



United States Department of Agriculture

National & Region 8 Aviation Safety and Management Plan 2016



Forest Service

January 2016

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at http://www.ascr.usda.gov/complaint_filing_cust.html and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

USDA is an equal opportunity provider, employer and lender.

2016

National Aviation Safety and Management Plan

Prepared and Reviewed By: */s/ Michael Peitz*
Michael Peitz, Branch Chief, Aviation Strategic Plans (Acting)

Date: 1/27/2016

Reviewed By: */s/ Aaron Schoolcraft*
Aaron Schoolcraft, Alaska and Pacific Northwest Region
Assistant Fire Director, Aviation; Regional Aviation Officer
Council Chairperson

Date: 1/25/2016

Reviewed By: */s/ Nick Hough*
Nick Hough, Eastern Region Aviation Safety Manager,
National Aviation Safety Council Chairperson

Date: 1/25/2016

Reviewed By: */s/ Arthur Hinaman*
Arthur Hinaman, Assistant Director, Aviation

Date: 3/4/2016

Reviewed By: _____
Frank Guzman, Deputy Director, Operations-Acting

Date: _____

Approved By: */s/ Dan Olsen*
Dan Olsen, Director, Fire and Aviation Management-Acting

Date: 3/11/2016

2016
2016

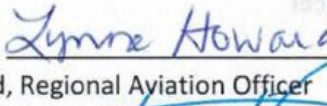
Regional Aviation Safety and Management Plan

Prepared By: 
Jimmy Keyes, Regional Aviation Safety Manager

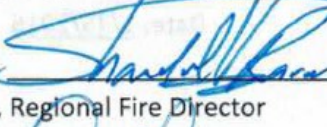
Date: 31 May 16

Reviewed By: 
Jimmy Keyes, Regional Aviation Safety Manager

Date: 31 May 16

Reviewed By: 
Lynne Howard, Regional Aviation Officer

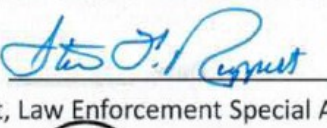
Date: 5/1/16

Reviewed By: 
Shardul Raval, Regional Fire Director

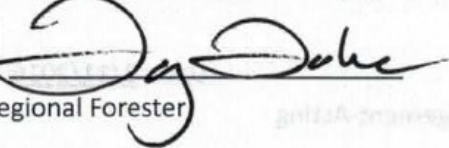
Date: 6/1/16

Approved By: 
Don Duerr, Forest Health Protection Director

Date: 6/6/16

Approved By: 
Steve Ruppert, Law Enforcement Special Agent in Charge

Date: 6/6/2016

Approved By: 
Tony Tooke, Regional Forester

Date: 06/13/2016

2016

Forest Health Protection/Law Enforcement Management Plan

This Page Intentionally Left Blank

2016

Forest/Station Aviation Safety and Management Plan

Prepared By: /s/ Signature

Date: X/XX/2016

Name, Position

Reviewed By: /s/ Signature

Date: X/XX/2016

Name, Position

Reviewed By: /s/ Signature

Date: X/XX/2016

Name, Forest/Station Aviation Officer

Reviewed By: /s/ Signature

Date: X/XX/2016

Name, Forest Fire Management Officer

Approved By: /s/ Signature

Date: X/XX/2016

Name, Forest Supervisor/Station Director

Contents

1.0 Aviation Management Plan.....	1
1.1 Purpose.....	1
1.2 Mission, Vision, Core Values.....	1
1.3 Leader’s Intent.....	2
1.4 Aviation Doctrine.....	3
1.5 USDA Forest Service Aviation Strategic Plan 2014–2018.....	6
1.6 Authority.....	6
1.7 General Policy.....	7
2.0 Aviation Management Organization.....	7
2.1 Organization.....	7
2.2 Washington Office (WO) Headquarters Staff.....	8
2.3 Regional Office (RO) Staff.....	18
2.4 Forest Staff.....	21
2.5 Additional Aviation Positions.....	24
2.6 National Groups/Committees.....	24
2.7 Program Overview.....	25
3.0 Administration.....	26
3.1 General.....	26
3.2 Reporting and Documentation Requirements.....	26
3.3 Aviation Plans.....	26
3.4 Aircrew Orientation Briefing Package.....	30
3.5 Land Use Policy for Aviation Activities.....	31
3.6 Budget.....	32
3.7 Contracting.....	32
3.8 Aircraft Contract Start/Modification/Extension.....	33
3.9 Contractor Performance.....	33
3.10 End Product Contracts.....	34
3.11 Aircraft Acquisition.....	34
3.12 Cooperator Aircraft.....	35
3.13 Aircraft Administrative Use and Reporting.....	36
3.14 Dispatching.....	37
3.15 Flight Use Reporting.....	37
3.16 Coding and Funding of Contract, Fleet, Severity Aircraft Availability.....	38
3.17 Working Capital Fund (WCF) (Fleet Aircraft).....	38
3.18 Federal Excess Personal Property (FEPP).....	39
3.19 Program Reviews.....	39
3.20 New Project/Program/Issue Requests.....	39
4.0 Aviation Safety Management Systems.....	43
4.1 General.....	43

4.2 Safety Management Systems (SMS).....	44
4.3 Policy.....	45
4.4 Risk Management.....	45
4.5 Assurance.....	47
4.6 Promotion.....	51
4.7 National Fire and Aviation Operations Alert System.....	52
5.0 Aviation Operations.....	52
5.1 General.....	52
5.2 Manuals, Handbooks, and Guides.....	53
5.3 Public/Civil Aircraft Operations.....	57
5.4 Employees on Unapproved Aircraft.....	58
5.5 Aviation Emergency Response.....	58
5.6 Flight Planning.....	59
5.7 Flight Following.....	59
5.8 Radio Frequency Management/Communications.....	60
5.9 Latitude and Longitude Formats.....	60
5.10 Overdue or Missing Aircraft.....	60
5.11 Mishap Response.....	61
5.12 Passengers.....	61
5.13 Transportation of Hazardous Materials.....	62
5.14 Invasive Species Control.....	63
5.15 Fire Chemicals and Aerial Application Policy Near Waterways.....	65
5.16 Search and Rescue (SAR).....	66
5.17 Large Airtanker Operations.....	67
5.18 SEAT Operations.....	67
5.19 Aerial Supervision Operations.....	68
5.20 Helicopter Operations.....	70
5.21 Aerial Ignition Operations.....	71
5.22 Wild Horse & Burro Operations.....	71
5.23 Aerial Capture, Eradication and Tagging of Animals (ACETA).....	72
5.24 Water Scooper Operations.....	72
5.25 Smokejumper Operations.....	72
5.26 Light Fixed-Wing Operations.....	73
5.27 Law Enforcement and Investigations (LEI) Operations.....	74
5.28 Unmanned Aerial Systems (UAS).....	75
5.29 Forest Health Protection (FHP) Operations.....	76
5.30 Aerial Firefighting Use and Effectiveness (AFUE) Study Operations.....	77
6.0 Aviation Training.....	78
6.1 Aviation Training for All Flight Activities and Positions.....	78
6.2 Responsibility.....	78
6.3 Instructor Standards.....	79
6.4 Records Management.....	79

6.5 Tuition and Travel	80
6.6 Development	80
6.7 IAT/NWCG Crosswalk	80
6.8 Aviation Contracting Officer Representative (COR) Requirements.....	81
6.9 Crew Resource Management (CRM) Training	81
7.0 Airspace Coordination.....	81
7.1 Interagency Airspace Coordination	81
7.2 Fire Traffic Area (FTA)	82
7.3 Temporary Flight Restriction (TFR).....	82
7.4 Aircraft Transponder Code (Firefighting)	82
7.5 Airspace Boundary Plan.....	83
7.6 Airspace De-confliction.....	83
7.7 Airspace Conflicts	84
7.8 Airspace Agreements – Memorandums of Understanding.....	84
8.0 Aviation Security	85
8.1 Aviation Security.....	85
8.2 FS Facilities Security Risk Assessments.....	85
8.3 FS Security Response Actions	86
8.4 General Aviation Security Awareness Programs	86
8.5 Aircraft Security Information (Cooperators)	86
8.6 TSA Commercial Airport Security	87
9.0 Aviation Facilities	87
9.1 General	87
9.2 Permanent Aviation Facilities.....	88
9.3 Temporary Aviation Facilities	88
9.4 Safety.....	88
9.5 Agency Owned/ Operated Facilities	89
9.6 Agency Owned/Operated Airstrips	89
9.7 Leasing	89
9.8 Funding	89
9.9 Land Use Agreements.....	90
9.10 Facilities Security	90
10.0 Appendix	91
10.1 Sample Letter of Cooperator Approval	91
10.2 Cooperator Approval Guide.....	91
10.3 Authorization for Law Enforcement and Investigations Employees to Fly on Department of Justice (DOJ) and Department of Homeland Security (DHS) Aircraft.....	92
10.4 Project Proposal Template	93

Regional Appendix

10.5 Policy Change -FMS5700 & 5709.16, Instrument Flight Conditions and Night.....	99
10.6 Aviation Unit Contact List.....	101
10.7 Regional leased aircraft information.....	102
10.8 Southern Region Type 3 Helicopter “Limited Use” Authorization.....	103
10.9 Authorization for Law Enforcement and Investigations Employees to Fly on Department of Justice (DOJ) and Department of Homeland Security (DHS) Aircraft.....	104
10.10 Forest Aviation Plan Supplement Checklist.....	105
10.11 Airport Security 49 CFR 1542.....	106
10.12 Project Aviation Safety Plan Template (PASP).....	107
10.13 Regional Aviation Safety Plan Guide for Forest or Unit Plans.....	118

Digest

The table below provides a list of changes made from the 2015 National Aviation Safety and Management Plan (NASMP). *Note:* This list is not inclusive of all changes made in the 2016 NASMP.

Section	Description of Change
1.1	Updated last sentence of first paragraph: While the information contained within this plan references policy, this document neither establishes policy nor does it change existing policy. (WO)
1.2 & 1.3	Aligned section with 2014-18 USDA FS Aviation Strategic Plan (WO)
1.4	Aligned with our requirement to use Small Businesses in our contracting process (R6)
1.5	Aligned section with 2014-18 USDA FS Aviation Strategic Plan (WO)
2.1	Changed end of sentence (description of organization) (WO)
2.2	Modified language, updated program manager titles, added Aviation Program Support position (WO)
2.6	Updated language, removed NAT Branch Chief's Committee, and removed AFF Subcommittee (WO)
2.7	Updated language/information about FS Aviation Program (WO) (R3)
3.0	Removed link to PASP until there is a national standard which can be provided as an example (WO)(R3)
3.11	Changed title and updated all language in aircraft acquisition section (WO)
3.20	Removed aircraft from New Project/Program/Issue Requests section (WO)
3.3	Retitled plans, added language, and broke out Scooper operations in Aviation Plans section (WO)
3.6	Modified budget language (WO)
4.5.1	Removed 'Technical' from Aviation Safety and Technical Assistance Team / Entire paragraph updated and reworded (R6)(WO)
4.5.3	Added Aircraft Accident Investigation Guide and created intra-document link to 5.2.3/FS Guides (WO) (R9)
4.5.5	Added 'prior to commencing non-emergency flights or flights outside the scope of an approved training program' language (R5)
5.2.1	Added rotorcraft flight manual and Commercial Pilot Practical Test Standards (R5)
5.2.3	Removed Management Review and Quality Assurance Guide (WO)
5.2.3	Added Operations and Safety Procedures Guide for Helicopter Pilots (R5) / Added UAS Guide (WO) / Added Aircraft Accident Investigation Guide and description of current and future locations (R9) (WO)
5.2.4	Removed UAS Operating Plan (WO) and added Airtanker Ops Plan, Aircraft Coordination Ops Plan, and National Rappel Ops Guide UAS Operating Plan to the Forest Service Aviation Operations Plans section (WO)
5.3	Removed 'exception not the rule' statement (R5)(WO)
5.5	Updated Aviation Emergency Response title and revised language (WO) / Further modified language and provided link to an aviation risk assessment (R3)

Section	Description of Change
5.6	Inserted Fight Hazard Map information and guidance information for GIS Specialists
5.7	Updated/revised AFF language (WO)
5.9	Replaced first paragraph concerning aviation standard for communication location coordinates and added FS bulletin # (WO)
5.13	Inserted additional public aircraft language and updated hyperlinks (R5)
5.17	Updated language and added FS A/t Ops Plan (WO)
5.17.1	Removed operational considerations for Very Large Airtankers and Interagency Aerial Supervision Guide (IASG) reference (WO)
5.20.4	Differentiated short-haul missions by listing emergency short-haul independent of LEI short-haul and then inserted hyperlink to the Emergency Medical Short-Haul Operations Plan (WO/R6)
5.20.8	Changed board to subcommittee and then changed the subsequent acronym (WO)
5.25.1	Inserted ram air parachute system language and a hyperlink to the associated CMIP (WO)
5.25.2	Changed evaluation 'board' to 'subcommittee' and then changed the subsequent acronym (WO)
5.26.2	Paragraph removed SE Airplane IMC at night paragraph (it's now policy) (WO)
5.27.3	Updated Aviation Emergency Response title (WO)
5.27.5	Updated and rewarded entire DHS paragraph + updated intra-document link to Appendix 10.3
5.28	Updated and reworded entire Unmanned Aerial Systems (UAS) paragraph (WO)
5.29	Removed last paragraph from the Forest Health Protection section (WO)
5.30	Inserted information about the Aerial Firefighting Use and Efficiency Study Operations (WO)
6.6	Updated aviation training language (R3)
6.9	Modified Crew Resource Management (CRM) Training language/ <i>reduced verbiage</i> (WO)
8.1 & 8.3	Changed National Terrorism Alert System to Advisory System to reflect actual title(R3)
9.4	Removed second sentence for efficiency (in order to not parrot policy which is referenced) (WO)
10.4 (Appendix)	Removed "aircraft" from General Process Information section (WO) / Added "Program" and provided example to General Project Process section (R3)

1.0 Aviation Management Plan

1.1 Purpose

The purpose of the Forest Service National Aviation Safety and Management Plan (NASMP) is to describe Washington Office Fire and Aviation Management (FAM) leader's intent, authority, roles and responsibilities, programs, activities, and to provide strategic and operational direction and operational guidance to each organizational level. While the information contained within this plan references policy, this document neither establishes policy nor does it change existing policy. Individual Regions and Units may supplement this plan when needed.

The USDA Forest Service must endeavor to place the safety of employees above all else and ensure recognized hazards are mitigated. The Forest Service's goal is to develop a culture that achieves and maintains a zero accident rate. Prior to conducting any work projects, all risks should be mitigated to the lowest acceptable level. Incorporating [FS Aviation Safety Management System \(SMS\) Guide](#) with a strong Quality Assurance (QA) component will improve the operating model for safety, efficiency, and effectiveness.

Regional Supplement

The National Aviation Management Plan (NASMP), along with these Regional Aviation Management Supplements (Regional Aviation Management Plan) defines the aviation program within Southern Region. The operational policies and methods used are intended to be consistent with national policy and pertinent Federal Aviation Regulations (FARs). The Regional Aviation Management Plan addresses where the Region has established more restrictive and conservative operational and safety policies than those established at the National level. The Regional Aviation Management Plan also identifies the responsibilities of the Regional Aviation Program Managers, identifies each position within the organization, and lists tasks and responsibilities.

The NASMP, along with Regional Aviation Management Plan, are to be used by the forests, in conjunction with specific Forest supplements, to plan and execute aviation programs and projects.

Forest Supplement

Placeholder.

1.2 Mission, Vision, and Core Values

Forest Service Aviation Mission. To provide safe, efficient, and coordinated aviation support for agency operations; to support partnership agreements; and to meet current and future needs through innovation and technology in order to sustain the health, diversity, and productivity of the Nation's forests and grasslands.

Forest Service Aviation Vision. Lead the world in aviation, supporting natural resources and wildland firefighting.

Fire and Aviation Management Core Values. Safety, integrity, treating people with mutual respect, and land stewardship.

Forest Service Aviation Core Values. To succeed in our mission as a public service organization, we believe that:

- Uncompromising integrity is a nonnegotiable part of our daily work activities.
- Excellence is expected.
- Proactive safety is a condition of employment.
- Disagreement does not equal disrespect.
- Everyone is accountable for his or her actions.
- Honest mistakes are expected.
- We can overcome challenges through innovation, collaboration, and hard work.

Regional Supplement

The Regional Aviation Group will support the efforts of the Forests to accomplish safe and effective use of aircraft and aerial resources through a systems-wide approach to safety and management. The Regional Aviation Group is committed to:

- Ensure operational decisions are made mindfully, with safety given priority over mission accomplishment
- Providing the best available support to the field
- A cooperative alliance with all employees to identify and resolve hazardous situations before they become unintended outcomes
- Ensuring aviation operations at all levels are focused on the safety of flight crews and other personnel

Forest Supplement:

Placeholder.

1.3 Leader's Intent

The Forest Service's aviation program goal is to provide aviation tools that safely and efficiently accomplish missions related to the task of managing national forests. Aircraft are dynamic and high impact resources that can be both expensive and unforgiving when used carelessly. These resources require competent operational oversight; and appropriate utilization of aviation resources can drastically improve operational effectiveness and efficiency, while reducing cost and overall risk. Aviation management requires balanced and pragmatic consideration of multiple complex factors, including safety, the environment, costs and mission goals.

Goal 1: Zero Accident Organization. Become a zero-fatality and zero-accident organization by implementing a Safety Management System (SMS) agency-wide approach to management and operations that includes safety management policy, safety risk management, safety assurance and safety promotion.

Goal 2: Take Care of Our People. Recruit and maintain a sufficient number of highly qualified, trained and motivated workforce members.

Goal 3: Organize for Success. Align the Forest Service aviation program and organization to meet the needs of current and future operations.

Goal 4: Take Advantage of Technology. Where feasible, deploy technologically advanced and cost-effective aircraft, equipment and infrastructure to meet the agency's current and future mission.

Refer to the [USDA Forest Service Aviation Strategic Plan 2014-2018](#) for additional information.

Regional Supplement

N/A

Forest Supplement

Placeholder.

1.4 Aviation Doctrine

Management has defined policy and doctrine in [FSM 5700](#) that conveys aviation safety expectations and objectives to employees. Aviation safety policy in [FSM 5700](#) addresses roles, responsibilities, and authorities regarding aviation safety at each organizational level.

This process starts with a clear value-based philosophy of what the organization and its business model should be and what it is about. The relevance of safety principles to Forest Service doctrine for aviation management cannot be overstated. These principles permeate the aviation management business model and drive SMS program design.

“As an organization our commitment is to manage risk to the lowest practical level.” This effort is an iterative process that requires diligence in the following principle areas:

- Develop and maintain a safety culture that recognizes the value of safety management systems;
- Clearly define the duties, responsibilities, and accountabilities for all employees;
- Provide all employees with adequate training and information to enhance performance;
- Comply with or exceed all regulatory and agency specific requirements;
- Proactively manage the risks associated with our operation;

- Standardize risk management as a part of the aviation operations planning process such that all deliberate/strategic risk assessments follow the general format found in section 3.5 of the [SMS Guide](#).
- Ensure externally supplied services and materials meet or exceed all regulatory and agency specific requirements;
- Determine specific performance goals and consistently measure performance against those goals;
- Conduct internal management and safety reviews to improve performance;
- Encourage all employees to report errors and safety issues in the spirit of a just culture.
- To formalize risk management as a part of the planning process, risk assessments should follow the format found in section 3.5 of the [FS Aviation Safety Management System \(SMS\) Guide](#).

1.4.1 Quality Principles

Top management shall ensure that quality policies and procedures are consistent with [SMS](#) requirements defined in this manual. [SMS](#) quality management (assurance and control) processes shall be consistent with agency to improve the efficiency of the entire organization.

1. “Create a constancy of purpose.” Replace short-term reaction with long-term planning. This applies to action plans that make adjustments for weaknesses and deficiencies.

- Avoid reactive fixes to organizational problems.
- Define the problems of today and the future.
- Allocate resources for long-term planning and plan for high quality services.
- Constantly improve product and service.

2. “Adopt a new philosophy.” Meaningful change can only take place from within the organization. Change focus from operations output to quality service.

- Quality costs less not more.
- The call for major change comes from the top.
- Stop waiting for direction from upper management and instead seek direction by evaluating field customer needs.

3. “Cease dependence on inspection to achieve quality.” Quality does not come from inspection alone. If quality is designed into the process, and standards are fully implemented, then variation is reduced, and there is less need to inspect operations for defects.

- Inspections should be used to collect data for process control and to provide input to guide management decisions resulting in a reduction in potential errors.

- Quality cannot be achieved through reactive identification and elimination of errors because it perpetuates the fly/crash/fix/fly cycle.

4. "Do not award business based on price tag alone." Our actions should be focused on the detection of variations between vendors' performances to identify the best service providers. Contract language should be consistent and clear so vendors understand our requirements.

- Price alone has no meaning: change focus from lowest cost to best value/cost.
- Develop a longer term relationship (contract) between the operation and vendors.

5. "Improve constantly the system of production and service." Each new action must constantly strive to reduce variation and introduce mitigations that reduce mishaps and improve effectiveness.

- Quality starts with the intent of management, which is found in directives.
- Design Quality into the system with a fundamental focus on team work in design.
- Constantly maintain awareness and continue to reduce waste.
- Constant improvement of the system requires greater efforts than reactively responding to errors and issues.

1.4.2 Aviation Promotion Principles

Management must be committed to the implementation of SMS as their highest priority: to provide safety resources, to continuously improve safety practices, and to provide a framework for responsibility and accountability.

1. "Institute a program of education and self-improvement." Personnel need a thorough grounding in the principles, tools, and techniques of SMS. People must learn new ways of working together as teams and adopt new behaviors that support the new management philosophy.

- Educate for higher awareness in management and in customers.
- Develop team-building skills in employees.

2. "Break barriers among staff areas." Another idea central to QA is the concept of the 'internal customer,' which in our case may mean that management processes, antiquated policies, budget allocations, and hiring restrictions are the barriers to our success. We need to act to correct such inefficiencies.

- Promote team work to identify internal barriers and satisfy the internal customer.
- Know your inefficiencies as well as those of your suppliers and customers.

3. "Adopt and institute leadership." Leadership means designing the system around high standards, building a quality culture, and modeling behavior that exemplifies the values to support such a culture.

- Remove barriers to foster pride of workmanship and recognize positive outcomes.
- Leaders must know the work they manage and supervise.

4. "Take action to accomplish the transformation." Everyone in the organization must work together to facilitate change management. Forest Service Aviation Managers at all levels in the program should:

- Be proactive within the implementation of the change management process.
- Take pride in the new doctrine and the Quality Assurance Program Plan (QAPP).
- Include a cross section of people to implement the change from the top to the bottom.

1.5 USDA Forest Service Aviation Strategic Plan 2014–2018

The [Aviation Strategic Plan](#) provides an outline of how the agency will use aviation assets to accomplish the Forest Service mission: "To sustain the health, diversity, and productivity of the Nation's forests and grasslands for the benefit of present and future generations."

The Aviation Strategic Plan defines Aviation Management's vision, mission, values and goals. To accomplish the Forest Service Aviation mission, "To provide safe, efficient, and coordinated aviation support for agency operations; to support partnership agreements, and to meet current and future needs through innovation and technology in order to sustain the health, diversity, and productivity of the Nation's forests and grasslands," Aviation goals are focused on safety, people, organization, and technologically advanced assets. These goals are characterized by specific objectives. Performance measures are used to define how well the agency has advanced toward accomplishing each objective. Strategies define the method or approach taken to accomplish the objectives and are reflective of opportunities and threats. Action plans will move the strategies forward and will be specific, measurable, and attainable. Progress will be reported in our annual aviation program report to assist the Forest Service with monitoring performance.

The Aviation Strategic Plan is the umbrella document that provides strategic context for all aviation activities. The plan is not a stand-alone document, but rather it complements, enhances, and guides other plans and strategies. The plan is tiered to higher level documents such as the Forest Service Strategic Plan. It is the long-term framework for guiding future Forest Service Aviation activities.

Regional Supplement

N/A

Forest Supplement

Placeholder.

1.6 Authority

This plan fulfills the requirements outlined in [FSM 5700](#). This plan sets the standard that will be aviation policy and has been developed to provide standardization and policy for aviation programs. While this document is Forest Service specific, it does incorporate interagency standards.

Regional Supplement

N/A

Forest Supplement

Placeholder.

1.7 General Policy

The policy of the Forest Service requires employees to follow the direction in aviation manuals, handbooks, and the aviation guides as listed in this chapter, under [FSM 5706](#).

Aviation operations require regulations, manuals, guides, and checklists to execute and coordinate operations in a safe and effective manner. Where the terms “shall” and “must” are used in manuals, handbooks, or guides, compliance with those items is mandatory and not discretionary ([FSM 1110.8 – Exhibit 01 Degree of Compliance or Restriction in Directives](#)). These principles should guide employees; they are authoritative, but require employees to apply their judgment in order to solve problems.

Regional Supplement

Each Forest shall supplement the Regional Aviation Management Plan with forest level supplements contained within this document or as a standalone document. The forest level supplements will contain more specific details relating to aviation operations conducted on or for the forest. The Forest Aviation Plan and the Forest Aircraft Incident/Accident Response Guide shall be reviewed and updated annually.

Forest Supplement

Placeholder.

