Card
7. **Crew duty time limitation.** All activities must be conducted in accordance with OPM-11, applicable guide or procurement document.

11.7 Contract, Rental and Charter Aircraft

See Chapter 13

11.8 Cooperator Aircraft

Entities with authority and responsibility to provide emergency and routine services in a national park unit may utilize a UAS in the course of conducting those activities. However, when NPS requests service from these entities, they must be approved by OAS as cooperators and NPS take-off, landing and operating on NPS lands/water approvals apply. NPS personnel should contact the RAM for guidance.

See Chapter 14 for additional information on cooperator aircraft.

11.9 Aviation Training

Line managers, supervisors, and park aviation managers are required to meet the training requirements of Chapter 15 of this reference manual.

11.10 Aircraft Mishap Procedures

See *Chapter 17* and OPM-11.

Chapter 12 – USE OF GOVERNMENT AIRCRAFT

- 12.1 Administrative Travel Justification and Documentation
- 12.2 OMB Circular A-126
- 12.3 Requests for Solicitor Approval
- 12.4 Space Available Travel

12.1 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 DOI Office of the Solicitor (SOL) approval is required for Senior Executive Service (SES), senior federal officials, or non-federal travelers.

1. SES officials include all civilian officials appointed by the president or civilian employees of the Executive Office.
2. Senior federal officials include all SES employees, congressional members or their staff, etc.
3. Other 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.

12.2 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."](#))

12.3 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:
 - a. [Form DI 1020, Travel Authorization](#).
 - b. [OPM-7, Appendix 6: OAS-110, Travel Cost Analysis](#).

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

Who Signs	Travel Authorization	OAS-110	
	Next Level Supervisor	File*	SOL*
NPS and other federal	√		
Senior executive	-	√	√
Senior federal	-	√	√
GS-level employees	√	-	-
Non-federal individuals	-	√	√

* File – Maintain a copy on file for at least 3 years

* Copy to be provided to the RAM

12.4 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 RAM to the SOL at least ten days prior to planned travel.

Chapter 13 – CONTRACT, RENTAL and CHARTER AIRCRAFT

- 13.1 General
- 13.2 Procurement
- 13.3 FBMS, Interagency and Cross Servicing Agreements
- 13.4 Procurement of Flight Services from DOI Bureaus and the USFS
- 13.5 Procurement of Flight Services from Non-Federal Public Agencies
- 13.6 Contract Services
- 13.7 Emergency Aircraft Procurement

13.1 General

Aircraft operators providing contract, individual charter, or hourly rental service to DOI bureaus must be approved by OAS. Pilots must meet DOI experience requirements and adhere to flight time and duty limitations.

13.2 Procurement

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

13.2.1 Seat Fare

Seat fares refer to a ticket purchased with a scheduled air carrier; this includes Part 135 operators (On Demand Operators) who are approved through the NAM by the AD-VRP and OAS. See [OPM-15, Seat Fares](#) for additional information.

13.2.2 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, may be used to obtain the product or services; however, there are limits on specifying controls or specific types of aircraft in the solicitation.

13.2.1.1 These types of contracts do not need to be obtained through OAS because they are not for flight services.

13.2.1.2 The NAO has developed specific guidelines regarding items such as "operational control" for the use of these types of contracts. Use the InsideNPS, Aviation Management "Unmanned Aircraft" page, "End Product/Best Value Determination Tool" to determine how to obtain the service or product.

13.2.1.3 Refer to DOI [OPM-35, Identification of End Product/Service and Flight Service Procurement](#), for further guidance.

13.3 FBMS, Interagency and Cross Servicing Agreements

Upfront funding is a requirement of the DOI Financial & Business Management System (FBMS). All DOI Interior Business Center-Acquisitions Division (AQD) contracted aviation services procured by the NPS will be funded through an interagency agreement (IAA) with AQD.

In lieu of an IAA, parks may also use "cross servicing agreements". AQD has the ability to cross-service NPS exclusive- use and on-call aviation for non-emergency, project flights only. The cross-servicing process must be done with close assistance from AQD to ensure a purchase request (PR) is done correctly. The main benefit to using cross-servicing is that the PR actually commits and obligates the NPS funds to the project before the flight occurs and the actual charges post to the NPS line of accounting. Cross servicing 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.

13.3.1 Aviation Services Acquired in Support of Non-Fire Activities

Each region or individual park must have a funded IAA in place in order to obtain non-fire and non-emergency flights. Aviation users must work with their RAM to ensure that non-fire aviation services are ordered in accordance with departmental policy.

13.3.2 Aircraft Services Acquired in the Support of Fire Management Activities

A national IAA is funded upfront by DFAM for NPS fire management activities for exclusive-use aircraft as well as call when needed aircraft (suppression, severity, fuels, emergency stabilization, burned area rehabilitation, and preparedness).

13.3.3 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 AQD](#) has been issued to vendors in support of all SARs. Contact a RAM for payment procedures. 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.

13.4 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.

13.5 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 emergency where there is 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. 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.

13.6 Contract Services

If the cost of a non-DOI owned aircraft will exceed \$25,000, the aircraft service must be acquired via contract rather than Aircraft Rental Agreement and submitted on Form AQD-13, *Request for Contract Services*. The request must be approved by a RAM and an official who has authority to certify that funds are available, then submitted to AQD.

13.7 Emergency Aircraft Procurement

The justification for the procurement of emergency aircraft services must meet either of the following criteria found in 350 DM1:

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.

13.7.1 Ordering Emergency Aircraft Services

The [National Park Service Management Policies 2006](#) state that “The saving of human life will take precedence over all other management actions as the Park Service strives to protect human life and provide for injury-free visits” (Section 8.2.5.1, Visitor Safety and Emergency Response). The NPS ability to respond to incidents is essential to the safety of all who enter NPS areas, and is implemented in this policy.

Pilot and aircraft will be approved 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. All such procurements will have a written risk assessment completed (per Chapter 10.5).

Chapter 14 – COOPERATOR AIRCRAFT

- 14.1 General
- 14.2 Use of Military Aircraft
- 14.3 Affiliate/Volunteer Aircraft
- 14.4 Cooperative Agreements
- 14.5 Letters of Authorization or Memoranda of Understanding/Agreement

14.1 General

A cooperator can be:

1. Any branch of the military,
2. Other government agency, or
3. Affiliate, an entity such as a university.

Aircraft and pilots, both manned and unmanned, must meet DOI standards for general or special use flights. NPS employees may not use such aircraft and pilots without prior OAS approval via an OAS-4, Cooperator Approval Request or a letter with the information listed below. Such requests require the approval of the Regional and National Aviation Manager. 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](#). At a minimum, the following items be provided to the RAM who will forward the request through the 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.

14.2 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 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.

14.3 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](#).

14.4 Cooperative Agreements

Cooperative Agreements are the mechanism NPS uses to facilitate research by cooperators, such as the work by universities that is done in parks. Agreements that involve the use of flight services must contain language stating that aircraft under the operational control of NPS are subject to this reference manual and DOI policies. While a cooperative agreement between NPS and the cooperator for the funding and research may be in place, a separate DOI aviation specific cooperator approval is also required.

14.4.1 Safety Plan/Brief

Aircraft operations conducted in a park by a cooperator require a safety plan or briefing, produced by the cooperator. The safety plan/briefing will be reviewed and acknowledged by the park, then approved by the cooperator. A NPS PASP is not required, although the format may be used by the cooperator.

14.5 Letters of Authorization or Memoranda of Understanding/Agreements

Letters of authorization (LOA) may be issued for cooperator aircraft and pilots. In situations involving numerous aircraft and pilots (military facilities, state Fish and Game agencies, etc.), a DOI established 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.

14.5.1 LOAs for Cooperators

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

1. LOAs 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.
2. Some MOUs require, at least annually, that the cooperator provide a list of aircraft and pilots that support the MOU, which will be used by OAS to issue an LOA.
3. All LOAs must be carried onboard the aircraft or in possession of the PIC in lieu of an interagency aircraft or pilot qualifications card.

14.5.2 MOUs/MOAs for Cooperators

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

1. Responsibility falls to the park to ensure that all MOU/MOA terms are met and that missions occur according to the MOUs/MOAs.
2. The local/regional aviation management plans and park aviation safety plans must address MOUs/MOAs.
3. Unless specified, an MOU/MOA does not have an LOA associated with it unless the terms in 13.5.1 are met.

14.5.3 NPS MOUs (Aviation)

The NPS may have additional MOUs with outside agencies such as the National Transportation Safety Board that allow exceptions to NPS policies. These can be found on InsideNPS.

Chapter 15 – AVIATION TRAINING

- 15.1 Aviation Training Equivalencies
- 15.2 Required Aviation Training
- 15.3 Specialty Training
- 15.4 NPS Pilot Training

15.1 Aviation Training Equivalencies

The NAM in conjunction with the OAS Training Division, is authorized to determine Interagency Aviation Training (IAT) equivalent training that has been acquired from sources other than IAT. This authorization may be delegated (see [DOI OPM-04, Aviation User Training Program](#)).