2.0 Aviation Management Organization

2.1 Organization

The Washington Office (WO) Fire and Aviation Management (FAM) is located at the USDA Forest Service National Headquarters in Washington D.C. and at a Washington Office detached unit in Boise, ID.

The Forest Service has nine Regional Offices and the North East Area located throughout the United States.

Region 1: Missoula, MT

Region 2: Golden, CO

Region 3: Albuquerque, NM

Region 4: Ogden, UT

Region 5: Vallejo, CA

Region 6: Portland, OR

Region 8: Atlanta, GA

Region 9: Milwaukee, WI

Region 10: Juneau, AK (Fire and Aviation are combined with Region 6, Portland, OR)

Northeast Area: Newtown Square, PA

There are five (5) Research Stations, one (1) Institute, and one (1) Laboratory.

Pacific Northwest Research Station: Portland, OR

Pacific Southwest Research Station: Berkeley, CA

Rock Mountain Research Station: Ft. Collins, CO

Northern Research Station: Newtown Square, PA

Southern Research Station: Asheville, NC

International Institute of Tropical Forestry: San Juan, PR

Forest Products Laboratory: Madison, WI

Each Region/Station/Area has several Forests/Units located within their geographical location or area of responsibility.

2.2 Washington Office (WO) Headquarters Staff

2.2.1 Director, Fire and Aviation (FAM)

The Director, FAM, is responsible to the Deputy Chief for State and Private Forestry. The Director, FAM's responsibilities are located in the [FSM 5704.2](#), [FSM 5720.43](#), and the [FSH 5709.19, Chapter 10](#).

2.2.2 Deputy Director, Aviation, Operations and Risk Management

The Deputy Director, Aviation, Operations and Risk Management responsibilities are located in the [FSM 5704.21](#) and the [FSH 5709.16, Chapter 50](#).

2.2.3 Assistant Director, Aviation

The Assistant Director, Aviation responsibilities are located in the [FSM 5704.21](#). The Assistant Director, Aviation provides national program direction, leadership, and management of the Forest Service aviation program, including coordination of aviation activities with other staffs, agencies, and groups, with an emphasis on aviation planning, budget, policy, operations, aircraft airworthiness, pilot standardization, aviation training and quality assurance. The Assistant Director, Aviation supervises:

- Branch Chief, Aviation Business Operations – Washington D.C.
- Branch Chief, Aviation Operations – Boise, ID
- Branch Chief, Airworthiness – Boise, ID

- Branch Chief, Pilot Standardization – Boise, ID
- Branch Chief, Aircraft Program Management – Washington D.C.
- Branch Chief, Aviation Strategic Plans – Washington D.C.

2.2.4 Branch Chief, Aviation Business Operations (ABO)

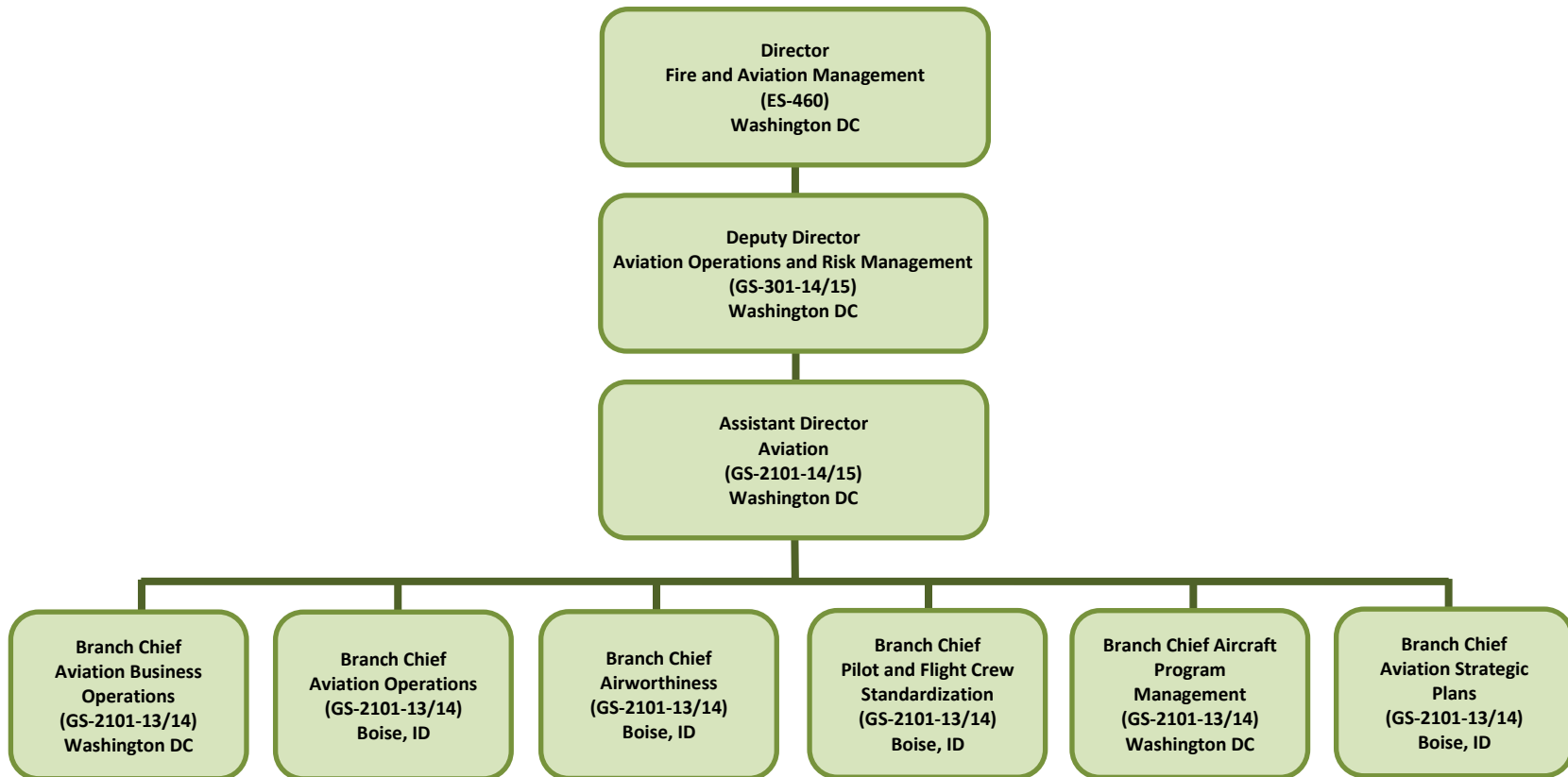
The Branch Chief, Aviation Business Operations provides oversight, planning, coordination, and direction for aviation policy, budget, reporting, and analysis. The Branch Chief ABO supervises three Aviation Management Specialists.

2.2.5 Branch Chief, Aviation Strategic Plans

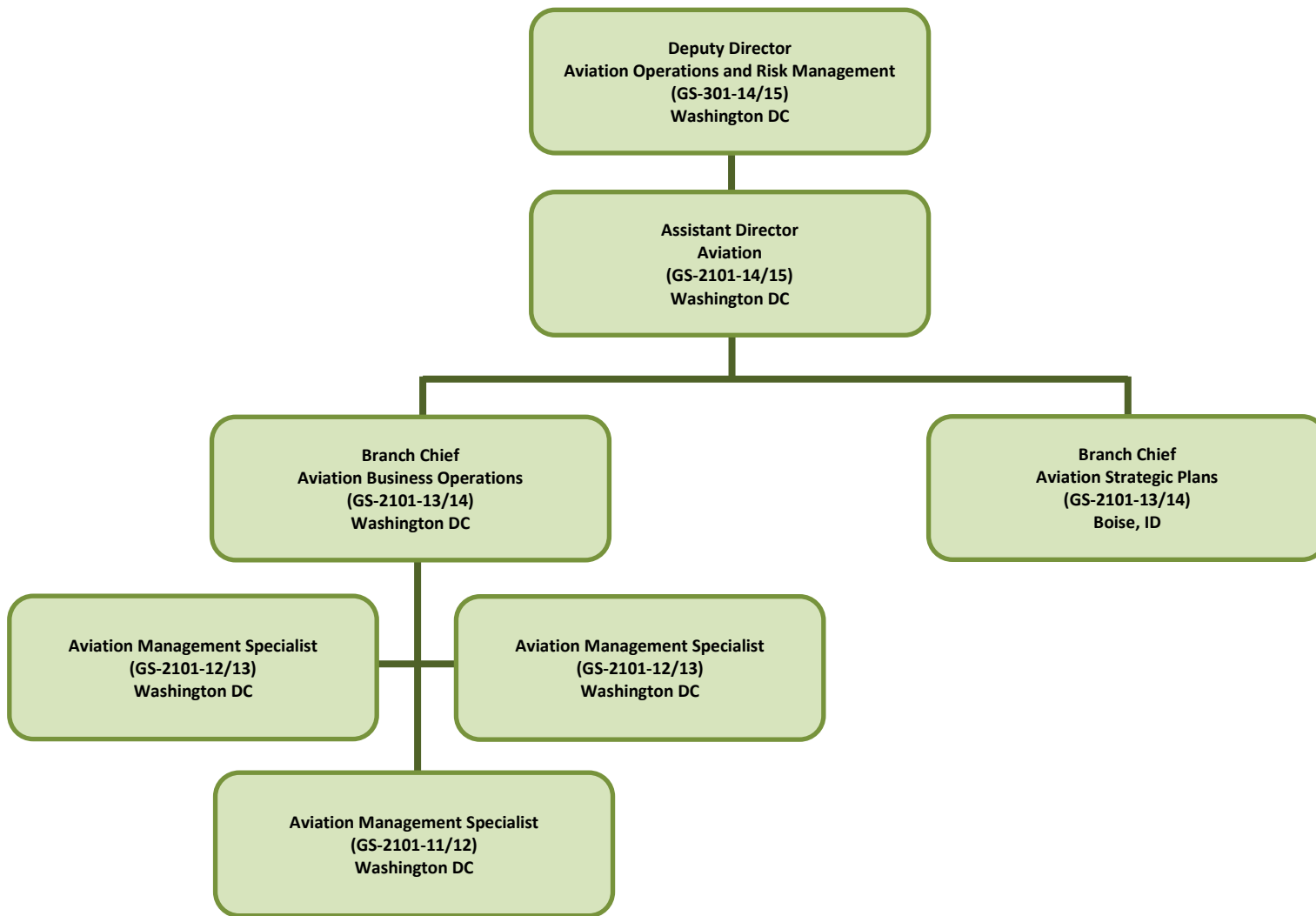
The Branch Chief, Aviation Strategic Plans develops aviation strategy for the Forest Service.

FIRE and AVIATION MANAGEMENT

Washington Office Headquarters and Washington Office Boise Aviation



FIRE and AVIATION MANAGEMENT Washington Office Headquarters Aviation Operations



2.2.6 Branch Chief, Aircraft Program Management

The Branch Chief, Aviation Program Management manages aircraft fleet programs.

2.2.7 Branch Chief, Aviation Operations

The Branch Chief, Aviation Operations provides oversight, coordination, and direction of aviation operations conducted by the National Office and Regions. The Branch Chief supervises the National Helicopter Program Manager, National Airtanker Program Manager, National Aircraft Coordinator, National Aerial Supervision Program Manager, National Helicopter Operations Specialist, National Smokejumper Program Manager, and National Rappel Specialist. The Branch Chief's responsibilities are located in the [FSM 5704.22](#) and [FSH 5709.16, Chapter 10, 10.41c](#).

National Helicopter Program Manager

The National Helicopter Program Manager:

- Provides oversight for the helicopter program.
- Serves as principal helicopter program advisor to National Contracting, Fire and Aviation HQ staff and the Regions in the development and implementation of policies, programs, and standard practices for helicopter programs and specialized projects.
- Responsible for performing contract helicopter inspections and pilot approvals.
- Serves as the contact and coordination point for industry groups and cooperating agencies regarding contract helicopter approvals and operations.

National Airtanker Program Manager

The National Airtanker Program Manager provides national airtanker program leadership, coordination, oversight, and interagency cooperation.

National Aircraft Coordinator

The National Aircraft Coordinator is responsible for coordinating the efficient use of airtankers, helicopters, lead planes and ASMs, and other aircraft as assigned. Movement of aircraft is coordinated with the National Interagency Coordination Center.

- Manages the Defense Logistics Administration fuel program
- May provide technical oversight, reporting and Contracting Officer Technical Representation (COTR) support for nationally contracted aircraft

National Aerial Supervision/Light Fixed Wing Program Manager

The National Aerial Supervision/Light Fixed Wing Program Manager provides national program leadership, coordination, and interagency cooperation for the aerial supervision program and advisor to Contracting, Fire and Aviation HQ staff and Regions in the development and implementation of policies, programs, and standard practices

for the light fixed wing aircraft and programs. The aerial supervision program consists of air tactical, lead plane, aerial supervision module and helicopter coordinator operations.

National Helicopter Operations Specialist (NHOS)

The National Helicopter Operations Specialist is responsible for the oversight, coordination, and direction of helicopter operations activities conducted by the National Office. The NHOS:

- Provides primary technical oversight and support for WO contracted helicopters.
- Provides oversight and assistance to regional helicopter program managers.

National Smokejumper and Large Fixed Wing Program Manager

The National Smokejumper and Large Fixed Wing Program Manager provides national program leadership, coordination, and interagency cooperation in the smokejumper program and is program advisor to Contracting, Fire and Aviation HQ staff, and Regions in the development and implementation of policies, programs, and standard practices for large fixed wing aircraft and programs.

National Rappel Specialist (NRS)

The NRS is responsible for the oversight in developing, recommending and implementing rappel standards, objectives, plans, and policies for the national rappel program.

The NRS:

- Provides oversight and continuous coordination of the national rappel program
- Assures standardization, quality assurance, integration and coordination among the rappel program to ensure that the program and equipment reflect aviation management policy direction, objectives, and regulations.

2.2.8 Branch Chief, Airworthiness

The Branch Chief, Airworthiness supervises Aviation Maintenance Inspectors (Airworthiness), Aviation Safety Inspectors (Avionics), Aeronautical/Aerospace Engineer, and an Aviation Budget Analyst. The responsibilities of the Branch Chief are in the [FSM 5704.23](#).

Aviation Safety Inspectors–Airworthiness (5)

The Aviation Safety Inspectors – Airworthiness:

- Provide oversight for delegated National/Regional program areas.
- Perform National and Regional Aviation program quality assurance, inspections and evaluations to support Forest Service.
- Establish work programs for inspection, monitoring, audits and surveillance.

- Evaluates compliance with Forest Service policy and [Federal Aviation Regulations \(14 CFR\)](#) with respect to airworthiness, maintenance, preventive maintenance, and alteration programs.
- Provides expert technical representation on agency and interagency working groups.
- Prepares and reviews technical specifications for aircraft, aircraft equipment/modifications, maintenance, and inspection requirements

Aviation Safety Inspectors–Avionics (2)

The Aviation Safety Inspectors – Avionics:

- Performs National and Regional aviation avionics program management, including planning, organizing, implementing, and controlling the aviation avionics program.
- Accomplishes equipment, aircraft, and operator inspections and evaluation to support the Forest Service.
- Evaluates compliance with Forest Service policy and [Federal Aviation Regulations \(14 CFR\)](#) with respect to avionics, avionics maintenance, avionics installations, and alteration programs.
- Inspects the avionics of multi-engine piston, or twin-engine turboprop aircraft as well as various fixed and rotor wing aircraft owned, contracted by or cooperated with by the Forest Service.
- Prepares and reviews technical specifications for avionics and inspection requirements, contract rewrite evaluations (e.g., Subject Matter Expert) and contract pre-award evaluation.
- Submits findings and recommendations to the National and/or Regional office which result from surveillance and inspections of aircraft.

Aeronautical/Aerospace Engineer (1)

The Aeronautical/ Aerospace Engineer:

- Provides oversight of Forest Service owned Type Certified Data Sheets (TCDS) and Supplemental Type Certificates (STC), and the Forest Service Operational Loads Monitoring (OLM) Program.
- Assists in the evaluation of proposed new equipment and aircraft modifications.
- Member of the Forest Service Airworthiness Working Group and/or the Interagency Airworthiness Practices Board.
- Interfaces with engineering representatives from aircraft and equipment manufacturers.
- Makes up a part of the airworthiness approval process for UAS utilized by the Forest Service.

Aviation Budget Analyst (1)

The Aviation Budget Analyst is responsible for analyzing and evaluating aviation cost and use data for aviation plans and reports; aviation business cases; managing projects; financial analysis and assessment of compliance with laws and regulations. The Aviation Budget Analyst also completes the Federal Aviation Information Reporting Systems reporting and working capital fund analysis and reports.

2.2.9 Branch Chief, Pilot and Flight Crew Standardization

The Branch Chief, Pilot and Flight Crew Standardization supervises a National Fixed Wing Standardization Pilot, a National Helicopter Standardization Pilot, and National Helicopter Inspector Pilots. The Branch Chief, Pilot Standardization:

- Identifies and approves qualified pilot instructor, check, and inspector pilots.
- Maintains current listings, including all mission and aircraft authorizations, of all qualified instructor, check, and inspector pilots.

National Fixed-Wing Standardization Pilot (1)

The National Fixed-Wing Standardization responsibilities are in the [FSH 5709.16, Chapter 20, 20.42](#).

National Helicopter Standardization Pilot (1)

The National Helicopter Standardization responsibilities are in the [FSH 5709.16, Chapter 20, 20.44](#).

National Helicopter Inspector Pilots (4)

The National Helicopter Inspector Pilots:

- Provides leadership and oversight for the development and implementation of a national helicopter pilot and training program.
- Provides expertise necessary to support the USFS National Standardization and Quality Assurance initiative for oversight of national contract operations.
- Administers pilot evaluations for the purpose of determining an individual's suitability to perform special use missions typical of natural resource operations.
- Provides technical oversight of pilots, aircraft, and equipment used in support of agency missions.

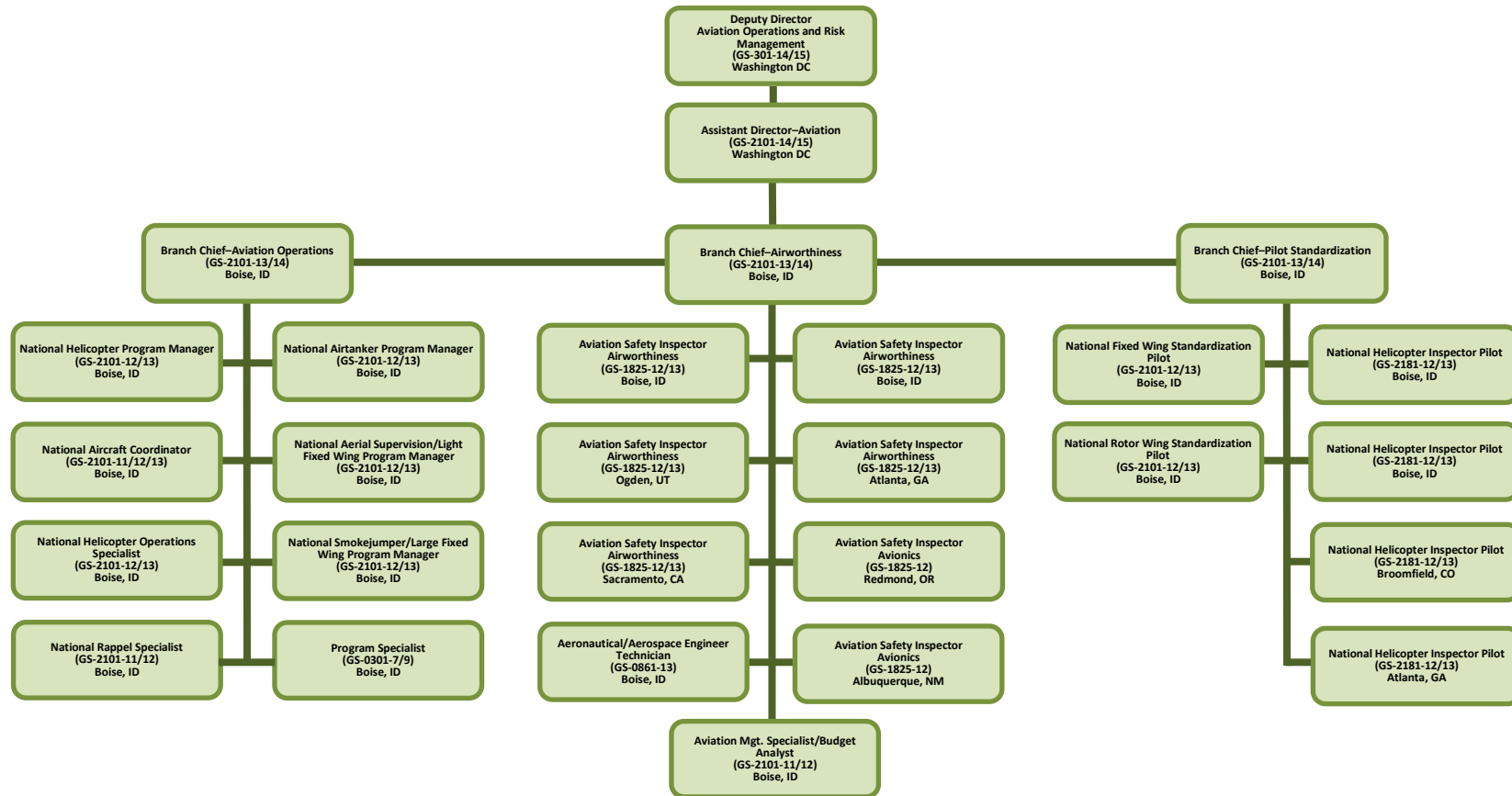
Two NHIPs are stationed in Boise, 2 virtual (Colorado and Georgia).

2.2.10 Assistant Director, Risk Management

The Assistant Director, Risk Management supervises one Branch Chief, Aviation Safety Management Systems

RE and AVIATION MANAGEMENT

Washington Office Boise Aviation Operations, Air Worthiness, and Pilot Standardizations



2.2.11 Branch Chief, Aviation Safety Management Systems

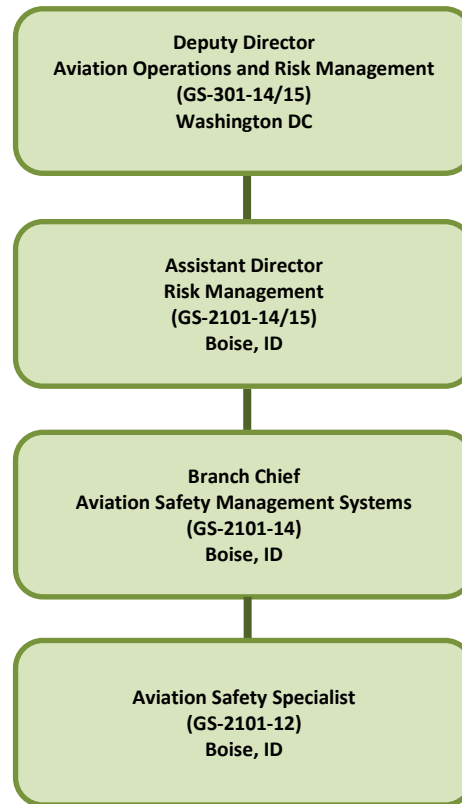
This position has the operational responsibility for development, implementation, and monitoring of the Aviation [Safety Management Systems](#), including oversight of the following key SMS components:

- Policy, including managing and coordinating implementation of the National Aviation Safety Management Plan.
- Risk management.
- Safety Assurance.
- Safety Promotion, including training programs.
- Reporting accidents and incidents to the Director, Fire and Aviation Management Staff, Washington Office and to Forest Service and Department Safety and Health officials.
- Determining the classification of mishaps as accidents, incidents with potential or incidents.
- Management and oversight of Aviation Safety Systems including; National Aviation Safety Center, System Safety Enterprise Team, National Aviation Safety Council, [SAFECOM](#) reporting system, aviation safety training and education.
- Maintains a process for data collection and analysis as well as evaluation of aviation risk management and operational safety.
- Establishes safety criteria and standards for National aviation contracts.
- Coordinates with the National Aviation Officer, Logistics, to assure aircraft airworthiness standards and aircraft selection in Agency and service provider aircraft types and provides guidance for final fleet composition.
- Provides program oversight and direction for aviation education and training, including interagency aviation training (IAT), Advanced Aviation Management Training (AAMT) and Lessons Learned.

National Aviation Safety Specialist

The National Aviation Safety Specialist is responsible for service-wide programs involving the development and implementation of plans and programs in aviation safety and standardization for aviation safety programs.

Washington Office Boise Fire and Aviation Risk Management



2.2.12 National Forest Health Protection Aviation Manager

The National Forest Health Protection Aviation Manager (NFHPAM) is responsible for coordinating forest health aviation safety and operations with the appropriate Regional Aviation Safety Manager, Regional Aviation Officer or Unit Aviation Officer.

2.3 Regional Office (RO) Staff

Regional level aviation organizations vary based on workload and overall organization. The Regional Aviation Officer and Regional Aviation Safety Manager are the two consistent positions.

The underlying reason for aviation positions in the Regional Office organization is the institutional concern for aviation safety. All employees involved in aviation operations are responsible for taking a proactive approach to aviation safety. The proactive person has planned and organized duties in a way that allows events to be controlled, resulting in the desired outcome. Planning affords each of us the opportunity to anticipate possible complications in order to have an alternative. When events intervene, the proactive person will analyze the situation, discuss, evaluate, decide and implement an alternative tactic.

Aviation organizations are comprised of diverse experts/professionals in a variety of positions that all have safety responsibilities. The following key positions provide the leadership, guidance, advisement, promotion and liaison required to have a successful accident prevention program.

2.3.1 Regional Forester

Regional Forester responsibilities are located in [FSM 5704.3](#).

2.3.2 Regional Aviation Officer (RAO)

The RAO is responsible for the oversight, coordination, and direction of aviation operations activities conducted by the Regional Office. The RAO responsibilities are located in the [FSM 5704.3](#), [FSH 5709.16, Chapter 10, 10.42b](#) and [FSM 5720.48b](#).

The primary role of the Regional Aviation Officer (RAO) is to provide program leadership and direction. This position is the focal point for setting the tone for the level of professionalism expected within the aviation function and executing a safe and effective Working Capital Fund (WCF) flight operation. The RAO and Aviation Staff communicate institutional values and level of acceptable risk to those executing and managing contract and internal aviation operations. The activities of the RAO are meant to unify the efforts of Regional aviation experts/professionals and develop a team approach in achieving safety goals and objectives while providing aviation support to the forests and cooperators.

The RAO is responsible for providing guidance, advice and support to the Forest Aviation Officers (FAO) from each National Forest in the Pacific Southwest Region. As leader of the Regional Aviation Unit, the RAO is responsible for maintaining a fully qualified staff of aviation experts in order to support the forests in all phases of aviation activities.

RAO Responsibility

- a. Monitor Forest, District and Project aviation planning as well as qualifications of Forest Service employees involved in aviation operations.
- b. Assist Forest Aviation Officers in the development of aviation-related plans and recommend changes to those forest plans and aviation operations.
- c. Provide assigned specialized aviation training to field units and employees.
- d. Provide technical input to Contracting Officers for development of standard contract specifications.
- e. Provide aircraft and pilot inspections and approvals as required by Forest Service direction, cooperative agreements and contract specifications.
- f. Conduct safety evaluations of field aviation operations on a regular basis.
- g. Monitor contract and employee pilot performance and provide every opportunity for employee pilots to expand their knowledge and cultivate their skills.
- h. Provide for training, check rides and approvals of Forest Service aviation employees as required by Forest Service Manual, Handbooks and operating guides.

2.3.3 Regional Aviation Safety Managers (RASM)

The RASM reports to the Director or the Deputy Director and is responsible for implementation, fostering and promoting SMS, including Policy, Risk Management, Assurance and Promotion. Their responsibilities are located in the [FSM 5720.48d](#).

The RASM serves as the principal advisor to the Director and RAO on all aviation safety matters and is a critical member of the Region's Aviation Management Team. This position is the focal point for the Region's endeavors in promoting safety awareness and developing safe attitudes in those people directly and indirectly involved in aviation operations. The RASM provides Regional direction, guidance and oversight of the SMS and aviation training programs. Evaluations and appraisals are conducted to determine the level of compliance and effectiveness of existing aviation safety activities. The RASM recommends actions necessary to enhance the Forest Service aviation Safety Culture.

The RASM is responsible for providing guidance, support and advice to the National Forests within the Southern Region regarding aviation safety issues. This is done primarily through the Forest Line Officers, Forest Aviation Officers, Dispatchers and Aviation managers. The RASM also has responsibility for aviation training hosted at the Regional level.

RASM Responsibility

- a. Assist Forest Aviation Officers in the development of aviation-related safety plans and
recommend changes to these Forest plans and aviation project operations.
- b. Provides oversight of aviation planning, training, contract specifications, contract administration support and recommend changes to the Director and RAO.
- c. Coordinate ASTAT safety evaluations and site visits of field aviation operations during
periods of high aviation use.
- d. Participate on selected safety evaluations with other aviation staff members to review
the ground operation monitoring programs and recommend changes to the RAO and
Director.
- e. Monitor follow-up actions on recommended actions from safety evaluations, from formal
reviews and from accident Boards of Review.
- f. Review contract and employee pilot training and monitoring activities to ensure compliance
with Forest Service direction and make recommendations for changes to the Director and
RAO.
- g. Ensure that all aviation accidents and incidents are investigated and corrective actions are
followed up on to prevent future reoccurrences.

- h. Provide trend monitoring of all accidents and incidents from 5700-14 reports, to help the RAO and Director prioritize the staff.

2.3.4 Regional Aviation Safety Inspector (ASI), Airworthiness / Regional Aviation Maintenance Program Manager

The ASI, Airworthiness is responsible for the maintenance and airworthiness program conducted by the Regional Office. The ASI responsibilities are located in the [FSH 5709.16, Chapter 40, 40.44, 40.45](#) and in the [FS Aircraft Inspection Guide \(AIG\)](#).

The Regional Aviation Maintenance Inspector (RAMI) serves as a technical representative and reports directly to the Regional Aviation Officer. The Aviation Maintenance Inspector provides aircraft airworthiness expertise to the Region and the National Forests in the Southern Region. The Aviation Maintenance Inspector is responsible for inspecting and approving all contract and cooperator aircraft, except for point-to-point transportation, for airworthiness and contract compliance. The Aviation Maintenance Inspector is authorized to recommend return to contract availability for any aircraft removed from service for mechanical deficiency after the necessary work has been performed and documented by a qualified aircraft mechanic.

The Aviation Maintenance Inspector is a highly trained, licensed Aircraft Maintenance Technician (Airframe and Power plant), and holds an Inspector Authorization (IA) issued by the Federal Aviation Administration. The Inspector Authorization allows the Aviation Maintenance Inspector to act for the Federal Aviation Administration Administrator in matters of aircraft worthiness.

The Aviation Maintenance Inspector contributes to the aviation safety program by advising the RASM and the RAO of any problems or hazards pertaining to aircraft maintenance issues. Also, investigates incidents as directed by the RASM.

2.3.5 Regional Aviation Safety Inspectors – Avionics

The ASI, Avionics, performs Regional aviation avionics program management, including planning, organizing, implementing and controlling the aviation avionics program. The ASI accomplishes equipment, aircraft, and operator inspections and evaluation to support the National and Regional Forest Service.

2.4 Forest Staff

2.4.1 Line Officer

Line Officer responsibilities are located in [FSM 5704.6](#), [FSM 5711.04](#), and [FSM 5720.48a](#).

2.4.2 Forest Aviation Officer/Unit Aviation Officer (FAO/UAO)

The FAO/UAO manages the forest aviation program by providing technical and management direction of aviation resources to support Forest programs. The FAO/UAO should meet the Aviation Manager qualifications in [IAT Guide](#). The FAO/UAO responsibilities are located in the ([FSM 5704.61](#)). Some forests employ “service-first” positions to fulfill the FAO/UAO responsibilities. On those units, the position is referred to as a UAO.

The Forest Aviation Officer (FAO) is the primary authority for aviation activities that occur at the Forest level. This position provides liaison between the Regional Aviation Staff, Forest management and persons conducting aviation activities on the Forest. The FAO plans and organizes aviation projects by coordinating with aircraft operators and ensuring compliance with policies and regulations governing air operations. This is the central point of convergence for the gathering and dissemination of information that emphasizes the Agency's, Regional Forester's, Forest Supervisor's and District Ranger's concern for conducting safe aviation operations.

FAO Responsibilities

- a. Ensure that Forest Plans, Forest Aviation Plans, Aviation Base Security Plans, Aviation Project Plans, Aviation Crash/Rescue Plan, Aviation Base Operating Plans, Fire Management Action Plans, Aerial Hazard Maps and other aviation-related plans are developed, completed, apply to the actual activity and address aviation safety and security needs.
- b. Ensure that all aviation-related plans are approved by the appropriate Forest Line Officer, employees working on aviation activities are aware of the plan contents and limits, and lines of authority and responsibility are established and understood in general, and on individual operations.
- c. Provide coordination between forest aviation planning activities and aviation operations with the appropriate regional aviation specialist.
- d. Monitor Forest Service and contract pilot performance and request RAO assistance in resolving any areas of concern to assure safe aviation operations.
- e. Ensure that Forest aviation personnel and contract employees are properly trained for the activity and job they are assigned to accomplish.
- f. Monitor all aviation ground support operations for compliance to the approved Forest plans, safety practices and any non-compliance are corrected.

FAO Activities

Participate in and supervise as appropriate, forest-level activities and programs involving aviation.

- a. Analyze aviation safety needs, problem areas and preventive measures.
- b. Advise planners regarding aircraft suitability for overall needs or specific projects.
- c. Compare capabilities and costs of various aircraft and systems in relation to planned needs.
- d. Analyze aviation training needs such as air observers, helicopter crewmembers, aviation base workers and COR liaison for all forest employees.
- e. Participate in aviation training.
- f. Secure and provide information and technical direction for all Forest aviation operations.
- g. Participate in aviation programs with cooperators.
- h. Coordinate technical inspections and approvals of all Forest aviation operations, equipment, aircraft and facilities.

- i. Inspect aviation facilities and operations to assure compliance with directives, policy, contract specifications and Forest aviation plans.
- j. Coordinate with various aviation specialists, airport authorities, contractors, suppliers, CORs, Forest Safety Manager, to name a few.
- k. Determine need for additional monitoring of aviation operations.
- l. Ensure de-confliction of airspace with military aviation.
- m. Draft and/or review accident and incident reports.

FAO Training

Successful completion of the Interagency Aviation Training (IAT) modules listed for the Aviation Manager position within the first two years is required. Position requirements, ACE registration and some on-line modules may be found at: <https://www.iat.gov>

Successful completion of the following national, regional and forest training courses within the first two years is recommended:

- a. I-300 Intermediate ICS
- b. S-270 Basic Aviation Operations
- c. Interagency Aviation Training (IAT) modules for Aviation Manager
- d. S-371 Helibase Manager
- e. Geographic Area Air Tanker Base Manager

2.4.3 All Employees

All employees involved in aviation activities are responsible for acquiring, knowing, and following aviation policy and regulations ([FSM 5704.09](#), [FSM 5720.46](#)). Forest Service employees shall fly only in approved government (refer to Government Aircraft definition in [FSM 5705](#)) aircraft flown by an approved pilot(s). Approvals are specified in [FSM 5703.1](#), [5712.3](#), [5712.4](#) and [5713.4](#). Employees are empowered and expected to manage the risks of aviation operations, and make reasonable and prudent decisions to accomplish the mission. Employees shall use an operational risk management process to evaluate the risk and hazards prior to every flight. Individuals will be held accountable for their decisions, which should be based on policy, principles, training, experience, and the given situation.

Forest Service employees have the responsibility to immediately report to the appropriate official any instances of unsafe equipment or aviation operations ([FSM 5723.1](#) and [5720.46](#)).

Regional Supplement

All Employees: Must report potential and actual problems, incidents and accidents using the SAFECOM reporting system at: <https://www.safecom.gov>

Must use the appropriate personal protective and life support equipment.

Forest Supplement

Placeholder.

2.5 Additional Aviation Positions

2.5.1 Station Aviation Officer (SAO)

The SAO coordinates the station aviation activities with the appropriate FAO/UAO and/or the RAO. The SAO may provide general aviation oversight and technical advice under the guidance of the FAO/UAO or RAO. The SAO will meet the Aviation Manager qualifications in [IAT Guide](#).

Regional Supplement

N/A

Forest/Station Supplement

Placeholder.

2.6 National Groups/Committees

2.6.1 National Aviation Team (NAT)

The National Aviation Team consists of all members of the Aviation Division, including the Assistant Director, Aviation; six Branch Chiefs; Program Managers and supporting staff.

2.6.2 Interagency Committee on Aviation Policy (ICAP)

This committee is chaired by the General Services Administration (GSA) and includes all federal agencies that own or hire aircraft. GSA established the committee at the direction of the President's Office of Management and Budget (OMB). GSA publishes regulatory policy for aircraft management in [41 Code of Federal Regulations \(CFR\) 102-33](#), "Management of Government Aircraft," and [41 CFR 300-3; 301-10; and 301-70](#), "Travel on Government Aircraft."

[OMB Circular A-126](#), "Improving the Management and Use of Government Aircraft, provides the basic guidance for management of federal aviation programs and for travel on government aircraft."

2.6.3 National Interagency Aviation Committee (NIAC)

The Committee is established to serve as a body of resident aviation experts, assisting NWCG with realizing opportunities for enhanced safety, effectiveness, and efficiency in aviation related operations, procedures, programs and coordination. [NIAC](#) is chartered under the Equipment and Technology Branch of NWCG.

Committee membership will reflect a mix of people who are knowledgeable in the subject area and who represent NWCG member agencies and organizations, including representation from Department of Interior (DOI) Office of Aviation Services (OAS).

The WO Branch Chiefs, Aviation Operations and Pilot Standardization are designated by the WO Assistant Director, Aviation as Forest Service representatives to NIAC.

NIAC Sub Committees include:

- Interagency Aerial Supervision Subcommittee
- Interagency Airspace Subcommittee
- Interagency Airtanker Base Operations Subcommittee
- Interagency Airtanker Board (IAB)
- Interagency Aviation Training Subcommittee (IAT)
- Interagency SEAT Board
- Smokejumper Aircraft Screening and Evaluation Board (SASEB)
- Interagency Helicopter Operations Subcommittee (IHops)
 - o Aerial Capture Eradication and Tagging Animals Unit (ACETA)
 - o Interagency Aerial Ignition Unit
 - Helitorch Subunit
 - o Interagency Helicopter Operations Guide Unit (IHOG)
 - o Interagency Helicopter Rappel Unit
 - Rappel Equipment Subunit
 - o Helicopter Short Haul Unit

2.7 Program Overview

The Forest Service aviation program is comprised of national, regional and forest organizations.

All agency-owned and operated (WCF) aircraft are registered to the Washington Office and hosted by regions or the national office. The WO is the lead for most of the contracted aircraft used by the interagency wildland firefighting community including Large Airtankers (LATs), smokejumper aircraft, Type I and II helicopters, Aerial Supervision Module (ASM) and lead plane aircraft, infrared (IR) airplanes, aerial supervision aircraft, water scoopers and other miscellaneous aircraft. These aircraft are acquired for the primary use of the Forest Service; however, they are available for use by other federal, state, and local partners and cooperators as specified in agency policy, agreements and procedures.

Regions and Forests also contract for aircraft including, but not limited to, Forest Health Protection (FHP) airplanes, Type III helicopters, aerial tactical airplanes, and other fire and resource management aircraft.

The majority of Forest Service aviation use is for wildland fire management and support. Other aviation uses include forest health protection, wildlife survey, law enforcement, and projects related to natural resource management and administrative flights.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.0 Administration

3.1 General

The administration section establishes management responsibilities, policies, and procedures for the administration of the aviation program in the Forest Service.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.2 Reporting and Documentation Requirements

The Forest Service is responsible for providing for the following:

- Responses to Department of Agriculture [Office of Inspector General \(OIG\)](#) audits.
- Responses to Congressional inquiries.
- Meeting the requirement of the [Federal Requirement for Federal Aviation for Interactive Reporting System \(FAIRS\)](#).
- Approving and documenting senior executive travel in agency and agency-procured aircraft as required by [OMB Circular A-126](#).
- Retaining contract management records for 6.5 years.
- Complying as applicable with existing records holds and freezes for all records.
- Responding to [Freedom of Information Act](#) (FOIA) requests – All aviation records are subject to Freedom of Information Requests.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.3 Aviation Plans

All Aviation Management Plans must be approved by the appropriate line officer ([FSM 5711.04](#)).

Regional Supplement

Each Forest shall supplement this plan with forest level Aviation Plans containing more specific details relating to aviation operations conducted on or for the forest. The Forest Aviation Plan and the Forest Aircraft Incident/Accident Response Guide shall be reviewed and updated annually.

Each Forest shall supplement the Regional Aviation Security Plan with **forest level base security plans** for permanent bases of aviation resources. Aviation Base Security Plans shall be updated, reviewed and approved annually. Forest Aviation Base Security Plans must be approved (signed) by the Forest Supervisor. Prior to approval, the Forest Aviation Officer (FAO), the Regional Aviation Officer (RAO) and the Regional Aviation Safety Manager (RASM) must review Forest Aviation Base Security Plans.

All Forest Aviation Plans must be reviewed by the RAO per policy.

All aviation plans must be reviewed and approved.

Forest Aviation Plans must be approved (signed) by the Forest Supervisor. Prior to approval, the Forest Aviation Officer, the Regional Aviation Officer and the Regional Aviation Safety Manager must review Forest Aviation Plans.

All Forest Service aviation operations must be addressed in a written plan. Those operations not covered in FSM or FSH, the National, Regional, or Forest Aviation Plan must be addressed in a Project Aviation Safety Plan (PASP).

Project Aviation Safety Plans (PASP) must be reviewed by the FAO, RAO and RASM, depending on the level of complexity, and approved by the District Ranger for non-complex aviation projects and by the Forest Supervisor for complex aviation operations.

Project planning should include the use of the **End-Product Exhibit matrix** (FSM 5711.21) to determine if a project should be managed as an end product contract or flight services contract. If it is determined that a project is going to be contracted as an End Product, a Project Aviation Plan shall not be completed.

Forest Supplement

Placeholder.

3.3.1 National Aviation Safety and Management Plan (NASMP)

The NASMP provides information regarding Forest Service aviation organization, responsibilities, administrative procedures, and policy and is intended to serve as an umbrella document that Regional and Forest Aviation Plans tier from. The Assistant Director, Aviation will maintain a National Aviation Safety and Management Plan ([FSM 5704.21](#)). The NASMP is approved by the Director, Fire and Aviation, annually.

3.3.2 Regional, Northeast Area or Station Aviation Management Plans (RAMP)

Each region, the Northeast Area (NA), and Stations shall publish a RAMP that implements national policy and describes protocols specific to each regional aviation program. The RAMP serves as an umbrella document for Forest Aviation Management Plans. The regional directors shall supplement and annually update the aviation management goals, objectives, programs and activities, and strategic direction at each organizational level ([FSM 5711.04b](#)). The RAMP is approved by Regional Foresters annually.

3.3.3 Regional and Northeast Area and Station Homeland Security Response Plan

Each Region, NA, and Station must develop a Homeland Security Response Plan that details the security actions that each Region, NA, and Station will implement, based upon the Homeland Security threat level. The Regional, NA, or Station Homeland Security Response Plan must be reviewed by the Fire and Aviation Management staff, HQ Washington Office ([FSH 5709.16, Chapter 60, 52.1](#)). The Regional, NA, and Station Homeland Security Response Plans are approved by the Regional Forester.

3.3.4 Regional and Northeast Area Aviation Safety Plan

The RASM has the responsibility to prepare the Regional Aviation Safety Plan ([FSM 5720.48d](#)). The Regional, NA Aviation Safety Plan is approved by the Regional Forester/ Director NA annually. Regional FHP unit aviation officers and Station Aviation Officers have the responsibility to draft FHP/Station Aviation Safety Plans that either tier to the RAMP or appear as an appendix within the RAMP.

3.3.5 Regional and Northeast Area Aviation Mishap Response Plan

Regional Foresters and/or Area Director have responsibility to ensure that every Forest Service unit that utilizes aircraft develops and annually updates, an aviation mishap response plan ([FSM 5720.48a](#)). The Regional and NA Aviation Mishap Response Plan is approved by the Regional Forester/ Director NA.

3.3.6 Forest and Station Aviation Management Plans (FAMP/ SAMP)

Forests and Stations are required to maintain and update unit aviation plans annually, which implement national and regional policy and establish local procedures and protocol. The Forest Service and Station Directors shall supplement and update annually the aviation management goals, objectives, programs and activities, and strategic direction at each organizational level ([FSM 5711.04b](#)). The FAMP / SAMP is approved by the appropriate Forest Supervisor/ Station Director annually.

3.3.7 Facility Homeland Security Response Plan

Each aviation facility must develop a Facility Homeland Security Response Plan that is specific to that aviation facility and details the security actions the facility will take for each

Homeland Security threat level. The Facilities Homeland Security Response Plan is approved by the appropriate Forest Supervisor annually.

3.3.8 Forest and Station Aviation Mishap Response Plan

Forest Supervisors, Station Directors, district rangers, and other officials designated with line authority have responsibility to ensure that every Forest Service unit that utilizes aircraft develops and annually updates, an aviation mishap response plan ([FSM 5720.48a](#)).

3.3.9 Project Aviation Safety Plans (PASP)

A PASP is submitted independent of a Forest, NA, or Station Aviation Management Plan. A PASP shall be developed and approved as required in the [FSM 5711.04](#) and [FSM 5711.1](#) for all non-emergency aviation projects.

3.3.10 Operations Plans

Operations Plans shall be developed and updated annually by the program managers. Specific Operations Plans will be developed for National Programs. Regions may supplement national operations plans as necessary. Aviation facility plans will be developed for national, regional, and forest aviation bases.

National Aviation Operations Plans will be approved by the Assistant Director, Aviation. Regional Aviation Operations Plans will be approved by RAOs. Forest/Unit Aviation Operations Plans will be approved by Forest Fire Management Officers or Fire Staff Officers.

Specific Operational Plans will be developed for national, regional or local permanent and temporary:

Airbase Operations

Helicopter operations (Exclusive Use)

- Helitack
- Rappel
- Tank/Bucket operations
- External Loads
- Night Air Operations
- Emergency Medical Short-haul

Smokejumper operations

Airtanker operations

- Very Large Airtanker
- Large Airtanker
- Scoopers

- Single Engine Airtankers (SEATs)

Scooper operations

Aerial Supervision

Light Fixed Wing operations

Law Enforcement & Investigation operations

Forest Health Protection (FHP)

Research

Natural Resource management and protection

These plans at a minimum should include:

- Authority
- Aircraft
- Aircraft Quantity
- Funding
- Contracts
- Sustainment
- Mission Requirements
- Facilities
- SMS
- Staffing

Operations Plans shall be approved by the appropriate line officer ([FSM 5711.04](#)).

Regional Supplement

Elements of the plans shall at a minimum include: organization, identification of typical missions, mission risk assessment and mitigation, training program and administrative procedures. The agency must use a risk management based approach for every task, looking for the hazards that may interfere with the safe and successful completion of the task at hand.

Forest Supplement

Placeholder.

3.4 Aircrew Orientation Briefing Package

All Forests that host permanent aviation bases shall create an Aircrew / Pilot Orientation Briefing Package. The Aircrew / Pilot Orientation Briefing Package serves as a source of

information to provide visiting pilots, aircrews, and Incident Management Teams. Elements of the briefing package should include:

- Leader's intent
- Local frequencies and their use (to include map if available)
- Contacts, name title, phone (may include vendor information)
- Local sunrise/sunset charts
- Local airport information (to include a map)
- Local lodging information
- Local water sources/dip sites (name, latitude and longitude, ownership, hazards, elevation, contact information).
- Helispots (name, latitude and longitude, map or aerial photo)
- Map depicting MTRs and Special Use Airspace
- IA size-up card
- Local medical evacuation information (including nearest burn and trauma centers)
- Local hazards (map and description)
- Airport crash rescue procedures
- Map and description of jettison areas
- Local flight following procedures (AFF and/or radio contact)
- Aviation Operations Plan
- Special considerations (e.g., retardant avoidance areas)

Regional Supplement

Regional direction is that every forest will have an aviation in-briefing package for visiting air resources and Incident Management Teams.

Forest Supplement

Placeholder.

3.5 Land Use Policy for Aviation Activities

The regulation of aviation activities on or over Forest Service managed lands is solely dependent on Land Management Plans (LMP) direction and any applicable [Federal Aviation Regulations \(14 CFR\)](#).

Temporary aviation operations on Forest Service lands may be restricted due to LMP direction. FAOs should coordinate with resource managers to identify areas of restriction when developing Operating Plans, Forest Aviation Management Plans, and [PASP](#). When identified by resource managers, FAOs should implement any invasive species control

measures for aviation activities. FAOs also coordinate reporting of any fire chemical aerial application in or near waterways.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.6 Budget

Budgeting is completed on a three year cycle. Out year budget requests are submitted to Congress in the President's Budget in February, six months prior to the fiscal year for which they were submitted. The budget request is then vetted separately through the Department of Agriculture and [Office of Management and Budget \(OMB\)](#). Finally, it is then aggregated with all other agency and program requests into the President's Proposed Budget. The current year budget is finalized after congress passes an Appropriations Bill.

WO Branch Chief's shall develop OTT program/project budget proposals in early 2nd Quarter for submission to the BC, Aviation Business Operations upon request.

Aviation programs and aviation contracts funded by the Washington Office shall be approved for commitment and obligation ([FS 6500-224](#)) ONLY by the Assistant Director, Planning and Budget. Aviation programs and aviation contracts that require requests for contract action (FS 6300-4) shall be approved by one of WO FAM Deputy Directors.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.7 Contracting

Reference the FAM Aviation Contracting Guide for contracting process and procedures.

Aircraft are acquired through different types of contracts, Exclusive-Use (Ex-Use), Call-When-Needed (CWN), Indefinite Delivery/Indefinite Quantities (IDIQ), or End Product.

Exclusive-use contracts are generally used when the agency has a definite aircraft need for a specific period of time. Exclusive-use aircraft are guaranteed a minimum amount of use through a Mandatory Available Period (MAP). Daily availability is usually cheaper with exclusive-use contracts since the vendor is guaranteed a minimum amount of work.