15.2 Required Aviation Training

Superintendents are responsible for ensuring that all employees involved in the use or control of aviation resources receive the required level of aviation training. Qualifications and currency requirements can be found in the handbooks and guides listed in Chapter 2 and [DOI OPM-04, Aviation User Training Program](#). Only those positions listed and defined in Chapter 1.5.2 that vary in training requirements from OPM-4 or the Interagency Aviation Training Guide are detailed below with their NPS-specific requirements.

15.2.1 Line Managers and Supervisors

Regional directors and their deputies, superintendents and their deputies, and those acting in these line manager positions are required to complete M-2, Line Managers Briefing, or M-3, Aviation Management Training for Supervisors, every three years.

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

15.2.2 Park Aviation Managers

Level 1 aviation complexity parks have a stand alone park aviation managers who are required to complete all “Aviation Manager” training as outlined in OPM-04.

Level 2 aviation complexity parks are required to have collateral duty park aviation managers. The PAM is required to complete the following interagency aviation training courses:

- A-100 Basic Aviation Safety
- A-107 Aviation Policy & Regulations
- A-110 Aviation Transportation of HAZMAT
- A-112 Mission Planning & Flight Request Process A-115 Automated Flight Following
- A-116 General Awareness Security Training A-200 Mishap Review
- A-203 Basic Airspace
- A-204 Aircraft Capabilities & Limitations A-205 Risk Management-I

Other courses may be required by the RAM. The park is required to consult with the RAM prior to commencing any non-emergency aviation activities.

Level 3 aviation complexity parks operate under a regional aviation management plan, and no additional aviation management training is required beyond that specified for line managers and supervisors as outlined in 14.2.1. Parks are required to consult with the RAM prior to commencing any non-emergency aviation activities.

15.2.3 Aircrew Members

Initial A-100 training must be taken in an instructor-led course unless otherwise approved by the RAM.

Recurrent training (every three years) for A-100, A-110 (if applicable), and A-200 may be taken online.

15.2.4 Flight Followers

Those functioning as flight followers must have 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. NPS does not recognize the position *Aviation Dispatcher* as defined in the IAT Guide and OPM-04. The park will identify in the park aviation plan the difference between a flight follower and an *Aircraft Dispatcher* (this training can be found in [NWCG 310-1](#)).

15.2.5 All Hazard/Resource Helicopter Manager and Crewmember Task Books

Task books can be found on the Aviation Management page of InsideNPS or by requesting a copy from the RAM. These task books are appropriate for non-fire helicopter positions. Fire positions should use the appropriate NWCG task book.

Users unfamiliar with these procedures should contact their RAM prior to initiating a task book for these positions. Once completed and approved, the task book(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 book.

All-Hazards/Resource Helicopter Manager/Crewmember Training, Qualifications, and Experience Requirements

POSITION	PREREQUISITES	TRAINING REQUIREMENTS ¹	CURRENCY
Helicopter Manager¹	Fully qualified as an all-hazard/resource helicopter crew member. S-271	S-372 ² Successful training assignments under the supervision of a qualified helicopter manager and completion of the All-Hazard/Resource Helicopter Manager Position Task Book.	1) Experience in the position, on a project or incident every 3 years, and attendance at RT-372 every 3 years. OR 2) Meet the "A" course requirements listed in the <i>Interagency Aviation Training Guide</i> .
Helicopter Crewmember	None	S-271 ² Successful training assignments under the supervision of a qualified helicopter manager/crewmember and completion of the All-Hazard/Resource Helicopter Crewmember Position Task Book.	1) Experience in the position on a project or incident every 3 years, and completion of A-209 Helicopter Operations and A-200 Mishap Review every 3 years. OR 2) Experience in the position on a project or incident every 3 years, and completion of both A-200 Mishap Review and a RAM- approved course equivalent for A-209 every 3 years.

1 Starting 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), an All-Hazards/Resource Helicopter Crewmember task book and have met the requirements of this position as outlined above. Individuals that were qualified Resource Helicopter Managers prior to 2016 are not required to complete a task book.

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

15.2 Specialty Training

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

15.3.1 Short-haul, ACETA, Rappel, and STEP

Training provided by sources other than qualified NPS personnel for short-haul, ACETA, rappel and STEP must be requested through RAMs and approved by the NAO.