Call-When-Needed contracts are a way for the agency to have ready access to a pool of aviation assets that meet a minimum standard, usually used for non-recurring missions or during periods of surge activity often related to wildland fire suppression. The

disadvantages are that the aircraft may not be available, the agency personnel and vendor personnel don't have the same opportunity for crew cohesion that an exclusive-use crew has, and that daily availability rates are generally higher since the vendor has no guaranteed work.

IDIQ and End Product contracts are often used for projects such as aerial application of pesticides or other types of work where: 1) the precise limits of the treatment area or quantity of material is uncertain or the contract may span multiple years (IDIQ) or 2) only the desired outcome is specified and/or specific area of treatment is known (End Product). Refer to Section 3.10 for End Product Contracts.

Regional Supplement

The Regional Contracting Officer for aircraft in Region 8 is Gloria Sanders located in Atlanta (404) 347-4023.

Light fixed-wing and type III rotor-wing aircraft are contracted at the Regional level. The large fixed-wing and the heavy and medium rotor-wing aircraft are contracted under a National contract. All Regional and National contracted aircraft are provided contract administration services through the Contracting Officer located in Boise, Idaho.

Several aircraft are specifically contracted to be operated and managed by Fire and Aviation Management. The primary use of these aircraft is to support fire suppression activities. They are also available to support other Regional natural resource programs and activities.

Forest Supplement

Placeholder.

3.8 Aircraft Contract Start/Modification/Extension

Aircraft contract start dates and MAP are a coordinated decision between the National Office and Regions.

Regional Supplement

For Type III helicopters, Regions determine all contract information. Light fixed-wing aircraft are contracted through the Regions. The MAP is the required time frame that an aircraft must be available for government use.

Forest Supplement

Placeholder.

3.9 Contractor Performance

All CWN and exclusive-use contractor performance will be documented in accordance with [FSH 6309.11](#). Contract Officer Technical Representatives are required to complete

contractor evaluations annually using the [Contractor Performance Assessment Reporting System \(CPARS\)](#). It should be noted that [SAFECOMs](#) are not used to determine contract awards.

Regional Supplement

The standard contract specifications are minimum safety and performance requirements for mission-specific equipment and operations. The Contracting Officer (CO) is the legal authority for administration of the contract. Every employee managing contractor-furnished aviation services is required to immediately notify the CO when a contractor or a contractor's employee engages in unsafe acts or violates a requirement of the contract; the Regional aviation staff should also be notified on Form 5700-14.

Forest Supplement

Placeholder.

3.10 End Product Contracts

An end-product contract is intended to efficiently and effectively accomplish certain projects with no internal operational controls or specifications from the Forest Service aviation personnel. Certain aviation operations, such as aerial application of herbicides and insecticides, seed, fertilizer, prescribed burn projects, and some Burned Area Emergency Rehabilitation (BAER) projects may be administered in a more efficient and less expensive manner if contracted on an end-product basis, instead of through a Forest Service flight services contract. Refer to [FSM 5711.2](#) for more information on end-product contracts.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.11 Aircraft Acquisition

Aircraft (including UAS) transfer, acquisition, and lease shall be approved by the Washington Office Director, Fire and Aviation Management (FAM).

The Washington Office Aviation Management shall initiate all aircraft transfers, acquisitions, and leases using an Office of Management and Budget, OMB Circular A-11, Business Case (Aviation Business Case).

An Integrated Project Team will be designated to develop Aviation Business Cases.

Aviation Business Cases will be recommended by the Director, FAM and approved by the Deputy Chief, State and Private Forestry.

- a. Additional review and approvals may be required by the agency and the Department of Agriculture prior to submission to the OMB.

Aviation Business Cases for all Forest Service aircraft must be formally revalidated every 5 years.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.12 Cooperator Aircraft

Cooperative aircraft operations and partnerships are encouraged in order to increase efficiency and enhance procedure standardization. The Northeastern Area, Regional Offices, and the States shall establish cooperative structures to increase capability and avoid duplication and conflicting procedures.

Use of state/local government, military, or other federal agency aircraft by Forest Service employees will require prior inspection and approval by Forest Service or OAS, usually in the form of a Cooperator Letter of Approval. Proposed use of these aircraft should be requested through the FAO to the RAO. Any employee wishing to ride on cooperator aircraft or work around a cooperator aircraft operation must consult their respective aviation manager.

Cooperator agreements for all aviation services provided to the Forest Service by other agencies and cooperators must specify levels of operational standards and safety comparable to those required of agency or contractor operations ([FSM 5710.35](#)).

When the Forest Service utilizes other governmental agency aircraft for non-fire missions, an agreement must be developed and approved to address at a minimum:

- Payment
- Operational Control
- Aircraft Management
- Performance Planning
- Mission Profile
- Landing Zones (When Applicable)
- Agreement Expiration Date
- [Public /Civil Aircraft Utilization Dispatch Work Sheet \(Public Law 103-411\)](#) (When Applicable)

Fire Missions:

- Create a resource order

Non-Fire Missions:

- Completed cost analysis

- Complete Project Aviation Safety Plan (PASP)

Military and cooperator aircraft approval shall meet the requirements in the [FSM 5713.43](#). National Guard pilots must meet the requirements identified in FSM 5712.34, 2.

See Appendix 10.1 for Sample Letter of Cooperator Approval. See Appendix 10.2 for Cooperator Approval Guide.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.13 Aircraft Administrative Use and Reporting

Utilize the Forest Service [Administrative Use of Aircraft Desk Guide](#) to provide guidance and clarify the administrative use of aircraft.

The [USDA Property Management Regulation \(PMR\) 110-33](#) supplements Federal Management Regulation 102-33 Management of Government Aircraft. Both documents are agency wide policy for the use of Government aircraft to accomplish official business. In coordination with the [Office of Management and Budget Circular A-126](#), they restrict the operation of government aircraft to defined official purposes: restricting travel on such aircraft, requiring special review of such travel on government aircraft by senior officials or non-federal travelers under certain circumstances, and codifies policies for reimbursement for the use of government aircraft. The transportation of passengers or cargo on Forest Service aircraft shall be limited in accordance with these Regulations.

[FSH 6509.33_301 Federal Travel Regulation](#) requires that all employees have a travel authorization for any official travel. Each instance of administrative use of a Forest Service aircraft to transport passengers must be justified, documented, and approved, and as such, will comply with the requirements contained in [FSM 5711.3](#). All documents pertaining to these flights must be maintained by Dispatch and on file for two years.

Regional Supplement

Special requirements exist for travel that is not to meet mission requirements or required use travel by the following individuals and must be authorized in advance and in writing:

- Senior Federal officials;
- Members of families of such senior Federal officials; and
- Non-Federal travelers.

Such authorizations must be approved and signed on a trip-by-trip basis by the Department's General Counsel or his or her principal deputy to insure compliance with Regulations.

Forest Supplement

Placeholder.

3.14 Dispatching

3.14.1 General

All flights (other than scheduled commercial air carrier flights) will be arranged by qualified aviation dispatchers and/or appropriate aviation manager and approved at the appropriate management level.

3.14.2 Administrative Use Flight Requests

Reference the Forest Service [Administrative Use of Aircraft Desk Reference](#).

3.14.3 Mission Flight Requests

All flight requests for mission flights shall follow the [National Mob Guide, Chapter 20](#).

3.14.4 Non-Incident Related Flight Requests

Follow local procedures.

Regional Supplement

Ordering

The aircraft ordering process can be found in the National Mob Guide, Chapter 20, 24.1. In general, all CWN helicopter ordering will be coordinated through the Southern Area Coordination Center (SACC) while light fixed wing aircraft are ordered at the local dispatch center level. Air Tankers ordered for incidents outside of a local dispatch area will be coordinated through SACC. There are some “neighborhood agreements” and exceptions in place throughout the Region. For specific information please see the Southern Region Area Mob Guide. (page 26 on link below)

http://gacc.nifc.gov/sacc/administrative/forms_references/SA_Mob_Guide/Chapter20.pdf

Ordering Flights: Official business only, coordinate through Dispatch. Air Tanker drops, Infrared.

Forest Supplement

Placeholder.

3.15 Flight Use Reporting

3.15.1 Forest Service Aviation Business System (ABS) and Aviation Management Information Systems (AMIS)

Flight time, daily availability, and other authorized charges or deductions shall be recorded on a Flight Use Report in [Aviation Business System \(ABS\) \(FSM 5717.1\)](#). The data shall be entered and reviewed by the Government and the Contractor’s Representative.

Working Capital Fund (WCF) aircraft use is entered into the [Aviation Management Information System \(AMIS\)](#) or [Aviation Business System \(ABS\)](#) as applicable.

For Administrative Use flight reporting reference the Forest Service [Administrative Use of Aircraft Desk Reference](#).

3.15.2 Office of Aviation Services (OAS) Aviation Management Systems (AMS)

All Department of Interior (DOI) contracted aircraft will utilize the OAS Aviation Management System (AMS) web based flight reporting system. The AMS application will become available at <http://ams.nbc.gov>.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.16 Coding and Funding of Contract, Fleet, Severity Aircraft Availability

RESERVED

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.17 Working Capital Fund (WCF) (Fleet Aircraft)

All agency-owned and operated WCF aircraft are FAA registered to USDA Forest Service, Boise Idaho. WCF aircraft are hosted by regions, but national optimal use is the primary goal to increase use and lower overall costs.

The purpose of the WCF is to provide a sustainable funding mechanism for the operation and replacement of agency owned aircraft that support fire suppression and non-fire aviation activities. WCF aircraft are subject to the same regulations regarding capitalization, de-capitalization, and depreciation as other WCF non-expendable personal property.

The Working Capital Fund Accounting Operations Handbook, [FSH 6509.11f](#) provides greater detail on how to accomplish day-to-day management, operations, and tasks, and what the WCF Aircraft User Guide will provide more aircraft specific information. Additionally, for more information regarding WCF fleet aircraft, refer to FSM 5713.1.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.18 Federal Excess Personal Property (FEPP)

The FEPP program refers to Forest Service owned property that is on loan to State Foresters for the purpose of wildland and rural firefighting. Once acquired by the Forest Service, it is loaned to State and local cooperators for firefighting purposes. Approximately 70% of FEPP is sub-loaned to local fire departments. For policy guidance regarding FEPP, refer to [FSH 3109.12](#) (aviation specific [FSH 3109.12, Chapter 40](#)), the [FEPP Desk Guide, Chapter 40](#).

The RAO may:

- Review all State aviation operations plans for compliance with Forest Service and State excess property direction.
- Help establish minimum standards for pilot qualifications and maintenance for excess property aircraft.
- Coordinate and/or establish an approved source of parts for excess property aircraft, such as the Department of Defense (DoD).
- Review State security risk assessments and mitigation plans.
- Review all acquisition documents prior to transfer of aircraft.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.19 Program Reviews

Program reviews will be conducted jointly by Regions and the WO for regional and national office programs. The Aviation Management Review and Quality Assurance Guide and [FSM 1410](#) will be used for these reviews.

Regional Supplement

N/A

Forest Supplement

Placeholder.

3.20 New Project/Program/Issue Requests

A project/program/issue may include the following examples:

- New or changed aviation equipment, e.g., aircraft, parachute system, etc.

- New contractor contract change, e.g., LFS Helicopter, etc.
- New agreement or MOUs.
- New process or changed process, e.g., rappel standardization, pilot standardization, etc.
- Deviation from standards, e.g., LEI exemption, Wire Strike Protection System, etc.
- New or changed policy, e.g., doctrinal policy changes, 100 hr, turbine single engine, etc.
- New or changed procedure, e.g., rappel procedures.

The proposal is submitted to the WO Aviation Division through any of the WO Aviation Branch Chiefs or Assistant Director, Aviation. The proposal should be formatted in the Project/Program/Issue Proposal template (10.4).

The Aviation Division will socialize the proposal within the division and to the RAOs and RASMs for a minimum of 30 days with a due date for discussion.

The proponent may be asked to brief the National Aviation Team (NAT). The NAT will:

- Discuss, ask questions and come to a decision.
- The decision may be to develop or gather more information, bring the proposal back to a later meeting for a Go/No Go decision or make a Go/ No Go decision.
- A No Go decision will end the proposal.
- Notify the proponent of the decision.

The proposal is briefed by NAT staff or the proponent to the Regional Aviation Officer and Regional Aviation Safety Manager Council. The councils will:

- Discuss, ask questions and come to a decision.
- The decision may be to develop or gather more information, bring the proposal back to a later meeting for a Go/No Go decision or make a Go/ No Go decision.
- A No Go decision will end the proposal.
- Notify the proponent of the decision.
- Depending on the scope a project team may be formed by the NAT, RAO and RASMs at this step.

Depending on the scope, the proposal may be briefed to the WO Director, Fire and Aviation Management (FAM) and the Regional Fire Directors (RFD). The Director FAM and RFDs may:

- Discuss, ask questions and come to a decision.
- The decision may be to develop or gather more information, bring the proposal back to a later meeting for a Go/No Go decision or make a Go/ No Go decision.
- A No Go decision will end the proposal.

- Go decision will include the NAT, RAOs, and RASMs forming a Project Team.
- Notify the proponent of the decision.

If a Project Team is formed it may be chartered by the Director FAM depending on the scope of the proposal. The Project Team will include Subject Matter Experts (SMEs) necessary to complete a Project Implementation Plan. SMEs may include:

- Aviation Operations- WO and/or Regional
- Aviation Safety- WO and/or Regional
- Airworthiness- WO and/or Regional
- WO Pilot Standardization
- WO Aviation Business
- FAM Budget
- AQM
- Fire Operations- WO and/or Regional
- Project proponent

A Project Implementation Plan outlining the steps to plan and implement a project may include the following components:

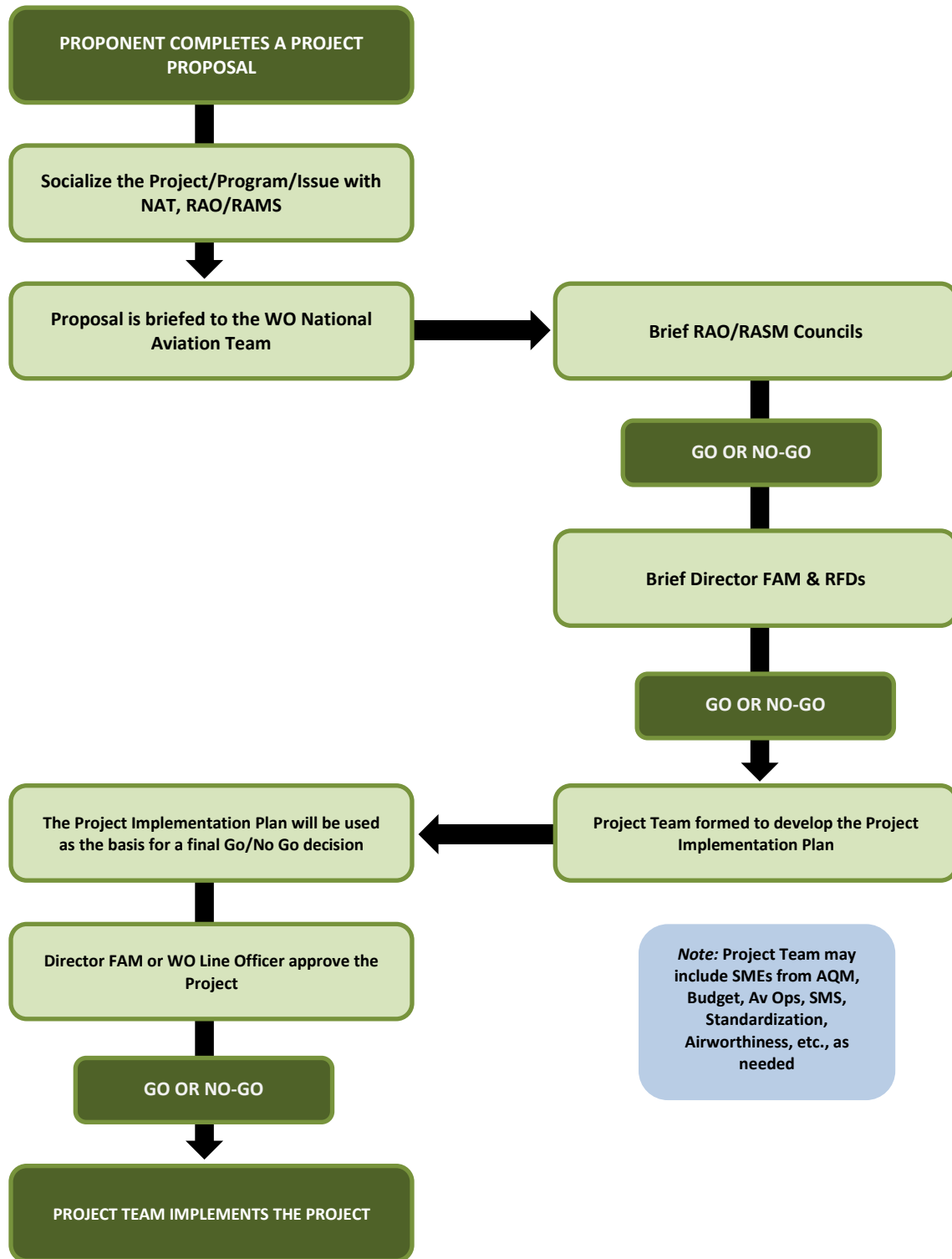
- Business Case- if required
- Requirements Analysis- if required
- Process Change Plan- if required
- Acquisition Plan- if required.
- Communication strategy- if necessary
- Official documentation- required.
- Action Plan- required
- Quality Assurance Plan- required
- Risk Assessment (safety impact analysis, business, and financial) - a safety impact analysis is required for any aviation operations related project.

The Project will require decision approval from the Director, FAM at a minimum. Depending on the scope it may require WO Line Officer approval – Chief or Deputy Chief prior to implementation and operations.

- The decision may be a Go/ No Go decision.
- A No Go decision will end the proposal.

Implement Project as defined by the Project Implementation Plan.

AVIATION Project/Program/Issue Process



4.0 Aviation Safety Management Systems

4.1 General

Safety is the state in which the possibility of harm to persons or property damage is reduced to, and maintained at or below, an acceptable level through continuing processes of hazard identification and risk management.

It (safety) must be a core value of our culture, ingrained in the character of every employee. As an agency, we must endeavor to place the safety of our co-workers and ourselves above all else. This obligation requires integrity, trust, and leadership: the integrity of every employee to adhere to Agency standards, the trust in our leaders to place safety as the first priority, and leadership at all levels to provide a culture that encourages employees to communicate unsafe conditions, policies, or acts that could lead to accidents without fear of reprisal (Chief's Safety Policy, August 27, 2009).

This commitment to safety will be reflected as doctrine within aviation safety management. The adoption of SMS continues the application of Forest Service Doctrine. SMS is not a safety program; rather it is a system which aligns, assesses, and organizes an organization's existing safety processes around the concept of system safety. SMS incorporates a proactive approach using hazard identification and risk management to achieve accident prevention.

Regional Supplement

The goal of the Aviation Safety and Training Program is to eliminate aviation accident occurrences.

Objectives

The objectives of the safety program are:

- a. To minimize human exposure to hazards through implementation of effective risk management techniques.
- b. To minimize loss of life, suffering from injury or permanent impairment, and the anguish and suffering of family and friends.
- c. To minimize the government costs that result from accidents.

- **Safety Awareness**

Safety awareness is a mental attitude fostered by proper management and supervisory procedures. FS management must be a partner in aviation safety to ensure that the standards and procedures established are understood and adhered to. This means that where operational decisions must be made, they are made prudently, with safety given priority over mission accomplishment. This requires individuals to know how to do a job or mission properly, comply with applicable FS policies and approved operating procedures, and how to follow them consistently. With a good safety awareness attitude and well-trained individuals, most aviation accidents can be prevented.

Aviation safety cannot be legislated or mandated; it can only be successfully accomplished by fostering and inspiring an attitude in which conducting aviation operations safely is the foremost priority. An undeviating and persistent commitment to professional conduct by everyone involved in the aviation program is paramount to achieving safety awareness accident prevention and successful risk management. All people involved in the aviation program play a key role in the successful (safe) outcome of aviation activities; however, management is responsible for achieving safety goals. This can only be accomplished through awareness and uncompromising support by management.

Organization for Accident Prevention

The fundamental reason for establishing the majority of Forest Service aviation positions in the past was for administration of aviation safety within the Forest Service. All personnel with aviation responsibilities are expected to actively participate in the execution of a successful aviation safety program.

The Region has designed a professional aviation organization and requires the forests to design a forest aviation organization to emphasize safety awareness. The Regional organization is staffed with technical and managerial specialists in various aviation fields that operate in their respective areas to provide continuous observations, implement accident prevention measures, monitor compliance with established procedures and advocate a cooperative safety-oriented attitude in the execution of aviation operations. Accident prevention activities include all segments of aviation and must be closely affiliated with other Forest Service functions.

Forest Supplement

Placeholder.

4.2 Safety Management Systems (SMS)

SMS offers a complimentary solution based on structuring the existing rules and continuous review of the efficacy of those rules. Thus, the system ensures that guidance and regulation meet the original intent and that they have no unforeseen adverse side effects. SMS can be considered as functioning like a filing system, which structures the organization's existing safety initiatives and provides a review process for how well those initiatives function. SMS is divided into four components: Policy, Risk Management, Assurance, and Promotion.

Regional Supplement

N/A

Forest Supplement

Placeholder.

4.3 Policy

SMS is a critical element of management responsibility in determining the agency's safety policy and SMS also defines how the agency intends to manage safety as an organizational core function.

- Policy guides aviation safety doctrine, philosophy, principles and practices.
- Policy provides framework for aviation plans ([Refer to 3.3 Aviation Plans](#)).
- Policy assists in the development of local standard operating procedures.
- Policy will foster and promote doctrinal principles and safety management systems within the Regions.

Regional Supplement

N/A

Forest Supplement

Placeholder.

4.4 Risk Management

To provide structure to control risk in operations, a formal system of hazard identification and safety risk management is essential. The risk management process is designed to manage risk to acceptable levels by the identification, assessment, and prioritization of risks followed by coordinated application of resources to minimize, monitor, and control the probability and/or impact of undesirable events.

The agency:

- Will define a process for risk acceptance that defines acceptable and unacceptable levels of safety risk; establishes descriptions for severity levels, and likelihood levels.
- Will define specific levels of management that can make safety risk acceptance decisions.
- Will define acceptable risk for hazards that will exist in the short-term while safety risk control/mitigation plans are developed and executed.
- Will establish feedback loops between assurance functions to evaluate the effectiveness of safety risk controls.

There are necessary steps in the Risk Management Process.

- Define Objectives (i.e., Strategic program analysis, change management, accident action plan, other).
- System Descriptions: Identify each system-component that contributes to the mission.

Risk assessment is a step in the risk management process. Risk assessment is the determination of hazards associated with a situation or activity.

There are necessary steps in the risk assessment process as outlined in the [FS Aviation Safety Management System Guide](#):

1. Define Objectives (i.e., System and task analysis).
2. System Descriptions: Identify each system – component that contributes to the mission. Consider change management in systems.
3. Hazard Identification: Brainstorm all possible failures, threats, and danger points.
4. Risk Analysis: Disassemble the hazard to identify outcomes, impacts of a hazardous event, and degree of exposure to risk. (Ask the question: If this hazard exists, then what happens?)
5. Risk Assessment: Evaluate the combined effects of the potential for injury, damage, fatality, etc. based upon severity and likelihood of an event occurring.
6. Decision Making: Determine mitigations needed, conduct cost/benefit analysis, develop an action plan, and implement controls. (This is risk management).
7. Validation of Control: Monitor controls and supervise operations to determine if controls are effective.

Risk assessment can be divided into three levels:

- *Time Critical*. This method of risk management is an “on-the-run” mental or verbal review of the situation using the Operational Risk Management (ORM) process without necessarily recording the information. Many of the skills used in this context are applicable to normal mission where deliberate risk management has occurred and crews must manage risk in a dynamic situation. Note that “time critical” does not mean “hasty” or “uninformed.”
- *Deliberate*. This ORM method is used with adequate planning time and may involve more than one system at its source. It involves a systems identification, hazard identification, risk assessment/analysis, consideration of control options and risk decision making, implementation of controls, and supervision. This method will involve documentation of the process and actions. Examples of the tools in use for ORM are project aviation safety plans (PASP) and job hazard analysis (JHA).
- *Strategic/In-Depth*. Strategic Risk Management (SRM) is conducted at the highest levels of the organization and is typically applied to “systems of systems” type complexity, and requires more sophisticated techniques and professional reviews. A system or task description should completely explain the interactions among the software, hardware, environment, and live ware (e.g. SHEL model) that make up the system in sufficient detail to identify hazards and perform risk analysis.

This method should be used in instances where an entire program-wide assessment is deemed necessary; new technology or a change in process is being proposed; or when risks appear consistently high in a specific functional area. The strategic

process produces a permanent record of findings and decisions used for long term planning, organizational decision-making and as authoritative training resources.

Note: The SRM process shall not preclude employees or contractors from taking interim immediate action to eliminate or mitigate existing safety risk when and where it is recognized that urgent action is required.

Regional Supplement

N/A

Forest Supplement

Placeholder.

4.5 Assurance

The safety assurance component involves processes for quality control, mishap investigation, and program reviews.

- Provide aviation safety oversight and review through active field presence and encourage a reporting culture between management and aviation.
- Monitor established standards and procedures and make corrections as needed.
- Monitor accident and incident trends, and implement appropriate prevention action.
- Report accidents and incidents with potential in accordance with the local emergency response plan.
- Conduct accident and incident investigations.
- Provide guidance, coordination, and monitoring of safety evaluations conducted by the Regional aviation staff and Forest/Unit Aviation Officers.
- Provide assistance in aviation activities to ensure best practices and procedures are understood.
- Promote and provide corrective action on [SAFECOM](#) reports, develop trend analysis and communicate lessons learned.
- Review aviation accident and incident reports and follow-up on action items.

QA techniques can be used to provide a structured process for achieving objectives. Forest Service efforts to date have concentrated on the development and implementation of comprehensive doctrine/policy revision, risk management processes, SMS promotion and training.

All effort should be made to focus corrective action as specifically as possible.

Safety evaluations are a means of determining compliance with safety standards and to detect unsafe conditions in order to prevent an incident, accident, loss of life, personal injury or property damage.

Formal evaluations are accomplished using a team of Forest Service, interagency, and/or industry aviation and management officials to conduct surveys, audits and reviews. The evaluation team is responsible for providing the operating unit and its managing organization with a written report of its findings and recommendations. The managing organization of the operating unit is then responsible for developing and implementing an action plan that addresses the findings and recommendations contained in the report. Forest Aviation Activities Safety Reviews will be conducted to provide safety assurance on a four/five year schedule for each forest, with up to three forests reviewed each year. These evaluations should be conducted annually at each established aviation base. Informal evaluations are conducted on a more frequent basis and are performed by aviation specialists during field assistance visits to Forests, aviation bases, incident bases and projects. In all cases, follow-up includes all subsequent activity needed to see that corrective actions are taken.

Helicopter and Air Tanker Base Reviews. Base reviews will be conducted by the Regional Office in accordance with the Interagency Helicopter Operations Guide and Interagency Air Tanker Base Operation Guide. To achieve the maximum degree of safety and efficiency, these reviews will place a special emphasis on trend monitoring and then applying these results in proficiency drills at each review. All finding will be reported to the Managing Line Officer, Forest Aviation Officer, Regional Aviation Safety Officer and the Regional Fire Director.

4.5.1 Aviation Safety and Assistance Team (ASAT)

During increased levels of wildland fire activity, an [Aviation Safety and Assistance Team](#) assures safety by providing (1) on-the-spot safety and technical assistance to aviation operations and (2) a conduit through which the field can communicate to Fire and Aviation Management. When conducting reviews, an ASAT team should follow direction as stated in:

- [Forest Service Aviation Safety Management System Guide](#)
- [FSM 1410](#)
- [Interagency Standards for Fire and Fire Aviation](#)

The purpose of Aviation Safety Technical Assistance Teams (ASTAT) is to expand the oversight and influence of the RASM across multiple incident and project locations. Operationally, ASTATs work to enhance safety, improve operational efficiency and effectiveness, and are able to provide on-site technical assistance. The Region will establish an ASTAT when aviation activity suggests doing so would be beneficial. All efforts will be made to coordinate with FAOs and aviation positions on IMTs about ASTAT activities. The RASM has responsibility to order, configure, and manage ASTATs.

4.5.2 Aviation Safety Communiqué–SAFECOM

[SAFECOM](#)s fulfills the Aviation Mishap Information System (AMIS) requirements for aviation mishap reporting for the Forest Service. The SAFECOM reports any condition, observance, act, maintenance problem, or circumstance which has the potential to cause an aviation-related mishap (FSM 5720.46). The SAFECOM system is not intended for initiating punitive actions. Submitting a SAFECOM is not a substitute for “on-the-spot” correction(s) to a safety concern. It is a tool used to identify, document, track and correct

safety related issues. This form is located on the SAFECOM web page, Interagency SAFECOM System. All personnel involved in aviation activities are encouraged to submit SAFECOMs when they feel such action is warranted.

The causes of most accidents reveal failures to observe controls already established through previous risk management efforts and accident experiences. In addition, some accident causal factors reveal hazards not previously addressed adequately. It is imperative that these hazards or hazardous practices be corrected or they are sure to be repeated over and over again.

An aviation hazard/incident is any event or situation associated with the operation of an aircraft that, if not corrected, could result in an accident. The individual or organization with first-hand knowledge of the circumstances pertinent to the hazard/incident accomplishes the most efficient and direct detection of hazards/incidents.

Each individual and each organizational unit has an obligation to others in aviation to share hazard, mishap, and causal information. Each unit's aviation plan contains provisions for encouraging the reporting of such information by individuals. The information is documented and processed for system-wide distribution using the SAFECOM (Form 5700-14) process.

Reporting Procedures

1. The individual involved or with first-hand knowledge of a hazard/incident should complete a SAFECOM form and submit it to the Regional Aviation Safety Manager (RASM) as soon as possible. The preferred and easiest method for doing this is by completing and submitting the SAFECOM through the Internet, although any method of getting the information into the system is acceptable. The Internet site is at **www.safecom.gov**.
2. The SAFECOM system automatically assigns a tracking number to each SAFECOM entered into the database.
3. The system simultaneously sends a message to the RASM and to the Forest Aviation Officer of the unit with operational control of the aircraft stating that a SAFECOM has been submitted.
4. The RASM coordinates any follow-up required, and posts the SAFECOM on the "public access" side of the SAFECOM database on the Internet.
5. Each aviation base should post the reports in an accessible location for all interested persons to see.

Actions to correct hazards/incidents are essentially the same, whether identified and reported before or after an accident. The normal accomplishment of remedial action

is a function of management personnel. Aviation safety programs should contain provisions for recommending specific remedial action to be taken by the organization and its employees to correct hazards/incidents.

The persistent monitoring of corrective actions has proven necessary to ensure that hazards are not left uncorrected and threaten future aviation activities with damage and/or injury. Regional and Forest Aviation Staff are responsible for monitoring corrective action.

4.5.3 Aircraft Accident Investigation Process

The [National Transportation Safety Board \(NTSB\)](#) is responsible for investigating all Forest Service aviation accidents. The Forest Service investigation team additionally conducts a review of Forest Service management and policy issues concurrent with the [NTSB](#) investigation utilizing the [Aircraft Accident Investigation Guide](#). The Coordinated Response Protocol (CRP) provides guidance for methodology. On completion of the learning review, the draft report will be reviewed by a Learning Review Board (LRB). The chairperson of the LRB forwards the Final Review Report, the Draft Safety Action Plan, and transmittal letter to the Chief's office for approval.

4.5.4 Forest Service Strategic Risk Assessment Close-Out Process

Once the Strategic Risk Assessment has been completed, and the Assistant Director, Aviation and Assistant Director, Risk Management will deliver the final product to the Director, Fire and Aviation Management. The Director will provide direction for the risk assessment report to be reviewed. The Strategic Risk Assessment Close-out Working Group (SRACOW) will establish a Subject Matter Expert (SME) group of no more than five SMEs. The SME group will be given direction, parameters and timelines to review the report; identify mitigations that are one time effort and those that are on-going; assess individual mitigation's effectiveness and implementation cost and to develop a Quality Assurance (QA) checklist for long-range monitoring. The SME group will provide the SRACOW with these products in the established timelines. The SRACOW will review and either accepts the SME products or a back and forth coordination will begin to develop acceptable products. Once the SRACOW agrees on an acceptable QA checklist, the SRACOW will provide the Assistant Director, Aviation and Assistant Director, Risk Management with documentation on the completion of the project. The Assistant Directors will deliver the final product to the Director of Fire and Aviation for Deputy Chief, State and Private Forestry signature. Strategic Risk Assessments should be closed out and formally completed no later than one year from the date of tasking to the SRACOW. A bulleted representation of the process is below:

- Aviation Strategic Risk Assessment completed and assigned to the SRACOW with the expectation of being formally closed out within one year. (Director FAM)
- Develop SME Group and provide clear direction of assigned tasks. (SRACOW)
 - o Identify on-going and one time mitigations and assess their viability. (SME)
 - o Develop QA Checklist. (SME)

- o Provide products back to SRACOW. (SME)
- Review, validate and either accept or return SME products. (SRACOW)
 - o Pass Back Process if needed.
- Once acceptable products are developed, formally complete and close out the risk assessment through documentation to the Assistant Director, Aviation and the Assistant Director, Risk Management. (SRACOW)

4.5.5 Project Aviation Safety Planning (PASP)

Accident prevention is paramount when planning individual aviation operations. PASPs are not required for incident aviation operations or point to point / administrative use flights.

Prior to commencing non-emergency aircraft operations, or aircraft operations outside the scope of an approved training program, the Regional Directors, Area Director, Forest Supervisors, and Station Directors shall develop and document a Project Aviation Plan including a PASP that will be reviewed by the RAO ([FSM 5711.04b](#)). An aviation safety manager is also recommended to be included in the review process. An appropriate line officer shall approve all Aviation Plans per direction in [FSM 5711.04](#).

Regional Supplement

The Regional PASP template can be found in Appendix 10.12.

Forest Supplement

Placeholder.

4.6 Promotion

The organization must promote safety as a core value with practices that support a positive safety culture. Safety promotion can be accomplished through safety awards, education, and communication.

- Training
- Communication
- [Lessons Learned Website](#)
- Reporting and Feedback
- Safety and Mishap Information
- Safety Awards

The desired positive Safety Culture is informed, flexible, learning, just and is a reporting culture that captures employee operational knowledge and experience. The end result of this cultural shift is to achieve the status of a High Reliability Organization (HRO).

The region understands that in order to accomplish “zero accidents”, we must maintain, provide and support a robust aviation training program. The region will strive to learn from

previous accidents and mishaps by incorporating modern and advance aviation training into the regions aviation training program.

4.6.1 Human Factors

Human error is the single area, which if possible to eliminate or reduce, would provide the greatest benefit in accident prevention. Human behavior is so complex that it is unrealistic to think that human error can be eliminated. When fully implemented, SMS provides and promotes a positive Safety Culture which can reduce the impact of human error.

4.6.2 Aviation Safety Awards Program

Aviation Safety Awards are a positive part of the aviation program and are provided to all levels with the Forest Service organization. National awards are given following the guidelines in [FSM 5724](#) for pilots and employees.

Regional Supplement

“SAFE ATTITUDE” is the interagency safety awareness campaign designed to help people understand that "attitude is everything" in aviation. AIRWARDS reinforce safety as a core value and encourage prevention of aviation mishaps. Everyone is eligible to nominate or be nominated for an AIRWARD. Nominations are submitted through a [SAFECOM](#) or by contacting the Regional Aviation Safety Manager.

Airwards are given to people working in and around aviation in recognition of their professional performance during a hazardous aviation event or significant contribution to aviation mishap prevention. AIRWARD recipients are featured in AIRWARD News which shares stories on those who are doing things right and sparking new ideas for different operations and programs.

Forest Supplement

Placeholder.

4.7 National Fire and Aviation Operations Alert System

RESERVED

5.0 Aviation Operations

5.1 General

It is the responsibility of each employee, cooperator, and contractor to conduct aviation operations that have been approved by management, planned properly, utilizes the correct equipment, use qualified personnel, and insure that the risk has been mitigated to an acceptable level.

Forest Service employees are often challenged by working in very high-risk and dynamic environments that are not always predictable. This responsibility can only be realized through participation of every employee.

Safety is the first priority and leadership at all levels must foster a culture that encourages employees to communicate unsafe conditions, policies, or acts that could lead to accidents without fear of reprisal.

The four components of SMS (Policy, Risk Management, Assurance, and Promotion) are critical to the success of safe operations.

Regional Supplement

General

Forest Service aviation activities include both "civil" and "public" operations. Civil aircraft operations shall comply with applicable sections of 14 CFR as well as Forest Service (FS) policy. Public aircraft operations shall comply with applicable sections of 14 CFR (control of air traffic, use of airspace and aircraft registration) as well as FS policy. Life-threatening emergencies may require deviation from policy. The pilot shall take appropriate action to ensure safety of flight. These situations shall be reported by the pilot and documented on Aviation Safety Communiqué (SAFECOM Form FS-5700-14). However, FS employees should attempt to follow FS aviation policies to the maximum extent practical. Aviation operations shall comply with the Federal Aviation Regulations (FAR), Forest Service Health and Safety Code, Forest Service Manual (FSM), and Forest Service Handbooks (FSH) as supplemented by the Region and Forest. The following activities, procedures and services shall be guided by the stated policy. When a more detailed explanation is required the appropriate reference is cited.

Forest Supplement

Placeholder.

5.2 Manuals, Handbooks, and Guides

5.2.1 Manuals

Aeronautical Information Manual (AIM): Issued by the Federal Aviation Administration; copies are available from the Government Printing Office and commercial sources. Also available at: http://www.faa.gov/air_traffic/publications/atpubs/aim/index.htm.

Rotorcraft Flight Manual (RFM): The original equipment manufacturer's manual is available in each aircraft operated by the agency.

Airplane Flight Manual (AFM): The original equipment manufacturer's manual is available in each aircraft operated by the agency.

Federal Aviation Administration Commercial Pilot Practical Testing Standards (PTS): Rotorcraft or Airplane as appropriate. Available at: https://www.faa.gov/training_testing/testing/test_standards/

FSM 5700 Aviation Management: Available at: http://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsm?5700

5.2.2 Handbooks

FSH 5309.11 – Law Enforcement Handbook, Chapter 50 – Actions and Procedures: Available at: https://fs.usda.gov/FSI_Directives/5309.11_50.doc.

FSH 5709.16 Aviation Management and Operations Handbook: Available at: http://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsh?5709.16

FSH 6709.11 Health and Safety Code Handbook: Available at: http://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsh?6709.11.

Military Use Handbook: Available at: http://www.nifc.gov/nicc/predictive/intelligence/military/Military_Use_Handbook_2006_2.pdf.

Pilot's Operating Handbook (POH): Also known as the FAA Approved Airplane Flight Manual; available in each aircraft operated by the agency.

5.2.3 Forest Service Guides

The most recent Forest Service approved version of the following guides supersedes all previous versions. Forest Service National Guides shall be approved in writing by the Deputy Chief, State & Private Forestry.

Accident Investigation Guide: <http://www.fs.fed.us/t-d/pubs/pdfpubs/pdf05672806/pdf05672806dpi72pt01.pdf>.

Aircraft Accident Investigation Guide: Available from Branch Chief, Aviation Safety until published within an updated Aviation Safety Management System Guide.

Aircraft Inspection Guide: Available from the Washington Office Detached Unit, Boise agency aviation staff. Available at: http://www.fs.fed.us/fire/aviation/av_library/AIG_2008.pdf

Air Card Guide

Aviation Safety Management System Guide: http://www.fs.fed.us/fire/av_safety/

Federal Excess Personal Property (FEPP) Desk Reference Guide: http://www.fs.fed.us/fire/partners/fepp/desk_guide/chap40.html

Fire and Aviation Qualifications Guide: <http://www.fs.fed.us/fire/publications/fsfaqq/fsfaqq.pdf>.

Helicopter Flight Evaluation Guide (HFEG): Available from the Washington Office Detached Unit, Boise agency aviation staff.

National Law Enforcement and Investigations (LEI) Short-Haul and Hoist (S-H/H) Guide

National Rappel Operations Guide:

http://www.fs.fed.us/fire/aviation/av_library/NROG/USFS%20NROG%202013.pdf

Professional Helicopter Pilot Guide:

http://www.fs.fed.us/fire/aviation/av_library/professional_helic_pilot_guide.pdf

Security Standard Requirements Guide: Available from aviation management staff, Washington Office, 1400 Independence Avenue SW, Washington, DC 20250.

Special Mission Airworthiness Assurance Guide:

http://www.fs.fed.us/fire/aviation/av_library/FS%20Special%20Mission%20Airworthiness%20Assurance%20Guide_Revision1_12_7_2011.pdf.

WCF Aircraft User Guide:

http://www.fs.fed.us/fire/aviation/av_library/Final_WCF_User_Guide_June_2010.pdf

Forest Service National Rappel Operations Guide:

http://www.fs.fed.us/fire/aviation/av_library/NROG/USFS%20NROG%202013.pdf

Operations and Safety Procedures Guide for Helicopter Pilots:

http://www.nifc.gov/aviation/av_documents/av_helicopters/SafetyBrief.pdf

5.2.4 Forest Service Aviation Operations Plans

The most recent Forest Service approved version of the following operational plans supersedes all previous versions.

- **Emergency Medical Short-Haul Operations Plan**
- **Modular Airborne Firefighting System (MAFFS) Operating Plan**
- **Night Air Operations Plan**
- **Water Scooper Aircraft Operating Plan**
- **Airtanker Operations Plan**
- **Aircraft Coordination Operations Plan**
- **National Rappel Operations Guide**

5.2.5 Interagency Aviation Operational Guides

The most recent Forest Service approved version of the following guides supersedes all previous versions. Interagency Guides utilized by the Forest Service shall be approved in writing by the Deputy Chief, State & Private Forestry.

Cooperator Aircraft and Pilot Approval Guide for Interagency Fire:

http://www.fs.fed.us/fire/aviation/av_library/COOP%20NASF%20Standards.pdf

Interagency Aerial Ignition Guide (IAIG):

http://www.nwcg.gov/sites/default/files/products/PMS501_2015.pdf

Interagency Aerial Supervision Guide (IASG): (NOTE – AS OF JANUARY, 2016, THE MOST RECENT IASG APPROVED BY THE FOREST SERVICE WAS IN 2011)

<http://www.nwcg.gov/publications/interagency-aerial-supervision-guide>

Interagency Airplane Pilot Practical Test Standards:

[https://www.doi.gov/sites/doi.gov/files/migrated/aviation/tech/upload/Airplane Pilot Practical Test Guide 2012.pdf](https://www.doi.gov/sites/doi.gov/files/migrated/aviation/tech/upload/Airplane_Pilot_Practical_Test_Guide_2012.pdf)

Interagency Airspace Coordination Guide (IACG):

http://www.airspacecoordination.org/guide/asguide_full.pdf

Interagency Airtanker Base Operations Guide (IABOG):

<http://www.nwcg.gov/pms/pubs/pms508.pdf>.

Department of Interior Aviation Life Support Equipment (ALSE) Handbook:

[https://www.doi.gov/sites/doi.gov/files/migrated/aviation/library/upload/Aviation Life Support Equipment Handbook 2008.pdf](https://www.doi.gov/sites/doi.gov/files/migrated/aviation/library/upload/Aviation_Life_Support_Equipment_Handbook_2008.pdf)

Interagency Aviation Mishap Response Guide and Checklist:

[https://www.doi.gov/sites/doi.gov/files/migrated/aviation/safety/upload/IAMRGC PMS503.pdf](https://www.doi.gov/sites/doi.gov/files/migrated/aviation/safety/upload/IAMRGC_PMS503.pdf)

Interagency Aviation Training Guide (IAT): Also available at:

https://www.iat.gov/docs/IAT_Guide_2014_0331.pdf

Interagency Aviation Transport of Hazardous Materials Guide:

[https://www.doi.gov/sites/doi.gov/files/migrated/aviation/library/upload/HAZMAT Handbook 2005-2.pdf](https://www.doi.gov/sites/doi.gov/files/migrated/aviation/library/upload/HAZMAT_Handbook_2005-2.pdf)

Interagency Helicopter Operations Guide (IHOG):

<http://www.nwcg.gov/sites/default/files/products/pms510.pdf>

Interagency Helicopter Pilot Practical Test Standards:

http://www.fs.fed.us/fire/aviation/av_library/ihpts.pdf

Interagency Helicopter Rappel Guide (IHRG):

[http://www.nifc.gov/PUBLICATIONS/ihrg/Interagency Helicopter Rappel Guide 2011.pdf](http://www.nifc.gov/PUBLICATIONS/ihrg/Interagency_Helicopter_Rappel_Guide_2011.pdf).

Interagency Single-Engine Airtanker Operations Guide (ISOG):

<http://www.nwcg.gov/sites/default/files/products/pms506.pdf11.pdf>.

Interagency Smokejumper Operations Guide (ISMOG):

http://www.fs.fed.us/fire/aviation/av_library/ismog/ismog-fs.pdf.

Interagency Smokejumper Pilots Operations Guide (ISPOG):

http://www.fs.fed.us/fire/aviation/av_library/ISPOG.pdf

Interagency Standards for Fire and Aviation Operations (annual revision):

https://www.nifc.gov/policies/pol_ref_redbook_2015.html

NASF Cooperators Aviation Standards for Interagency Fire:

http://www.fs.fed.us/fire/aviation/av_library/COOP%20NASF%20Standards.pdf.

National Interagency Mobilization Guide (annual revision):

<http://www.nifc.gov/nicc/mobguide/index.html>.

5.2.6 Other References

Administrative Use of Aircraft Desk Reference**Aviation Risk Management Workbook:**

http://www.fs.fed.us/fire/av_safety/risk_management/ARMW%20Individual%20Files/ARM_2011W.pdf.

Foundational Doctrine Fire and Aviation Rotor and Wing January 2006:

http://fsweb.wo.fs.fed.us/fire/fam/aviation/foundational_doctrine_fam_2006.pdf

Interagency Airtanker Base Directory: Available from the Washington Office Detached Unit, Boise Great Basin Cache, as National Fire Equipment System (NFES) Order Number 002537.

National Aviation Safety and Management Plan:

http://www.fs.fed.us/fire/aviation/av_library/2012%20National%20Aviation%20Safety%20and%20Management%20Plan%20Final.pdf

Regional Supplement

Regional Aviation Operational Guides:

SACC Mobilization Guide: http://.gacc.nifc.gov/sacc/forms_references.php

Forest Supplement

Placeholder.

5.3 Public/Civil Aircraft Operations

Forest Service aviation activities include both “civil” and “public” operations. Civil aircraft operations shall comply with [FSM 5703.32](#). Public aircraft operations shall comply with [FSM 5703.31](#).

5.3.1 Civil Aircraft

All Forest Service aircraft operations are civil unless specifically declared public. All aircraft other than public aircraft are considered civil aircraft ([FAR1.1](#)).

5.3.2 Public Aircraft

The definition for Public Aircraft can be found in the [FSM 5705](#). The Forest Service will comply with all 14 Code of Federal Regulations (14 CFR) Federal Aviation Regulations in the operation and maintenance of public aircraft with the few exceptions outlined in [FSM 5714](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.4 Employees on Unapproved Aircraft

All agency employees will comply with Forest Service aviation policies when performing agency employment-related duties on board any organization's aircraft and/or aircraft operated under any other organization's operational control. Employees shall be mindful of policy and the appropriate approval level for any deviation from policy. These policies include, but are not limited to: approved aircraft and pilot (carding or letter of approval), PASP, flight following, PPE, and appropriate management.

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.5 Aviation Emergency Response

In unusual circumstances, Forest Service personnel may perform a flight in non-approved aircraft with non-approved pilots ([FSM 5713.53](#)). The Regional Forester may authorize this flight based on advisement and recommendation from the Regional Aviation Officer and counsel from the Regional Aviation Safety Manager.

A mission Risk Assessment (RA) shall be completed and approved by the appropriate Line Officer prior to the flight(s). The [Green-Amber-Red \(GAR\) Model Risk Assessment](#) is an example of an appropriate aviation risk assessment to utilize in an aviation emergency response situation.

These flights shall be documented on form FS-5700-14, [SAFECOM](#): Aviation Safety Communiqué and submitted to the appropriate aviation manager.

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.6 Flight Planning

5.6.1 Point-to-Point

Point-to-Point flights will be tracked by either an FAA – VFR (Visual Flight Rules), IFR (Instrument Flight Rules) Flight Plan, or agency flight plan. Minimally, there must be notification to Dispatch Centers upon departure and arrival.

5.6.2 FAA Flight Plans

FAA Flight Plans are filed by the pilot, opened in flight upon departure, and closed by the pilot with FAA Air Traffic Control (ATC) or Flight Service upon arrival.

5.6.3 Agency Flight Plans

Agency flight plans for point-to-point flights are documented on a Flight Request/Flight Schedule form. The procedures for accomplishing agency flight tracking are documented in detail in the [National and Geographic Area Mobilization Guides](#).

5.6.4 Flight Hazard Maps

The document at the following link provides a status report of the interagency effort to standardize flight hazard maps:

<http://gis.nwcg.gov/standards/AviationHazards/Memorandum%20No.15-008%20Aviation%20Hazard%20Mapping.pdf>

The Map Product Description Sheet located at the following link provides guidance to GIS Specialists for creating flight hazard maps: http://gis.nwcg.gov/standards_data.html

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.7 Flight Following

5.7.1 Mission Flight Following

All Forest Service flight activities, except those activities conducted under IFR flight plans (14 CFR 91.173) or which are under positive control with air traffic control (ATC), shall be coordinated through an originating dispatch office during its hours of operation in accordance with FSH5709.16 Chapter 33.11.

AFF is the preferred method of agency flight following but shall not preclude the use of radio flight following as an alternate means. [Automated Flight Following \(AFF\)](#) does not reduce or eliminate the requirement for FM radio capability and radio communication.

Reference the [National Interagency Mobilization Guide, Chapter 20](#) Flight Following Requirements and Procedures.

The method of flight following for Fire incidents is documented on an Aircraft Resource order or in a Dispatch Center's Mobilization/Operating Guide. The method for flight following non-fire resource missions will be documented in a Project Aviation Safety Plan (PASP) and/or Flight Request/Flight Schedule form.