15.3.2 Water Ditching and Survival Training

NPS pilots and personnel acting as crew members onboard aircraft on over-water flights beyond gliding distance to shore or take-off/landings to water will complete A-312, *Water Ditching and Survival* training. However, this requirement may be met by an NAO approved equivalent, such as military or commercial instruction.

Refresher training is required every three years, either by completing A-312 or by an in-class “dry” simulation.

15.3.3 Flight Followers

Those functioning as flight followers must have 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. NPS does not recognize the position Aviation Dispatcher as defined in the IAT Guide and OPM-04. The park will identify in the park aviation plan the difference between a flight follower and an Aircraft Dispatcher (this training can be found in NWCG 310-1).

A15.3.4 II-Hazard/Resource Helicopter Manager and Crewmember Task Books

Task books can be found on the Aviation Management page of InsideNPS or by requesting a copy from the RAM. These task books are appropriate for non-fire helicopter positions. Fire positions should use the appropriate NWCG task book.

Users unfamiliar with these procedures should contact their RAM prior to initiating a task book for these positions. Once completed and approved, the task book(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 book.

15.3.5 Helicopter Longline Remote Hook Training

NPS fire personnel involved in external load work must:

- be qualified as a Helicopter Longline Remote Hook Specialist (HELR), meeting the training requirements per NWCG PMS#310-1
- or
- be qualified as a helicopter crew member (HECM).

NPS non-fire personnel involved in external load work must:

- be qualified as an aircrew member and complete A-219 training triennially
- or
- be qualified as an all-hazard/resource helicopter crew member (HEAC).

15.4 NPS Pilot Training

See Chapter 9 of this reference manual for manned aircraft training and Chapter 11 of this reference manual for unmanned aircraft systems training.

Chapter 16 – AVIATION AWARDS PROGRAM

16.1 NPS Aviation Awards Program

16.2 DOI Aviation Awards Program

16.1 NPS Aviation Awards Program

The NPS Aviation Awards Program recognizes four areas of excellence in aviation. These awards shall be awarded from the NPS Aviation Branch Office.

16.1.1 Wright Brothers Aviation Safety Award

Standard: 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.

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

Procedures: Nominations will include a narrative of purpose of recognition. Nominations from the field or RAM will include individual(s) name, park, and contact information. Complete nomination package will be submitted to the Aviation Branch Chief for consideration.

Frequency: Unlimited number to be given throughout the year.

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

Standard: Recognizes an individual, crew or program 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-hazard programs.

Criteria: 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.

Procedures: Nominations will include a narrative of purpose of recognition. Nominations from the field or RAM will include individual(s) name, park, and contact information. Complete nomination package will be submitted to the Aviation Branch Chief for consideration.

Frequency: To be awarded to one individual, crew or program, once a year.

16.1.3 Excellence in Mentorship Aviation Award

Standard: 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.

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

Procedures: Nominations will include a narrative of purpose of recognition. Nominations from the field or RAM will include individual(s) name, park, and contact information. Complete nomination package will be submitted to the Aviation Branch Chief for consideration.

Frequency: Unlimited number to be given throughout the year.

16.1.4 NPS Aviator of the Year (Rotor and Fixed Wing)

Standard: 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.

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

Procedures: Nominations will include a narrative of purpose of recognition. Nominations from the field or RAM will include individual(s) name, park, and contact information. Complete nomination package will be submitted to the Aviation Branch Chief for consideration.

Frequency: To be awarded to one individual, once a year. The NAM will make a call for nominations annually.

16.2 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](#). DOI aviation safety award has its own standard, criteria and type of award respectively identified in policy.

16.2.1 Award for In Flight Action

The award is established to recognize onboard flight crewmembers, aircrew members, and passengers who, through outstanding airmanship, courage, or other action, materially contribute to the successful recovery from an emergency, or who minimize or prevent aircraft damage or injury to personnel during a DOI aviation-related occurrence. The award may also be presented to non-DOI personnel.

16.2.2 Award for Safe Flying

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

16.2.3 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.

16.2.4 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.

16.2.5 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. These are highlighted on [DOI Airward News](#).

Chapter 17 – AIRCRAFT MISHAP PROCEDURES

- 17.1 Aircraft Mishaps
- 17.2 Mishap Notification Procedures
- 17.3 Aviation Mishap Response Plan
- 17.4 Aircraft Mishap Investigations
- 17.5 Aircraft Mishap Review Board
- 17.6 Aircraft Mishap Documentation

17.1 Aircraft Mishaps

All aircraft mishaps range from most severe (accidents) to least severe (incidents), but all instances will be reported via [SAFECOM](#).