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.8 Radio Frequency Management/Communications

RESERVED

Do not use any frequency without proper authorization from the authorized radio frequency management personnel at the local, state, regional or national level.

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.9 Latitude and Longitude Formats

The aviation standard for communicating latitude and longitude shall be: Degrees Decimal Minutes (also known as Degrees Minutes, Decimal Minutes, or Degrees Minutes Tenths) i.e., 48°36.12'N 114°08.12'W. Ground units must ensure their GPS is set to Degrees Decimal Minutes before providing coordinates to aircraft.

There is also a format specific to the [Interagency National Mobilization Guide](#), for requesting TFRs, which is an exception to the above formats. An example would be 483612N/1140812W (uses no punctuation at all with degrees, minutes and seconds).

Reference the [Latitude/Longitude Information for GPS Navigation Information Bulletin FS-10-02](#) for more information.

5.10 Overdue or Missing Aircraft

An aircraft is considered "overdue" when it fails to arrive within 30 minutes after the Estimated Time of Arrival (ETA) and cannot be located.

An aircraft is considered “missing” when its fuel duration has been exceeded, it has been reported as “overdue” to the FAA and the FAA has completed an administrative search for the aircraft without success.

If an aircraft is missing, overdue, or downed, initiate the [Interagency Mishap Response Guide and Checklist](#).

Regional Supplement

The Southern Region uses a standardized template for aviation mishap response. The actions for an overdue or missing aircraft are the same as found in the above referenced document.

Forest Supplement

Placeholder.

5.11 Mishap Response

Forest Service local units shall establish procedures in an Emergency Response Plan to, [FSM5720.48](#):

- Coordinate and plan the response to aviation accidents and incidents; and should
- Conduct periodic exercises of mishap response plans.

The Emergency Response Plan is specific to each unit and shall be available in all dispatch offices. The Emergency Response Plan must be updated annually at a minimum.

Regional / Program Aviation Safety Manager should be notified immediately of any aviation accident, incident with potential or NTSB reportable incident.

Regional Supplement

The Regional template ([Regional Template](#)) for aviation mishap response (The Aviation Accident/Incident Response Guide) is updated annually by SACC to reflect Regional and National Interagency contacts and placed on the SACC website under the aviation link. Local units need to use this template as a foundation and incorporate local FAM contacts, local hospitals, “life flights” type resources and pertinent emergency response information (i.e. phone numbers, latitude, longitude and frequency information for area hospital Helibases) into their respective response guides. Responding to aviation mishaps is a rare occurrence, so practice drills and discussion on responding to mishaps should occur at least annually.

Forest Supplement

Placeholder.

5.12 Passengers

A passenger is any person aboard an aircraft, when traveling on official Forest Service business, who does not perform the function of a flight crewmember or air crewmember.

Passengers will:

- Use appropriate personal protective equipment for the type of flights being conducted
- Report aviation incidents, operations deviating from policy, potential incidents
- Ensure personal safety as well as safety for others involved in the flight.

5.12.1 Agency Employees off Duty

Federal employees cannot utilize annual leave/Leave without Pay (LWOP) or “volunteer” in order to circumvent agency policy. If any aspect of the employee’s activity is related to their official duties, they are conducting agency business, regardless of their pay or leave status.

Refer to the regulations regarding off-duty activities in accordance with the Standards of Ethical Conduct for Employees of the Executive Branch ([5 CFR Part 2635.802-803](#))

5.12.2 Volunteers

Volunteers when traveling on official business are official passengers, within the terms of [FSH 6509.33, Federal Travel Regulations 301-1](#). A [Day Trip Authorization \(FS-5700-12\)](#) shall be filled out for each flight listing each volunteer. During fire mission flights, the Incident Commander with Delegation of Authority from the unit line officer or the local line officer is the appropriate level of approval ([FSM 5716.44- Exhibit 01](#)).

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.13 Transportation of Hazardous Materials

Transportation of hazardous materials aboard agency contracted aircraft must meet the requirements set forth in the [Interagency Aviation Transport of Hazardous Materials USDI Handbook and USDA-FS Guide](#).

Hazardous materials transported aboard commercial aircraft fall under [49 CFR Part 175](#). Employee shall check with commercial carrier prior to traveling. Some commercial carriers may not permit hazardous materials.

When hazardous materials are transported on agency aircraft, the most current special permit authorization issued by the Department of Transportation directly to the USDA Forest Service ([DOT SP-9198](#)) shall be onboard each aircraft. All aircraft operated under this special permit must be under operational control of the Forest Service for the purposes of a government function listed in the special permit. The specific details associated with the most current revision of DOT SP-9198 may be viewed and downloaded from the following link:

http://www.phmsa.dot.gov/pv_obj_cache/pv_obj_id_762CE209CD4276E7DA5127C29B51F27BC9B90000/filename/SP9198_2014010921.pdf

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.14 Invasive Species Control

Aquatic invasive species are easily transported in a variety of ways (e.g., helicopter buckets, fixed tank helicopters and SEATs utilizing open water sources, engines and tenders, and other water handling equipment). Agency personnel should become knowledgeable in the preventive measures associated with the prevention of the spread of aquatic plants and invertebrates. Aviation managers should consult with local unit representatives to acquire information associated with: contaminated water sources, approved water sources, cleaning equipment exposed to contaminated water requirements, and other pertinent information.

In addition, the Equipment Technology Committee under the National Wildfire Coordinating Group established an Invasive Species Subcommittee to focus on developing guidance for use in the interagency fire community. Current information is available at http://www.nwccg.gov/branches/et/etc/subcommittees/invasive_species/invasive_species-subcommittee.htm specific to this subcommittee.

Work is underway to develop additional guidance and procedures in the cleaning of equipment that has been exposed to aquatic invasive. Current information concerning cleaning solutions can be found at this web site:

<http://www.fs.fed.us/rm/fire/wfcs/documents/watercon.pdf>

Many web sites exist containing information on invasive aquatic species. The following is not an all-inclusive list but will provide the user with specifics about aquatic invasive species, guidance surrounding the prevention of spreading invasive, as well as equipment cleaning information:

Forest Service Region 4 Fire Operations Guidance for Aquatic Invasive Species:

<http://www.fs.fed.us/r4/resources/aquatic/guidelines/index.shtml>

USDA National Invasive Species Information Center Resource Library:

<http://www.invasivespeciesinfo.gov/resources/orgstate.shtml>

Forest Service Technology & Development Water-Source Toolkit:

<http://www.fs.fed.us/t-d/programs/wsa/watertoolkit.htm>

Environmental Protection Agency Useful Links to Invasive Species Information:

http://www.epa.gov/owow/invasive_species/links.html

Forest Service Invasive Species Program:

<http://www.fs.fed.us/invasivespecies/index.shtml>;

<http://www.fs.fed.us/invasivespecies/relatedlinks.shtml>

Forest Service Region 4 Invasive Species Homepage:

<http://www.fs.fed.us/r4/resources/invasives/>

US Fish and Wildlife Service Western Regional Panel on Aquatic Nuisance Species Homepage: <http://www.fws.gov/answest/default.html>

Global Invasive Species Database: <http://www.issg.org/database/welcome/>

California Department of Fish and Game Invasive Species:

<http://www.dfg.ca.gov/invasives/>

USDA National Invasive Species Information Center Homepage:

<http://www.invasivespeciesinfo.gov/>

Aquatic Nuisance Species Task Force Homepage: <http://anstaskforce.gov/default.php>

US Fish and Wildlife Service Invasive Species Homepage:

<http://www.fws.gov/invasives/>

US Geological Survey Non-indigenous Aquatic Species Homepage:

<http://nas.er.usgs.gov/>

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.15 Fire Chemicals and Aerial Application Policy Near Waterways

For operational guidelines on use of fire chemicals, refer to [Implementation Guidance for the Nationwide Aerial Application of Fire Retardants on National Forest Systems Lands](#). For aerial application of pesticides near “waters of the United States”, refer to Environmental Protection Agency’s National Pesticide Discharge Elimination System (NPDES) <http://cfpub.epa.gov/npdes/> and consult your USFS Regional Pesticide Coordinator for NPDES permitting information.

Interagency policy only allows the use of a product that is qualified and approved for intended use. A Qualified Products List (QPL) is published for each wildland fire chemical type and maintained on the Wildland Fire Chemical Systems (WFCS) web site: <http://www.fs.fed.us/rm/fire/wfcs/index.htm>.

Personnel involved in handling, mixing, and applying chemicals or solutions shall be trained in proper safe handling procedures and use the personal protective equipment recommend on the product label and Material Safety Data Sheet (MSDS). The MSDSs for all approved fire chemicals can be found on the WFSC web site. MSDSs for pesticides or other materials must be available on site for duration of project. One resource for searching MSDSs is <http://www.msds-online.com/msds-search/>.

Airtanker bases shall have appropriate spill containment facilities (and equipment) in place.

Products must be blended or mixed at the proper ratio by approved methods prior to being loaded into the aircraft. Inaccurate mixing of fire chemicals may negate the suppressant or retarding properties, which is not cost effective and may be a safety factor.

Avoid aerial application of wildland fire chemicals within 300 feet of waterways. Report all retardant misapplications using the report tools located on the USFS Retardant Environment Impact Statement (EIS) website: [Aerial Application of Fire Retardant](#). The following link provides assistance with access to retardant misapplication forms and the reporting process: http://www.fs.fed.us/fire/retardant/forms/wfcmr_getting_started_guide.pdf

5.15.1 Retardant Avoidance Areas

Additionally, aerial retardant drops are not allowed in mapped avoidance areas for threatened, endangered, proposed, candidate or sensitive species except in cases where human life or public safety is threatened and retardant within an avoidance area could be reasonably expected to alleviate that threat. Maps identifying all retardant avoidance areas (including waterways) can be found at: <http://www.fs.fed.us/fire/retardant/maps.html>. These maps shall be provided to dispatch centers, incident commanders and incident aviation resources.

Regional Supplement

Avoid aerial application of wildland fire chemicals within 300 feet of waterways. Consult **Interagency Standards for Fire and Fire Aviation Operations** handbook for current reporting processes for any aerial application of retardant, foam or water enhancer (gel) in a waterway or within the 300-foot buffer area; or when a transportation accident results in a spill of a wildland fire chemical into a waterway or within the 300-foot buffer; or when ground resources apply a wildland fire chemical that enters, or has potential to enter a waterway; or when applied on USFS administered lands in the habitats of the 45 Threatened & Endangered Species (TES) identified by the US Fish & Wildlife Service (USFWS) as being the most vulnerable to retardant, regardless of the 300' waterway buffer.

Additionally, aerial retardant drops are not allowed in mapped avoidance areas for threatened, endangered, proposed, candidate or sensitive species except in cases where human life or public safety is threatened and retardant within an avoidance area could be reasonably expected to alleviate that threat. The regional avoidance area maps can be found at:

[These maps shall be provided to Dispatch Centers, Air Tanker Bases, Incident Commanders and incident aviation resources.](#)

[Additional guidance can be found in the "Implementation Guidance for the Nationwide Aerial Application of Fire Retardants on National Forest System Lands".](#)

Forest Supplement

Placeholder.

5.16 Search and Rescue (SAR)

Refer to the [FSM 5713.53](#) and [FSM 1590](#) regarding search and rescue. Search and rescue operations could lead to actions in conflict with policy. Refer to section [5.5 Aviation Emergency Response](#).

Regional Supplement

The county sheriff or designee is usually responsible for search and rescue of overdue or missing person(s), depending on the legislative jurisdiction of National Forest System lands. Pursuant to 16 USC 575, the Secretary of Agriculture is authorized to incur such expenses as maybe necessary in searching for person(s) lost within the National Forests or to provide transportation to person(s) seriously ill, injured, or who die within the National Forests to the nearest place where the sick or injured person(s) may be transferred to interested parties or local authorities.

- All personnel involved with and assisting other agencies with law enforcement or search and rescue operations should remain within the scope of their training, certification, and employment.
- Proper planning, risk assessments and briefing the mission prior to an event will significantly reduce risk and improve the odds of success.

- Forest Service owned, contracted or leased aircraft should not be used in SAR operations outside of our own agency mission (assisting our own employees) unless approved by the Line Officer.
- All SAR helicopter operations will be performed in accordance with IHOG Chapter 17 except when NAMP 5.5 Emergency Exception to Policy applies.

Forest Supplement

Placeholder.

5.17 Large Airtanker Operations

Large Airtankers are a national resource and their primary mission is initial attack. Geographic Areas will make them available for wildland fire assignments when ordered by the National Interagency Coordination Center. In addition to federally contracted airtankers, MAFFS (military) and cooperator aircraft may be utilized to supplement the federal fleet through established agreements.

Operational considerations concerning all Airtankers can be referenced in the [Interagency Airtanker Base Operations Guide \(IATBOG\)](#) and the [Interagency Aerial Supervision Guide \(IASG\)](#).

5.17.1 Very Large Airtanker (VLAT) Operations

VLATs require a VLAT qualified lead plane or aerial supervision module for all missions. Not all airtanker bases are capable of supporting VLAT operations due to runway or ramp limitations.

Airtanker bases must evaluate base size, configuration, retardant capacity and other relevant factors before inserting VLATs into the existing pit areas. Consider establishing a satellite base at the airport or an airport in the proximity.

5.17.2 Airtanker Base Personnel

The airtanker base manager supervises ground operations in accordance with the [Interagency Airtanker Base Operations Guide \(IATBOG\)](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.18 SEAT Operations

SEATs primary mission is initial attack. Mobilization is managed by Dispatch Centers with support by the Bureau of Land Management's National SEAT Coordinator and BLM State Aviation Managers. Operational considerations concerning SEATs can be referenced in the

[Interagency SEAT Operations Guide \(ISOG\)](#) and the [Interagency Aerial Supervision Guide \(IASG\)](#).

SEAT Manager (SEMG) responsibilities are outlined in the [ISOG](#), and their training and currency requirements are contained in [NWCG PMS 310-1](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.19 Aerial Supervision Operations

Lead planes (LP) and Aerial Supervision Modules (ASM) are national resources as defined by the National Interagency Mobilization Guide.

Air Tactical Group Supervisor (ATGS) aircraft, LPs, ASMs and Helicopter Coordinators (HLCO) conduct operations in accordance with the [Interagency Aerial Supervision Guide \(IASG\)](#) and the policies and procedures prescribed in the [Interagency Standards for Fire and Fire Aviation Operations Handbook](#). Dispatch and ordering are accomplished in accordance with the Geographic Area and National Mobilization Guides.

Personnel shall be fully qualified as an ATGS to perform air tactical supervision.

Lead planes and ASM will be considered interchangeable in terms of the lead plane mission. An ATGS should be ordered if there is a need for incident air tactical supervision.

Lead plane pilot trainees will be given priority over all ASM flights/ missions.

The Aerial Supervision Program is managed by the WO Aerial Supervision Program Manager.

Regional Supplement

Appendix 10.7 has the current information regarding the Southern Region Lead Plane/ASM platform. Schedule this aircraft through the Southern Area Coordination Center (SACC).

Forest Supplement

Placeholder.

5.19.1 Aerial Supervision Personnel

The ATGS manages incident airspace and controls incident air traffic. The ATGS is an airborne firefighter who coordinates, assigns, and evaluates the use of aerial resources in support of incident objectives. The ATGS is the link between ground personnel and incident aircraft.

Air tactical aircraft can be considered a local unit, incident, or geographic resource. Air tactical aircraft must meet the avionics typing requirements listed in the [Interagency Aerial Supervision Guide \(IASG\)](#) and the pilot must be carded to perform the air tactical mission.

Air Tactical Group Supervisors (ATGS) responsibilities and procedures are outlined in the [Interagency Aerial Supervision Guide \(IASG\)](#), and the position qualifications, training and currency requirements are contained in the Forest Service Fire and Aviation Qualifications Guide.

The ATGS works for the Air Operations Branch Director (AOBD) when an AOBD is assigned. If an AOBD is not assigned, the ATGS works for the incident commander or designee.

5.19.2 ASM

An ASM is a two person crew consisting of a lead plane pilot and ATGS- ATS (Air Tactical Supervisor). The ASM crew is qualified in their respective positions and has received additional training. An ASM can be utilized as a LP or ATGS depending on the needs of incident management personnel.

ASM responsibilities and procedures are outlined in the [IASG](#). LP pilot responsibilities and procedures are outlined in Forest Service policy ([5714.11 – Exhibit 01](#), [5709.16 Chapter 20](#)) and the IASG.

Lead plane pilot designations are the responsibility of the WO Branch Chief, Pilot Standardization.

ATGS-ATS designations are the responsibility of the WO Aerial Supervision Program Manager.

ASMs work for the ATGS when an ATGS is assigned. If an ATGS is not assigned, the ASM works for the incident commander or designee.

5.19.3 Lead Plane

Lead planes coordinate, direct, and evaluate airtanker and other incident aircraft operations. The low level capabilities of a lead plane enhance the safety and effectiveness of airtanker operations in the low level turbulent, smoky, and congested fire environment. Lead planes are single pilot aircraft unless a lead plane trainee is assigned.

LP responsibilities and procedures are outlined in Forest Service policy ([5714.11 – Exhibit 01](#), [5709.16 Chapter 20](#)) and the [IASG](#).

Lead plane pilot designations are the responsibility of the WO Branch Chief, Pilot Standardization.

Lead planes work for the ATGS when an ATGS is assigned. If an ATGS is not assigned, the LP works for the incident commander or designee.

5.19.4 HLCO

The HLCO coordinates, directs, and evaluates tactical/logistical helicopter operations. The HLCO works for the ATGS. This position is typically activated on complex incidents where several helicopters are assigned. A HLCO can reduce the span of control of the ATGS by managing all the helicopters over an incident.

HLCO responsibilities and procedures are outlined in the [IASG](#). The position qualifications, training and currency requirements for the HLCO are contained in the [Forest Service Fire and Aviation Qualifications Guide](#).

HLCOs work for the ATGS when an ATGS is assigned. If an ATGS is not assigned, the HLCO works for the incident commander or designee.

5.20 Helicopter Operations

All helicopter operations shall be accomplished in accordance with the [Interagency Helicopter Operations Guide \(IHOG\)](#), the Aerial Ignition Guide, and the aircraft contract.

The applicable Hover out of Ground Effect (HOGE) chart will be used for initial attack operations, first time into remote landing site, or when the pilot deems that environmental conditions warrant use of HOGE chart.

5.20.1 Helitack

Each unit hosting an exclusive-use helicopter is responsible for providing essential management, overhead, equipment, facilities and the resources necessary to fully support the helitack crew. Minimum crew staffing is contained in the [Interagency Standards for Fire and Fire Aviation Operations](#). Helicopter personnel responsibilities are outlined in the [Interagency Helicopter Operations Guide \(IHOG\)](#), and their training and currency requirements are contained in the [Forest Service Fire and Aviation Qualifications Guide](#).

5.20.2 Rappel

Rappel activities will be conducted in compliance with the [Interagency Helicopter Rappel Guide](#) and [National Rappel Operations Guide](#).

5.20.3 Cargo Letdown

Cargo letdown will be conducted in compliance with the [Interagency Helicopter Rappel Guide](#) and [National Rappel Operations Guide](#).

Rappel/Cargo Letdown/Toe-in, are prohibited in the Southern Region.

5.20.4 Emergency Medical Short-Haul

Emergency Medical Short-Haul operations support the rapid evacuation of injured personnel. All Emergency Medical Short-Haul operations will be conducted in accordance with the [Emergency Medical Short-Haul Operations Plan](#) (EMSHOP).

5.20.5 LEI Short-Haul and Hoist

Short-Haul and Hoist operations are approved for Region 5 Law Enforcement and Investigations at this time. Short-Haul and Hoist operations will be conducted in compliance with the [Interagency Helicopter Operations Guide \(IHOG\)](#) and the Forest Service (FS) National Law Enforcement and Investigations (LEI) Short-Haul and Hoist (S-H/H) Guide.

Region 6 LEI may be approved for Short-haul and / or hoist operations in 2016. If so, an approval letter will be issued by the Deputy Chief, State and Private Forestry and the Director of LEI.

5.20.6 Helicopter Bucket and Tank Operations

Helicopter Bucket and Tank Operations will be conducted in compliance with the [Interagency Helicopter Operations Guide \(IHOG\)](#).

5.20.7 Helicopter External Load Operations

Helicopter External Load Operations will be conducted in compliance with the [Interagency Helicopter Operations Guide \(IHOG\)](#).

5.20.8 Night Helicopter Operations

Forest Service Night Helicopter Operations are only authorized in Region 5. Night helicopter operations are restricted to fixed tank, ground fill only. Night helicopter operations will be conducted in compliance with the Night Air Operations Plan.

5.20.9 Interagency Helicopter Screening and Evaluation Subcommittee

The Interagency Helicopter Screening and Evaluation Subcommittee (IHSAES) will provide guidance for standardization when evaluating new interagency helicopters and related accessories.

5.21 Aerial Ignition Operations

Aerial ignition operations and projects are accomplished in accordance with the [Interagency Aerial Ignition Guide](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.22 Wild Horse & Burro Operations

RESERVED

Regional Supplement

N/A

Forest Supplement

Placeholder.

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

RESERVED

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.24 Water Scooper Operations

Water scoopers are a national resource and should be managed and used much like heavy helicopters. Operations will be in compliance with the Water Scooper Evaluation and Operations Plan

5.25 Smokejumper Operations

Smokejumper dispatch and ordering are accomplished in accordance with the Geographic and National Mobilization Guides and [Interagency Smokejumper Operations Guide \(ISMOG\)](#).

5.25.1 Smokejumper Personnel

Smokejumpers: Smokejumper operations are performed according to the [Interagency Smokejumper Operations Guide \(ISMOG\)](#), and the policies and procedures prescribed in the [Interagency Standards for Fire and Aviation Operations Handbook](#).

Smokejumper Pilots: The [Interagency Smokejumper Pilot Operations Guide \(ISPOG\)](#) serves as policy for smokejumper pilots' qualifications, training and operations.

Smokejumper Parachute System: Forest Service parachute operations are currently transitioning to a ram-air parachute system. Forest Service ram-air parachute operations will be performed in accordance with the [Ram Air Parachute System Change Management and Implementation Plan \(CMIP\)](#).

5.25.2 Smokejumper Aircraft

Smokejumper aircraft are evaluated and approved by the Smokejumper Aircraft Screening and Evaluation Subcommittee (SASES). The SASES will provide guidance for standardization when evaluating new smokejumper aircraft and related accessories.

Regional Supplement

Placeholder.

Forest Supplement

Placeholder.

5.26 Light Fixed-Wing Operations

Fixed-wing dispatch, ordering, and operations are accomplished in accordance with the local geographic area and National Mobilization guides.

For all non-fire flights, the [IAT Guide](#) provides the training standards for fixed-wing flight managers (FWFM) in charge of point-to-point and FWFM Special-Use mission flights. A qualified FWFM shall be assigned to point-to-point flights and FWFM Special-Use for mission flights.

Low-level Flight Operations (Less than 500 feet AGL)

The only fixed-wing aircraft missions authorized are:

- Para-cargo.
- Aerial Supervision Module (ASM) and lead profile operations.
- Aerial retardant, water and foam application.
- Aerial Seeding/Spraying

Operational Procedures:

- A high-level recon will be made prior to low-level flight operations.
- All flights below 500 feet will be contained to the area of operation.
- PPE is required for all fixed-wing, low-level flights. Helmets are not required for multi-engine airtanker crews, smokejumper pilots and ASM flight/aircrew members.

The following is a list of fixed-wing operations conducted in Region 8. This is not an all-inclusive list.

1. Reconnaissance
2. Law Enforcement
3. Remote Sensing
4. Administrative Transport
5. Aerial Supervision
6. Mapping / Aerial Surveys

5.26.1 Reconnaissance or Patrol Flights

The purpose of aerial reconnaissance or detection flights is to gather and relay information. In addition to detecting, mapping, and sizing up fires, this resource may be utilized to

provide ground resources with intelligence, and provide recommendations to the appropriate individuals.

Only qualified Aerial Supervisors (ATGS, ASM, HLCO, and Lead) are authorized to coordinate incident airspace operations. Flights with a “Recon, Detection, or Patrol” designation should communicate with tactical aircraft only to announce location, altitude, and to relay their departure direction and altitude from the incident.

5.27 Law Enforcement and Investigations (LEI) Operations

The LEI personnel shall follow the [FSH 5309.11, Chapter 50](#), [FSM 5700](#), and [FSH 5709.16](#) for all aviation operations.

Local LEI personnel that are required to utilize aircraft to support aviation operations should discuss all aspects of the operation with the FAO or UAO well in advance of operations.

All transport of hazardous materials during LEI operations shall follow the [Interagency Aviation Transport of Hazardous Materials](#) Guide.

The Law Enforcement and Investigations Group annually develops and maintains a Regional Law Enforcement and Investigations Aviation Plan. It is kept on file at the Regional Office.

5.27.1 Special Law Enforcement Aviation Projects

Occasionally there are “special” law enforcement aviation missions that are not covered in a standard PASP. If any proposed flights are not covered by an appropriately established aviation plan, then a PASP will be prepared. This includes the use of aviation resources for Flight Service Contracts. The responsible individual will prepare a PASP and submit the plan for review and approval. All LEI operations will have a PASP prior to commencing operations. Line officers shall be informed of law enforcement and investigator non-covert aviation activities within their area of responsibility.

5.27.2 LEI Training

LEI personnel involved with aviation activities shall receive and be current in required aviation training (NWCG and/or IAT) commensurate with the aviation position they will fill, prior to any aviation operations.

5.27.3 Civil Air Patrol (CAP)

A new Memorandum of Agreement (MOA) is being developed between the USFS and CAP. It will restrict use of CAP to LEI only and limit the make and model of aircraft that can be used. Regions will approve CAP pilots and aircraft based on the MOA. LEI personnel will utilize aircraft and pilots that have been approved for use by a letter of approval from the Regional Aviation officer.

Not all CAP pilots and/or aircraft will be approved for use. Aircraft contracted for fire/resource operations are not mandated to participate in LEI operations. Aircraft

companies must agree to participate in LEI operations. Missions outside of the scope of the contract require a contract modification.

Certain LEI operations could lead to actions in conflict with Forest Service policy; reference Section 5.5 Aviation Emergency Response.

5.27.4 Department of Homeland Security (DHS)

The Chief has issued a letter of Authorization for Law Enforcement and Investigations Employees to Fly on Department of Justice (DOJ) and Department of Homeland Security (DHS) Aircraft ([Appendix 10.3](#)) while performing joint law enforcement operations and missions coordinated with DHS agencies.

5.27.5 LEI Personal Protective Equipment (PPE) During Tactical Operations

Follow the direction on the use of personal protective equipment (PPE) described in the [Interagency Helicopter Operations Guide \(IHOG\) \(NFES 1885\)](#). Approved PPE must be prescribed by the incident commander, operations supervisor, or their designee per [FSM 5300](#). Law enforcement personnel are authorized to wear the following for special tactical operations, for emergency flights, or on flights that are short in duration:

- Battlefield dress uniform (BDU),
- Forest Service uniform, or
- Approved utility uniform.

5.27.6 Emergency Operations

The LEI personnel shall follow the [FSH 5309.11, Chapter 52.15 – Emergency Operations](#)

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.28 Unmanned Aerial Systems (UAS)

National and Regional Fire and Aviation Management recognizes the potential for increased Unmanned Aerial System operations and that that establishing a program is critical.

UAS operating in the national airspace system are considered by the Federal Aviation Administration (FAA) as aircraft, regardless of size; therefore, UAS executing FS missions are required to adhere to FAA requirements and Forest Service policy. These requirements are similar to manned aircraft in terms of pilot training, currency and certification, airworthiness approval, avionics, and operational restrictions.

The agency UAS Operations Guide is currently under development and will be widely distributed when finalized. Since this program is new to the FS, Fire and Aviation Management intends to proceed cautiously.

While UAS program-related policy ([FSM 5713.7](#)) and integration matures, any planned use (including through agreements), acquisition proposals (FSM 5708), or leasing proposals need to be coordinated with the appropriate Regional Aviation Officer and with Washington Office, Fire and Aviation Management UAS Program Manager.

Forest Service requests to the FAA for UAS Certificates of Waiver or Authorization (COA) will be coordinated through the Washington Office, Fire and Aviation Management UAS Program Manager. Other agencies that have received a COA from the FAA can be considered Cooperator aircraft ([FSM 5710.35](#)). UAS operated by cooperators (including the military) in support of Forest Service missions are subject to the approval requirements in [FSM 5713.7](#) and shall meet additional requirements established in the [FSM 5713.43](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

5.29 Forest Health Protection (FHP) Operations

FHP utilizes light fixed and rotor wing aircraft to conduct aerial reconnaissance, aerial photography and aerial application. The purpose of these operations is to gather information regarding forest health conditions and manage pests in accordance with [FSM 2100](#) and [FSM 3400](#).

All FHP aviation operations should be coordinated with the appropriate Regional Aviation Officer. Dispatch, ordering, and operations are accomplished in accordance with the local geographic area and [National Mobilization Guide](#) and the [Interagency Helicopter Operations Guide \(IHOG\)](#).

For all non-fire flights, the [IAT Guide](#) provides minimum training standards for fixed-wing flight managers (FWFM) in charge of point-to-point and FWFM Special-Use mission flights. Additional training required by FHP and the FWFM Special-Use Aerial Survey Observer Task Book are available at www.fs.fed.us/foresthealth/aviation/training.shtml. All aerial reconnaissance and photography mission flights shall utilize a qualified FWFM Special-Use for fixed wing and qualified Helicopter Manager for rotor wing. Agency personnel are not permitted on board restricted category aerial application aircraft and full PPE is required for aerial application pilots operating low level.

Wilderness Areas

Helicopter use in wilderness areas must first be approved for fire, project or emergency situations according to each specific Wilderness Plan. Long-line operations require a risk

assessment, including consideration of other delivery methods before use. Long-line operations are classified as helicopter landings in some wilderness areas and require approval before use.

5.30 Aerial Firefighting Use and Effectiveness (AFUE) Study Operations

In 2012, the Aerial Firefighting Use and Efficiency (AFUE) Study was initiated by Washington Office Fire and Aviation Management. The objectives of the study include developing and implementing performance metrics to analyze the use of aerial assets that have the ability to deliver water or wildland fire chemicals to meet incident objectives. Operational data collection occurs through dedicated ground and aerial resources.

The aerial component of this study will film aerial firefighting aircraft (airtankers, helicopters, and water scoopers) drops using infrared/electro optical technology thereby supporting the additional objectives of (1) evaluating aircraft drop effectiveness while it attempts to support incident objectives and (2) evaluating the characteristics of aircraft delivery systems.

The primary aviation platform will be a contracted fixed-wing, pressurized aircraft with up to two (2) Forest Service personnel on board filling the flight manager, aerial supervisor, sensor operator, or aerial observer rolls. Additional contracted or government-owned aircraft may be utilized for the AFUE operational data collection mission.

The aircraft will primarily operate on an incident as an observation/imaging platform or, on a limited basis, as a combination-Air Tactical Group Supervisor (ATGS) and observation/imaging platform. Regardless of which role the aircraft is executing, the sensor operator must be trained and have experience in operating the aircraft's sensor system and gathering data.

5.30.1 Incident Airspace De-confliction

When an AFUE aircraft is assigned to an incident, airspace de-confliction shall be conducted with aerial supervision aircraft, other incident and non-incident aircraft, and, when necessary, air traffic control (ATC).

A non-ATGS AFUE aircraft responding to an incident will remain clear of the [Fire Traffic Area \(FTA\)](#) and clear of any established, incident-related Temporary Flight Restriction (TFR) area unless the incident's aerial supervisor provides: (1) an altimeter setting, (2) a clearance to enter the respective area, and (3) an altitude to maintain until further notice.

If no aerial supervisor is present during the initial attack phase of an incident, AFUE aircraft will remain at a minimum of 7,500 feet above ground level (AGL) and clear of any established, incident-related TFR.

Note: Remaining at or above 7,500 feet AGL will provide approximately 5,000 feet of separation between the AFUE aircraft and the minimum FTA ATGS orbit ceiling. AFUE aircraft will request a clearance from the appropriate Air Route Traffic Control Center (ARTCC) in order to operate in Class A airspace (18,000 feet MSL and above).

6.0 Aviation Training

6.1 Aviation Training for All Flight Activities and Positions

Aviation training is essential to aircraft pilots (both contract and employee), aviation users, supervisors, and managers to ensure that they are knowledgeable of the inherent hazards of aviation operations. The Forest Service Aviation Training Program is a “fire” and “non-fire” system. The [National Wildland Coordinating Group PMS 310-1](#) and [Forest Service Fire and Aviation Qualifications Guide](#) directs the fire qualifications ([FSH 5109.17](#)), while the [Interagency Aviation Training Guide](#) regulates the “non-fire” qualifications. Personnel serving in NWCG positions need only meet the qualification and currency requirements required in [Forest Service Fire and Aviation Qualifications Guide / PMS 310-1](#) or other interagency guidance as appropriate (Smokejumper Spotter, [Interagency Aerial Supervision Guide \(IASG\)](#), etc.).

The objectives of selection, recruitment, development and training are to improve safety, quality and efficiency by placing employees in jobs to which they are suited and qualified. Although this concept is obvious, it is fundamental at all levels within an agency and worthy of emphasis. The appropriate experience and training requirements for safety-related posts much be defined, monitored and recorded.

Regional Supplement

N/A

Forest Supplement

Placeholder.

6.2 Responsibility

The Washington Office, Branch Chief, Aviation Safety Management Systems is responsible for national oversight of the aviation safety education program and aviation accident prevention efforts ([FSM 5720.45](#)).

It is management’s responsibility to provide training and career development opportunities to personnel under its control, to expand, improve, correct deficiencies, or meet job performance requirements.

It is every employee’s responsibility to take advantage of aviation training opportunities and to notify their supervisor of any aviation training they believe they require for accomplishing their jobs safely and efficiently.

Regional Supplement

The regional RASM is responsible for assuring the region provides the necessary training to ensure we are operating at the lowest risk acceptable and for successional planning.

Forest Supplement

Placeholder.

6.3 Instructor Standards

Aviation trainers provide specialized training in many aviation job skills, e.g., helitack, aerial attack, SEAT management, air tanker base management, aerial ignition, rappel, and helicopter management. The Interagency Aviation Training (IAT) guide identifies position training requirements for non-fire aviation functions. Specialized training courses can be accessed on the IAT website at: <http://iat.nifc.gov/online.asp>.

Personnel serving in NWCG instructor positions need to meet the qualification and currency requirements in [Forest Service Fire and Aviation Qualifications Guide](#) and the [PMS 901-1 Field Manager's Course Guide](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

6.4 Records Management

All employee training records shall meet the requirements stated in the [Forest Service Fire and Aviation Qualifications Guide](#) for all NWCG qualifications. All training records for non-fire qualifications (IAT) shall either reside with the Training Officer or the Forest Aviation Officer.

Each operating unit needs to develop and implement plans for the identification of initial and recurrent aviation training needs specific to its missions.

Areas of aviation training are:

- Orientation and basic aviation safety for all users
- Flight Manager Training
- Dispatching and flight-following procedures
- Management of aviation operations and equipment
- Planning, risk assessment and execution of projects using aviation resources
- Proficiency and special mission training for pilots
- Technical training on aviation equipment and aircraft maintenance
- Advanced safety management systems (SMS) and quality assurance for aviation professionals and specialists

Regional Supplement

N/A

Forest Supplement

Placeholder.

6.5 Tuition and Travel

Forest Service management is dedicated to conducting or providing for professional and technical training of employee or contract personnel at all levels of the organization that use and/or influence the use of aviation resources. Supervisors are to provide adequate levels of funding for the tuition and travel to attend training that will maintain aviation personnel currency and advance their skills.

Regional Supplement

N/A

Forest Supplement

Placeholder.

6.6 Development

The Forest Service encourages development of interested personnel who desire to pursue an aviation career path. Developmental positions (e.g., Regional Aviation Management Specialists) and all positions that have aviation operations responsibility are encouraged to attend [Aviation Safety Management Systems](#)-related training.

Regional Supplement

N/A

Forest Supplement

Placeholder.

6.7 IAT/NWCG Crosswalk

NWCG/Forest Service Fire and Aviation Qualifications Guide	IAT Resource Qualifications
HECM	Aircrew Member
ACDP	Aircraft Dispatcher
AOBD, ASGS, ATGS	Aviation Manager
AOBD, ASGS, ATGS, HLCO	Fixed-Wing Flight Manager –Special Use
HMGB	Helicopter Manager-Resource
AOBD, ASGS, HEB1/2	Project Aviation Manager
AOBD	Supervisor

The positions listed in the NWCG / [Forest Service Fire and Aviation Qualifications Guide](#) Qualifications column will crosswalk into the non-fire IAT Resource Qualifications.

If individuals do not meet the NWCG / [Forest Service Fire and Aviation Qualifications Guide](#) Qualifications (above), they shall follow the training requirements found in the IAT Guide in order to conduct/oversee non-fire resource aviation operations.

Regional Supplement

N/A

Forest Supplement

Placeholder.

6.8 Aviation Contracting Officer Representative (COR) Requirements

Aviation COR's must meet initial training and maintenance requirements as stipulated in Agency Acquisition Regulations (AGAR).

Regional Supplement

CORs must maintain documentation of all training; enter data into the Federal Acquisitions Institute Training Application System (FAITAS):

<https://www.atrrs.army.mil/faitas/External/Login/?ReturnUrl=%2ffaitas%2f>

Designate Inspectors. Supervisors of CORs must develop training plans that meet requirements, determine the level of the COR, evaluate competencies and ensure documentation and FAITAS data entries are completed. The supervisor of the COR is responsible for submitting names to the Contracting Officer (CO) for determination of certification requirements. The CO will make the final determination and designation of CORs

Forest Supplement

Placeholder.

6.9 Crew Resource Management (CRM) Training

Refer to the [National Incident Management System Wildland Fire Qualification System Guide, PMS 310-1](#), and [Forest Service Fire & Aviation Qualification Guide \(FSFAQG\)](#) in order to determine which aircrew positions require N9059-Crew Resource Management 7 Skills training.

7.0 Airspace Coordination

7.1 Interagency Airspace Coordination

Interagency airspace coordination is accomplished through the Interagency Airspace Steering Committee (IASC) chartered under the National Interagency Aviation Council

(NIAC). Guidance and education is provided through the [Interagency Airspace Coordination Guide](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

7.2 Fire Traffic Area (FTA)

The FTA provides a standardized initial attack sequence structure to enhance air traffic separation over wildfire or all-hazard incidents. The structure emphasizes established communications, clearances and compliances. The FTA process will be used by all tactical aircraft. The local dispatch center will be the initial point of contact for aviation resources approaching and departing the FTA when no aerial supervision is in place. If aerial supervision is not on scene, the first responding aircraft must establish / control the FTA until aerial supervision arrives, as specified in the Interagency [Interagency Aerial Supervision Guide \(IASG\)](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

7.3 Temporary Flight Restriction (TFR)

In order to enhance safety during an incident, the FAA may be requested to issue a TFR that closes the airspace to non-participating aircraft (with some exceptions). While there are currently nine different types of TFR's, the most commonly issued TFR for wildfire is [14 CFR 91.137 \(a\) 2](#) which is explicit as to what operations are prohibited, restricted, or allowed. Aviation Managers requesting a TFR should be familiar with the ordering procedures, coordination protocol and exceptions that are outlined in [Chapter 6](#) of the [Interagency Airspace Coordination Guide](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

7.4 Aircraft Transponder Code (Firefighting)

The FAA has provided the 1255 Transponder code as the national designation for firefighting aircraft. It is not agency specific. The code should be utilized by aircraft

responding to and operating over fire incidents supporting suppression operations (unless otherwise directed by Air Traffic Control (ATC). It is not to be used for repositioning or during cross-country flights.

Regional Supplement

N/A

Forest Supplement

Placeholder.

7.5 Airspace Boundary Plan

When resources are dispatched by more than one unit to an incident that shares a common boundary, care should be taken to ensure safe separation and communication of responding aircraft. Boundary Plans should be prepared that focus on a 10 NM wide “neutral airspace” corridor for mutual or exchanged initial attack area’s or zones.

7.5.1 International Airspace Boundary – Mexico

Aircraft entering Mexican airspace must follow established protocols and communicate mission details to the appropriate Interagency Dispatch Center. Aircraft must not enter Mexican airspace without consent from the coordinating authorities and concurrence from the identified aerial supervision. Permission must be received from National Forestry Commission of Mexico (CONAFOR) prior to entering Mexican airspace.

7.5.2 International Airspace Boundary – Canada

Aviation operations across the U.S.A./Canada border must be conducted in accordance with The Canada/United States Reciprocal Forest Fire Fighting Arrangement (NMG chapter 40) or the normal US Customs and Border Protection procedures. Flights must follow protocol established by the respective coordinating authorities and involve the appropriate Dispatch Center. Such flights usually require prior notification, special tracking procedures and an understanding of the mutually agreed upon operating parameters.

Regional Supplement

N/A

Forest Supplement

Placeholder.

7.6 Airspace De-confliction

Airspace de-confliction can occur for both emergency response and non-emergency aviation activities.

De-confliction can be accomplished through the following measures:

- Pilots must obtain all information pertinent to flight before flying. This is accomplished by obtaining a briefing from the FAA through the Flight Service Stations. This is the official source of NOTAM information.
- Dispatching units may obtain scheduling information from DoD units that have Special Use Airspace or Military Training Routes and share this information as “hazards” information on the Resource Order when the aircraft is dispatched. For non-emergency flights, information may be shared through common communication protocol.
- Aviation Internet websites are prolific on the internet. When used for obtaining airspace information, the user must be aware of any disclaimers regarding the timeliness of the information posted. The FAA’s US NOTAM office provides current TFR information through DINS (DoD Internet NOTAM Service) at <https://www.notams.faa.gov>.

Regional Supplement

When conditions warrant, the Regional Aviation Group will initiate a conference call between cooperators, IMTs and GACCs to coordinate airspace issues.

Forest Supplement

Placeholder.

7.7 Airspace Conflicts

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

Regional Supplement

N/A

Forest Supplement

Placeholder.

7.8 Airspace Agreements – Memorandums of Understanding

When Special Use Airspace (SUA’s), Military Training Routes (MTR’s), Slow Routes (SR’s), or Aerial Refueling Routes (AR’s) are located over lands within an agency’s jurisdiction or within their area of normal flight operations (fire or non-fire), the agency should consider instituting an agreement with the appropriate DoD entity that schedules the airspace. Airspace agreements establish protocol for emergency and non-emergency contacts. They provide local level leadership a tool that defines protocols to address recurring activities, coordination of time critical responses, deconfliction and resolving issues in a timely

manner. Initiation of an agreement can begin by contacting the Military Representative to the FAA located at FAA Service Centers, Air Force Representative, Navy Representative, and Department of Army Representative. A template and sample format is provided in [Chapter 12 of the Interagency Airspace Coordination Guide](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

8.0 Aviation Security

8.1 Aviation Security

The policies and procedures in this chapter when implemented are intended to make the theft of FS aircraft more difficult and time consuming and therefore reduce the threat to our facilities from criminal elements.

The FS will provide an aviation security program that will include:

- Aviation facilities and aircraft security standards
- Aviation security measures that respond to alerts of the Homeland Security National Terrorism Advisory System (NTAS)
- Quick response emergency procedures

Regional Supplement

N/A

Forest Supplement

Placeholder.

8.2 FS Facilities Security Risk Assessments

Each Forest Service aviation facility must complete a risk assessment on a timeline based on its Facility Security Level (FSL) to determine the security standard. The FSL can be determined using the document Facility Security Level Determinations for Federal Facilities, An Interagency Security Committee Standard.

The risk assessment must include an analysis of:

- The vulnerability level of the facility, which is any weakness in the design or operation of a facility that can be exploited by an adversary.
- The probability of threat, or the likelihood of an undesirable event occurring over time.

- The severity of event consequences, which is the level, duration, and nature of the loss resulting from an undesirable event.

Reference the [FSH 5709.16 Chapter 60](#) for the FS Risk Assessment.

Regional Supplement

This is the 60 page checklist found in Chapter 6 of the Department of Agriculture's Integrated Physical Security Standards & Procedures Handbook. A copy of the completed self-assessment shall be retained at the local unit and one copy shall be submitted to the Regional Office by November 30 for collation of all aviation bases and then submission by the RO to meet the WO deadline.

Forest Supplement

Placeholder.

8.3 FS Security Response Actions

The objective is to ensure that the FS is prepared to increase security standards at agency aviation facilities in response to an alert of the Homeland Security National Terrorism Advisory System.

It is FS policy to immediately adjust the level of aviation security any time an NTAS Alert is issued for the facility.

Regional Supplement

The Regional Base Security Plan demonstrates the template to be followed. Aviation Base Security Plans shall be reviewed by the Regional Office annually.

Forest Supplement

Placeholder.

8.4 General Aviation Security Awareness Programs

RESERVED

Regional Supplement

N/A

Forest Supplement

Placeholder.

8.5 Aircraft Security Information (Cooperators)

The security of cooperator provided aircraft and equipment is the responsibility of the cooperator.

Regional Supplement

Aircraft shall be electrically and/or mechanically disabled by two independent security systems whenever the aircraft is unattended. Deactivating security systems shall be incorporated into preflight checklists to prevent accidental damage to the aircraft or interfere with safety of flight. Examples of Unacceptable disabling systems are:

- Locked door/windows
- Fenced parking areas

Forest Supplement

Placeholder.

8.6 TSA Commercial Airport Security

Commercial airport security requirements can be found at the [Transportation Security Administration \(TSA\)](#) web site.

Forests should work with local airports to establish a procedure for escorting transient pilots and mechanics that base their operations within a Security Information Display Area (SIDA). As an example; a Type I helicopter could be based at a commercial airport in support of a large fire for a number of days. The mechanic supporting that helicopter will require access to the aircraft on the airport at all hours. The airport may require that the mechanic be escorted by an authorized individual.

Forests can work with their local airports to receive training and background checks to obtain the appropriate credentials to escort pilots and mechanics to operate within the SIDA. All airports will have personnel authorized to escort personnel in the SIDA, however they may not be staffed to support the 24 hour a day support required for some aircraft operations. (See Appendix 10.08 for further information on Airport Security).

9.0 Aviation Facilities

9.1 General

All facilities managers are responsible for providing aviation facilities, within their respective area, that are safe, adequate, and are in compliance with applicable Forest Service regulations.

Regional Supplement

N/A

Forest Supplement

Placeholder.

9.2 Permanent Aviation Facilities

These facilities (helibases, retardant bases, and airport facilities) are permanent installations (owned and leased) and are used on a continuous or seasonal basis for aviation operations. These include aviation facilities on Forest Service property and facilities on non-Forest Service land where Forest Service has primary responsibility for operations, maintenance, and oversight. Facility base reviews shall be conducted in accordance with the [Interagency Helicopter Operations Guide \(IHOG\), Appendix E](#); [Interagency Airtanker Operations Base Guide \(IATOBG\), Chapter 5 Section B](#); and [Interagency Standards for Fire and Fire Aviation Operations, Chapter 18](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

9.3 Temporary Aviation Facilities

Temporary bases are sites that are used on a temporary or intermittent basis (helispots and remote airstrips). Sites not located on Forest Service land must be pre-approved and use shall be documented in an Agreement. Each site should be cataloged as to location, description, local hazards, use procedures, agreements, and contacts. Preseason inspection and maintenance should be completed as necessary to meet agency safety requirements.

Regional Supplement

N/A

Forest Supplement

Placeholder.

9.4 Safety

Aviation facilities must comply with safety regulations outlined in Forest Service manuals, guides, handbooks, and the Occupational Safety and Health Act (OSHA).

Regional Supplement

N/A

Forest Supplement

Placeholder.

9.5 Agency Owned/ Operated Facilities

Refer to the [Building and Facilities Related Handbook FSH 7309.11](#) for information regarding:

- Planning
- Development
- Management
- Special-Use Facilities
- Records and Reports

Regional Supplement

N/A

Forest Supplement

Placeholder.

9.6 Agency Owned/Operated Airstrips

RESERVED

Regional Supplement

N/A

Forest Supplement

Placeholder.

9.7 Leasing

Leased facility needs can be met through the Acquisition Management (AQM) organization, either via lease or grants and agreements. These are more fully described on the AQM website: <http://fsweb.wo.fs.fed.us/aqm/>. Facilities can also be acquired on Government-owned land by means of land exchanges.

Regional Supplement

N/A

Forest Supplement

Placeholder.

9.8 Funding

RESERVED

Regional Supplement

N/A

Forest Supplement

Placeholder.

9.9 Land Use Agreements

Simplified acquisition procedures should be used to acquire the use of property or facilities for emergency incidents. Emergency incident agreements do not require special leasing authority. Procurement officials with warrant authority may enter into these agreements. More detailed information is available in the [Interagency Incident Business Management Handbook, Chapter 20](#).

Regional Supplement

N/A

Forest Supplement

Placeholder.

9.10 Facilities Security

All sites will be provided with appropriate physical security measures commensurate with the risk of loss of operating capability, irreplaceable data, or expensive property ([FSH 7309.11, 41.2](#)).

- Equip all buildings with locks. The keys shall be managed by the facility manager or other individual designated by the line officer. Where emergency access by non-unit personnel is necessary for fire management and other common occurrences, use master locks.
- Install signs and fences and/or provide other physical deterrents to warn and retard entry to all remote sites containing vulnerable operations such as telecommunications and research projects. Consider maintainability in the design of fences in areas subject to heavy snow, ice, and wind conditions.
- Restrict entry of unauthorized personnel into operations such as flammable, chemical and pesticide storage rooms or buildings, explosive storage facilities, computer rooms, biologically sensitive and controlled-environment areas, and others as the facility manager and policy deem necessary.

Refer to [Chapter 8](#) in the National Aviation Safety and Management Plan and [FS Manual 5709.16 Chapter 60, Aviation Security](#) for additional facilities security.

Regional Supplement

N/A

Forest Supplement

Placeholder.

10.0 Appendix

10.1 Sample Letter of Cooperator Approval

RESERVED

10.2 Cooperator Approval Guide

RESERVED

10.3 Authorization for Law Enforcement and Investigations Employees to Fly on Department of Justice (DOJ) and Department of Homeland Security (DHS) Aircraft



Forest
Service

Washington
Office

1400 Independence Avenue, SW
Washington, DC 20250

File Code: 5300/5700

Date: May 20, 2013

Route To:

Subject: Authorization for Law Enforcement and Investigations Employees to Fly on Department of Justice (DOJ) and Department of Homeland Security (DHS) Aircraft

To: Director, Law Enforcement and Investigations

This letter will permit Forest Service (FS) Law Enforcement & Investigations (LEI) employees on official duty to fly aboard Department of Justice (DOJ) and Department of Homeland Security (DHS) owned and operated aircraft while performing joint law enforcement operations and coordinating missions with the respective agencies.