17.1.1 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 NAM, NPS regional director (RD), and the OAS in accordance with 352 DM 3, Aircraft Mishap Notification, Investigation and Reporting and NPS policy. Accident classification and investigation is the responsibility of the NTSB.

17.1.2 Incidents with Potential (IWP)

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

17.1.3 Aircraft Incidents

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

17.1.4 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](#).

17.2 Mishap Notification Procedures

Nothing in the following notification procedures should be interpreted to delay emergency response 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.

17.2.1 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 NAM, 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.

17.2.2 NPS Internal Aviation Notification and Routing Procedures

1. For aviation mishaps or other aviation related events 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.
2. 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.

17.3 Aviation Mishap Response Plan

Each unit that dispatches or controls aviation assets will develop an "Aviation Mishap Response Plan" that will detail the actions that need to be accomplished in the event of an aviation mishap. 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, flight and aircrew members, 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.

17.4 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.

17.5 Aircraft Mishap Review Board

A DOI 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 directives.

17.5.1 NPS Attendance, Report Routing and Follow-up Actions

Per DOI [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 forward the report 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.

17.6 Aircraft Mishap Documentation

17.6.1 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 16.1 above.

17.6.2 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.

POSITION	AUTHORITY	RESPONSIBILITIES	CRITICAL NOTES
Individual	Submission	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.	Fill out completely and accurately. Report only the facts. Narratives should be brief and concise.

POSITION	AUTHORITY	RESPONSIBILITIES	CRITICAL NOTES
Park Aviation Manager	Submission	If only a hardcopy has been completed, will send that copy to OAS.	Fill out completely and accurately. Report only the facts. Narratives should be brief and concise.
	E-Mail Notification	Receives e-mail notification of all initial, modified and completed SAFECOMs identifying their NPS field office as having operational control.	Provide feedback to person submitting (unless anonymous).
	Corrective Actions	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).	Must treat all corrective action descriptions as if they were public.

POSITION	AUTHORITY	RESPONSIBILITIES	CRITICAL NOTES
Regional Aviation Manager	E-Mail Notification	Receives e-mail notification of all initial, corrective action, modified, and completed SAFECOMs identifying NPS operational control within their state.	Coordinate with PAM.
	Corrective Actions	Reviews all information. May take and document additional corrective actions.	Coordinate with PAM.
	Modify Actions	Authority to sanitize references in the "Narrative" block to parties involved, including aircraft N numbers, company names, and names of individuals except for the submitter's name.	Coordinate with PAM. Verify and amend all info for accuracy.
	Operational Control	Makes initial determination of the agency, region, and park unit that have operational control.	Determines who will receive e-mail notification.
	Category	Selects the appropriate category to classify the SAFECOM.	Multiple categories possible.
	Make Public	Copies original text into the public text area for both the narrative and corrective action fields. Makes the SAFECOM "public" (if overly sensitive, consult with NAO before making public).	Ensures all public text is sanitized in narrative and corrective action fields prior to making public.
	Make Public	Has the authority to sanitize information and make the SAFECOM "public" (if not already done at the state level). Coordinates with OAS.	Ensures all public text is sanitized in narrative and corrective action fields prior to making public.

POSITION	AUTHORITY	RESPONSIBILITIES	CRITICAL NOTES
National Aviation Manager or National Aviation Safety Manager	E-Mail Notification	Receives e-mail notification of all initial, corrective action, modified, and completed SAFECOMs nationwide that identify NPS operational control.	Coordinate with RAM.
	Corrective Actions	Takes additional corrective actions, if necessary, and documents actions on the SAFECOM.	Coordinate with RAM.
	Modify Actions	Authority to change all SAFECOM information (except for the RAM's comments and the original narrative).	Coordinate with RAM.
	Make Public	Has authority to sanitize information and make the SAFECOM "public" (if not already done at the regional level). Coordinates with OAS.	Ensures all public text is sanitized in narrative and corrective action fields prior to making public.

POSITION	AUTHORITY	RESPONSIBILITIES	CRITICAL NOTES
	Completion	Delegates authority to the RAMs to make the SAFECOM "complete."	Ensures all public text is sanitized in narrative and corrective action fields prior to making public.
	Distribution	Distributes all "public" NPS SAFECOMs to NPS RAMs and other agencies.	Coordinates with OAS.
	Designates Users	Authority to identify all NPS users and their appropriate permission levels. Must notify OAS of additional users/ changes/updates.	Coordinates with OAS.
	Out of Agency	Authorized to review other agency "public" SAFECOMs. Read Only!	Coordinates with OAS.