Agreements with DOJ and DHS regarding joint law enforcement aviation operations should be used to provide overall operational requirements and procedures for all agencies.

This letter specific to DOJ and DHS owned and operated aircraft used by FS LEI employees on official duty will meet the intent of FS Manual (FSM) 5704.9 which requires that all FS employees "shall fly only in approved government (refer to Government Aircraft definition in FSM 5705) aircraft flown by an approved pilot(s)."

The FS law enforcement program has unique mission requirements and a need for close interagency coordination and cooperation with the DOJ and DHS.

Field-level LEI employees are required to notify the Regional Special Agent-in-Charge and Washington Office employees the Director of LEI, when using this approval.

The Director of LEI is responsible for ensuring overall employee safety under this exemption.

This letter rescinds the Flight Authorization on Department of Homeland Security Aircraft letter dated May 20, 2008.

/s/ James E. Hubbard

JAMES E. HUBBARD
Deputy Chief, State and Private Forestry

cc: Robert A Baird, Dan Olsen, Ron Hanks, John A Nelson, Thomas A Cook, Tom Harbour, Ezequiel N Parrilla, Caleb A Berry



America's Working Forests – Caring Every Day in Every Way

Printed on Recycled Paper



10.4 Project Proposal Template

Note: The template begins on the following page.



**USDA Forest Service
Fire & Aviation Management
Aviation Division**

**PROJECT or PROGRAM or ISSUE
PROPOSAL NAME**



Forest Service

Month 20XX

Table of Contents

- 1. General Process Information.....
- 2. Introduction
- 2.1 Problem Statement.....
- 2.2 Background
- 2.3 Challenges
- 2.4 Objective(s)
- 2.5 Deliverables
- 3. Proposed Method.....
- 3.1 Requirements
- 3.2 Technology
- 3.3 Implementation Method
- 3.4 Risk and Quality Assurance.....
- 4. Expected Project Results
- 4.1 Performance Measures
- 5. Action Plan and Timeline

1.0 General Process Information

This Project, Program, Issue Proposal Template (PPT) is included in the National Aviation Safety and Management Plan (NASMP).

Utilize the PPT when proposing the following:

- New equipment, e.g., aircraft, parachute, etc.
- New contractor contract change, e.g., VLAT, LFS Helicopter, etc.
- New agreement or MOUs.
- New process or changed process, e.g., rappel standardization, RADS, etc.
- Deviation from standards, e.g., LEI exemption, etc.
- New or changed policy, e.g., doctrinal policy changes, 100 hr, turbine single engine, etc.
- New or changed procedure, e.g., rappel procedures.
- New program, e.g., UAS, etc.

Questions regarding the PPT and development of a proposal should be directed to the Branch Chief, Aviation Business Operations, 202-205-0974.

Completed PPTs will be forwarded to the Branch Chief, Aviation Business Operations by email. Call the number above to get a current email address.

The project, program, issue proposal process will follow steps outlined in Section 3.3 of the NASMP.

2.0 Introduction

Summarize briefly the problem/issue, project objective(s), and expected benefit(s) and cost of the proposal. Is the problem/issue an entire system or a sub-system element?¹

2.1 Problem Statement

Describe the problem/issue in terms of system or sub-system.

What does the problem/issue affect (who and/or what)? What are the impacts (safety, cost, risk, lack of standardization, etc.) of the problem/issue?

¹ A system is an integrated set of integral elements that are combined in an operational or program to accomplish a defined objective. These elements include personnel, aircraft, facilities, technology, facilities, human factors, operations, procedures, equipment, services, and other components. Sub-systems are integral to the operation and function of the system. E.g. performance, capability and specialized equipment for the mission would be sub-systems of an aircraft system.

2.2 Background

Describe the background information about the project. Provide only factual information, observations or opinions should be noted as such.

2.3 Challenges

Describe the known challenges of the existing system or sub-system to be addressed by the project.

2.4 Objective(s)

Identify specific and measurable objectives of what the project is anticipated to achieve. Identify any anticipated changes in the system or sub-system.

2.5 Deliverables

Identify the tangible and verifiable product or service that meets the objectives stated above.

3.0 Proposed Method

Describe and define the technical and/or non-technical aspects of the proposal. This section should include a description of the methodology to be used to complete the project, a specific plan for gathering requirements, design requirements, information technology requirements best practices for implementation, and quality assurance.

3.1 Requirements

Describe the requirements for the proposal. Requirements are quantifiable functional and technical needs of the proposal. Include diagrams or charts to visually display the information if applicable.

3.2 Technology

Describe any technology required to implement the project. Describe hardware, software, or network components as relevant and as understood at this time. Include diagrams or charts to visually display the proposed system components and the relationships between them.

3.3 Implementation Method

Describe your methodology for implementation, including best practices.

3.4 Risk and Quality Assurance

Describe the potential risks (financial, business, cultural, operational, safety, etc.) related the project.

Describe the examples of quality assurance that would be used to mitigate risks.

4.0 Expected Project Results

Using the objectives and deliverables listed in section 1 describe the technical, operational, cultural and behavior changes the project would implement.

4.1 Performance Measures

Complete the Performance Measure table below based on the objectives of the project. Describe an assessment plan to monitor Performance Goals over time.

Metric #	Year Initiated	Performance Baseline	Performance Goal	Actual Result
1	2014	The status quo needs 345 hours consuming 207 thousand gallons to fly 100,000 miles	Fuel use for the same distance is reduced by 10 percent	Do not complete

5.0 Action Plan and Timeline

Develop a draft action plan for the project.

Action Steps What will be done?	Responsibilities Who is the lead?	Deadline By when? (mm/dd/yy)	Resources Resources available? Resources needed (financial, human, political & other)?	Potential barriers Individuals or organizations? Mitigation?	Communications Plan Who is involved? What methods? How often?

Appendix 10.5

Policy Change -FMS5700 & 5709.16, Instrument Flight Conditions and Night

Date: October
13, 2010

Current Forest Service (FS) policy prohibits single-engine flight in Instrument Meteorological Conditions (IMC) and at night except for ferry and cargo- carrying flights. Technology has made single-engine turbine airplanes and helicopters as safe to fly in IMC and at night as multi-engine aircraft when equipped to do so.

All Federal Aviation Regulations (FAR) which address IFR and night flight will be required for these flights.

Effective on this date, FSM 5716.12 and 5716.2 will read as follows:

FSM 5700

5716.12 – Instrument Flight Conditions

Use only multi-engine or turbine powered single-engine aircraft for flights in Instrument Meteorological Conditions (IMC) that meet the applicable Instrument Flight Rules (IFR) requirements in Federal Aviation Regulations (FAR) Part 135, Part 91 and Part 61 as referenced in FSH 5709.16 or applicable contracts.

Low-level (FSM 5716.3) fixed-wing flight operations will be conducted only in daylight Visual Flight Rules (VFR) conditions (30 minutes prior to official sunrise until 30 minutes after official sunset).

5716.2 - Night Flying

Use only multi-engine or turbine powered single-engine aircraft for night flights that meet the applicable requirements in FAR Part 91 and Part 61 as referenced in FSH 5709.16 or applicable contracts.

Pilots flying night missions shall land at airports or heliports that meet Federal Aviation Administration (FAA) lighting standards, except:

1. This restriction does not apply to helicopter flights utilizing Night Vision Goggles (NVG).

Low-level helicopter flight operations will only be conducted using NVG. Helicopters will be approved for such an operation.

Reciprocating engine powered single-engine aircraft flights at night are authorized only for ferry and cargo-carrying missions at pilot-in-command discretion and in accordance with FAR Part 91.

Low-level (FSM 5716.3) fixed-wing flight operations will be conducted only in daylight Visual Flight Rules (VFR) conditions (30 minutes prior to official sunrise until 30 minutes after official sunset).

Regional Foresters, Station Directors, Area Director, Director, Law Enforcement and Investigations, Regional Fire Directors, Regional Aviation Officers 2

Effective on this date, FSH 5709.16, 11.26 will read as follows.

FSH 5709.16

11.26 – Operational Requirements – All Pilots

Requirements for all pilots flying Forest Service missions are as follows:

1. Instrument Flight Conditions. Use only multi-engine or turbine-powered single-engine aircraft for flights in Instrument Meteorological Conditions (IMC) that meet the applicable Instrument Flight Rules (IFR) requirements in Federal Aviation Regulations (FAR) Part 135, Part 91 and Part 61 as referenced in FSH 5709.16 or applicable contracts.

Low-level (FSM 5716.3) fixed-wing flight operations will be conducted only in daylight Visual Flight Rules (VFR) conditions (30 minutes prior to official sunrise until 30 minutes after official sunset).

2. FSM 5716.2 - Night Flying. Use only multi-engine or turbine-powered single-engine aircraft for night flights that meet the applicable requirements in FAR Part 91 and Part 61 as referenced in FSH 5709.16 or applicable contracts.

Pilots flying night missions shall land at airports or heliports that meet Federal Aviation Administration (FAA) lighting standards, except:

1. This restriction does not apply to helicopter flights utilizing Night Vision Goggles (NVG).

Low-level helicopter flight operations will only be conducted using Night Vision Goggles (NVG). Helicopters will be approved for such an operation.

Reciprocating engine powered single-engine aircraft flights at night are authorized only for ferry and cargo-carrying missions at pilot-in-command discretion and in accordance with FAR Part 91.

Low-level (FSM 5716.3) fixed-wing flight operations will be conducted only in daylight Visual Flight Rules (VFR) conditions (30 minutes prior to official sunrise until 30 minutes after official sunset).

This policy change will be in effect until rescinded.

Questions regarding this policy change should be directed to Paul Linse, 202-205-0974.

/s/ James E. Hubbard

JAMES E. HUBBARD

Deputy Chief, State and Private Forestry

Appendix 10.6

Regional Contact List

Region 8 Aviation Management			
Position	Name	Office	Cell
Regional Aviation Officer	Lynne Howard	770-237-0119 / ext 1008	678-622-0489
Regional Aviation Safety Manager	Jimmy Keyes	404-780-0590	404-780-0590
Helicopter Ops. Specialist	Scott Fry	770-237-0119 / ext 1002	404-670-6729
Helicopter Inspector Pilot	Jerry Perry	770-237-0119 / ext 1014	404-558-3075
Fixed Wing Operations Specialist	VACANT	770-237-0119 / ext	
Fixed Wing Pilot	VACANT		
Fixed Wing Inspector Pilot Lead 89	Aaron Knobloch	770-237-0119 / ext 1009	770-880-5385
Maintenance Inspector	Tim Rikard	770-237-0119 / ext 1015	470-233-3637
Miscellaneous			
Regional Av. Contracting Officer	Gloria Sanders	404-347-4023	404-309-3880
Regional Fire Director -			
Director of FAM	Shardul Raval	404-347-2347	404-909-0239

Appendix 10.7**2015 SOUTHEAST REGION AIRCRAFT**

Three aircraft are available in the Region year-round.

N 417SH	King Air E-90	\$598/HR
N 182Z	King Air 200	\$1224/HR
N 106Z	Bell Jet Ranger	\$651/HR

SCHEDULE ALL AIRCRAFT THROUGH SACC.

Appendix 10.8



United States
Department of
Agriculture

Forest
Service

Southern
Region

1720 Peachtree Rd., NW
Atlanta, Georgia 30309

File Code: 5700

Date: 04/08/15

Route To:

Subject: Southern Region Type 3 Helicopter "Limited Use" Authorization
To: Forest Supervisors

This Letter of Delegation is issued in accordance with direction found in the Interagency Helicopter Operations Guide (IHOG), Chapter 2, Section III, Limited Use Designation. The IHOG provides for the designation of Standard Category Type 3 Helicopters as Limited Use for certain specific missions (IHOG pages 2-4, 5) by the Regional or State Aviation Officer. Type 3 Call-When-Needed and Exclusive Use helicopters may operate as "Limited Use" within the Southern Region provided adherence to the following guidance. This letter allows all Type 3 helicopters operating within the Region to be designated as either Limited or Standard Category, depending on staffing and use, provided approval is issued by the Forest Fire Staff Officer, Forest Fire Management Officer, or Forest Aviation Officer, and documented.

1. Passenger Transport. The helicopter shall be fully staffed with a Helicopter Manager and two Helicopter Crewmembers when operations entail the transport of personnel - Troop shuttles etc. (hand crews, fire fighters or other working teams) to and from helispots or other landing areas where they disembark to work in the field.
2. Reconnaissance/Surveys, Air-Attack, Helicopter Coordinator, Infrared, and Aerial Mapping: i.e. A minimum of one HECM shall remain at the departure point when the helicopter is performing these types of missions from any field location, established airports and Helibases are excluded. To determine the suitability of the landing area, a helicopter manager shall be aboard the helicopter when landing other than the departure point that is not supervised by qualified helicopter Crewmembers.
3. Suppression. On staffing class (D or E days), the Exclusive Use (EU) Suppression funded/classified helicopter shall be fully staffed and able to respond to a dispatch. All other class days, the EU helicopter may initial attack (IA) (bucket operations only) local agreement area wildfires with only a Helicopter Manager present; a Helicopter Crewperson is highly recommended to assist Manager. When possible, a Helicopter Crewmember (HECM) should be deployed to the dip-site to observe operations. These staffing guidelines apply to both Exclusive Use and CWN helicopters.
4. Aerial ignition. The minimum personnel required to perform aerial plastic sphere operations are a Helicopter Manager, Burn Boss/Firing Boss, and Plastic Sphere Dispenser Operator (PLDO). A HECM qualified person shall remain at the departure point if the Manager is aboard the helicopter arriving at a remote helispot. A HECM qualified person does not need to remain at the departure point if the Manager is aboard when working out of an established airport or helibase. Helitorch operations require a full helitorch module. These requirements are established in the Interagency Aerial Ignition Guide as policy.

This authorization shall remain in effect unless rescinded by the Regional Aviation Officer (RAO) or designated representative. If you have any questions or need further information, please contact Scott Fry at 404-670-6729.

/s/ Lynne Howard
LYNNE HOWARD
Regional Aviation Officer

Appendix 10.9

File Code:
5300/5700
2013

Date: May 20,

Route To:

Subject:

Authorization for Law Enforcement and Investigations Employees to Fly on Department of Justice (DOJ) and Department of Homeland Security (DHS) Aircraft

To:

Director, Law Enforcement and Investigations

This letter will permit Forest Service (FS) Law Enforcement & Investigations (LEI) employees on official duty to fly aboard Department of Justice (DOJ) and Department of Homeland Security (DHS) owned and operated aircraft while performing joint law enforcement operations and coordinating missions with the respective agencies. Agreements with DOJ and DHS regarding joint law enforcement aviation operations should be used to provide overall operational requirements and procedures for all agencies. This letter specific to DOJ and DHS owned and operated aircraft used by FS LEI employees on official duty will meet the intent of FS Manual (FSM) 5704.9 which requires that all FS employees “shall fly only in approved government (refer to Government Aircraft definition in FSM 5705) aircraft flown by an approved pilot(s).” The FS law enforcement program has unique mission requirements and a need for close interagency coordination and cooperation with the DOJ and DHS. Field-level LEI employees are required to notify the Regional Special Agent-in-Charge and Washington Office employees the Director of LEI, when using this approval. The Director of LEI is responsible for ensuring overall employee safety under this exemption. This letter rescinds the Flight Authorization on Department of Homeland Security Aircraft letter dated May 20, 2008.

/s/ James E. Hubbard

JAMES E. HUBBARD

Deputy Chief, State and Private Forestry

cc: Robert A Baird, Dan Olsen, Ron Hanks, John A Nelson, Thomas A Cook, Tom Harbour, Ezequiel N Parrilla, Caleb A Berry

Appendix 10.10**Forest Aviation Plan Supplement Checklist****2015**

- egap erutangiS ♣
- noitazinagrO ♣
 - o Positions
 - o Names of incumbents
 - o Roles/Responsibilities
- snoissim noitaivA nommoC ♣
 - o Fire
 - o Non-fire
 - o Administrative
- evisulcxE ♣-Use aircraft in area
- serudecorp gniredrO ♣
- orp gniwolof thgilF ♣cedures
- nalP snoitacinummoC ♣
 - o Frequencies
- snoitatimiL/snoitcirtseR lacoL ♣
 - o Specific direction
 - o Dip sites
 - o Sensitive areas
- sdrazaH laireA ♣
- saera esu laicepS ♣
 - o MTR
 - o MOA
- ssecorP tmemagnesid ♣
- esnopser tnedicnI/tnedicca ♣
- seitilicaF lacideM ♣
- ♣Airports/Fuel/common helispots
- gniniarT level tseroF ♣
- srotarepooC ♣
- nalP ytiruceS ♣
 - o Location
 - o Initiation or contacts for protocol

Appendix suggestions

- nalP snoitarepO esaB noitaivA ♣
- nI ♣-briefing Orientation Package
- ediuG esnopseR tnedicnI/tnedicca ♣
- sthgilf nommoc rof tmemssesa ksiR ♣

Appendix 10.11

49 CFR 1542 Airport Security

"Each airport operator required to have a security program under §1542.103(a) must establish at least one Security Information Display Area (SIDA). Each airport operator required to establish a SIDA and must establish and carry out measures to prevent the unauthorized presence and movement of individuals in the SIDA."

This can be accomplished by authorizing designated individuals to provide an escort to transient aircrews and mechanics.

49 CFR 1542.211(e) *Escorting*. Each airport operator must establish and implement procedures for escorting individuals who do not have unescorted access authority to a secured area or SIDA that—

- (1) Ensure that only individuals with unescorted access authority are permitted to escort;
- (2) Ensure that the escorted individuals are continuously accompanied or monitored while within the secured area or SIDA in a manner sufficient to identify whether the escorted individual is engaged in activities other than those for which escorted access was granted, and to take action in accordance with the airport security program;
- (3) Identify what action is to be taken by the escort, or other authorized individual, should individuals under escort engage in activities other than those for which access was granted;
- (4) Prescribe law enforcement support for escort procedures; and
- (5) Ensure that individuals escorted into a sterile area without being screened under §1544.201 of this chapter remain under escort until they exit the sterile area, or submit to screening pursuant to §1544.201 or §1546.201 of this chapter.

Appendix 10.12**SOUTHERN REGION - PROJECT AVIATION SAFETY PLAN (PASP)****Use this template for all Regional Aviation Projects****PROJECT NAME****Name of Forest**

Mission:	Project Name:	Unit:	Fixed Wing <input type="checkbox"/> Rotor Wing <input type="checkbox"/>
Anticipated Project Date(s):			
Project Plan Prepared by:	Title:	Date:	
• Project Plan Reviewed by:	• Title: Project Aviation Manager	• Date:	
• Project Plan Reviewed by:	Title: Forest Aviation Officer	Date:	
Project Plan Reviewed by:	Title: Forest Fire Management Officer	Date:	
Project Plan Reviewed by:	Title: Regional Aviation Safety Mgr.	Date:	
Project Plan Reviewed by:	Title: Regional Aviation Officer	Date:	
Project Plan Approved by: (Line Officer)	Title:	Date:	

PROJECT DESCRIPTION/MISSION OBJECTIVES:**Compliance with the operational procedures outlined in this Project Aviation Safety Plan is required.**

GENERAL LOCATION/DESCRIPTION

(Provide description and attach map—map must include aerial hazards)

JUSTIFICATION FOR AIRCRAFT USE:

• AIRCRAFT INFORMATION					
• Cooperator <input type="checkbox"/> / Agency <input type="checkbox"/> / Vendor <input type="checkbox"/> / Military <input type="checkbox"/> / RAIDS <input type="checkbox"/> / Other <input type="checkbox"/>					
Type of Flight:		Desired Make/Model:			
Vendor:	Phone:		Cell:		
Aircraft N#:	Make & Model:		Aircraft Color:		
Pilot Name:		Pilot Contact number:			
Pilot Carded: <input type="checkbox"/> Yes <input type="checkbox"/> No Expiration Date:		A/C Carded: <input type="checkbox"/> Yes <input type="checkbox"/> No Expiration Date:			
Type Procurement:		Charge Code:			
Estimated Flight Hours:		Estimated Cost:			
SUPERVISION					
Project Aviation Manager:		Contact Number:			
Forest/Unit Aviation Officer:		Contact Number:			
PARTICIPANTS- list individuals involved in flight(s)					
Name:		Project Role/Responsibility:			
Name:		Project Role/Responsibility:			
Name:		Project Role/Responsibility:			
Name:		Project Role/Responsibility:			
Name:		Project Role/Responsibility:			
Name:		Project Role/Responsibility:			
CARGO					
Weight:	Hazardous Materials	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pilot Briefed	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Weight:	Hazardous Materials	<input type="checkbox"/> Yes <input type="checkbox"/> No	Pilot Briefed	<input type="checkbox"/> Yes <input type="checkbox"/> No	
FLIGHT FOLLOWING					
Flight Follow: <input type="checkbox"/> AFF <input type="checkbox"/> Radio (15 minute check in)		Request or Flight #: <input type="checkbox"/>			
FM Receive:	FM Transmit:		Tones:		
FM Receive:	FM Transmit:		Tones:		
FM Receive:	FM Transmit:		Tones:		
AM Air to Air:	AM Unicom:		Other:		
MILITARY TRAINING ROUTE (MTR) or MILITARY OPERATING AREA (MOA) INFORMATION -Aircraft Manager must confirm with dispatch prior to the flight that affected routes' schedules have been contacted for route activity					
MTR/ MOA	Route Legs-Altitude	Activity	Time		Time Zone
		<input type="checkbox"/> Hot <input type="checkbox"/> Cold	Start	Stop	<input type="checkbox"/> UTC <input type="checkbox"/> Local
		<input type="checkbox"/> Hot <input type="checkbox"/> Cold	Start	Stop	<input type="checkbox"/> UTC <input type="checkbox"/> Local
		<input type="checkbox"/> Hot <input type="checkbox"/> Cold	Start	Stop	<input type="checkbox"/> UTC <input type="checkbox"/> Local

• **PERFORMANCE PLANNING**

• The pilot is responsible for the accurate completion of load calculations. Trained personnel shall ensure that aircraft scheduled are capable of performing the mission(s) safely and within the capabilities of the aircraft selected. The Helicopter or Flight Manager shall ensure that manifests and load calculations/weight and balance calculations are completed properly using accurate environmental and aircraft data.

PERSONAL PROTECTIVE EQUIPMENT

Type of Operation – check applicable boxes	Personnel Protective Equipment Requirements
<input type="checkbox"/> Rotor Wing Ground Operations	Fire resistant clothing, hardhat w/chin strap or approved aviator flight helmet, fire resistant and/or leather gloves, all leather boots, eye protection, hearing protection.
<input type="checkbox"/> Rotor Wing All Flights	Fire resistant clothing, approved aviator flight helmet, fire and/ or leather gloves, all leather boots, hearing protection.
<input type="checkbox"/> Doors off Flight	Personnel will remain seated and inside fuselage during all flights, approved secondary restraint harness for doors off flights (only for PLDO, HRAP, HRSP, Aerial Photography, IR Operator, ACETA Gunner, Cargo Letdown)

SEARCH AND RESCUE – EMERGENCY RESPONSE

Crash/Search and Rescue Procedures:

- ~ **Contact Dispatch who will initiate the Interagency Aviation Incident/Accident Response Plan.** This initiation includes accomplishing all emergency and administrative notifications.
- ~ **On-site emergency response will be handled by the aircraft personnel and other project personnel, and will comply with appropriate guides (examples: Interagency Helicopter Operations Guide (IHOG) or Forest’s Aviation Incident/Accident Response Guide.**

SPECIAL CONSIDERATIONS and JUSTIFICATIONS:

(List justifications for deviating from SOP, policy etc.)

CRASH RESCUE/MEDI-EVAC PLAN – highlighted area is the minimum information regarding medical/emergency response to be filled out prior to review and approval. The remaining fields should be completed as much as practical prior to the day of operation.

General Instructions:

In the event of an accident, the _____ Operations project manager will supervise and coordinate the crash rescue activities. Specific crash rescue duties will be assigned to _____ operations personnel each morning before flights of any kind. Crash rescue and first aid equipment will be located near the _____ operations site and equipment's location made known to all personnel. Information and instructions will be sent/ received through the local dispatch office or communications.

EMT (S) ON PROJECT

Names

AVAILABLE MEDIVAC HELICOPTERS

FAA # HEMB or Contact

Litter/Rappel/Extraction Capable?

Remarks

FAA # HEMB or Contact

Litter/Rappel/Extraction Capable?

Remarks

NEAREST MEDICAL FACILITY	Name/Location	
--------------------------	---------------	--

Latitude	Longitude	Contact Freq
----------	-----------	--------------

VOR	Nautical Miles	DEG
-----	----------------	-----

NEAREST BURN CENTER	Name/Location	
---------------------	---------------	--

Latitude	Longitude	Contact Freq
----------	-----------	--------------

VOR	Nautical Miles	DEG
-----	----------------	-----

LIFEFLIGHT	Name/Location	
------------	---------------	--

Type Aircraft	Phone #	Contact Freq
---------------	---------	--------------

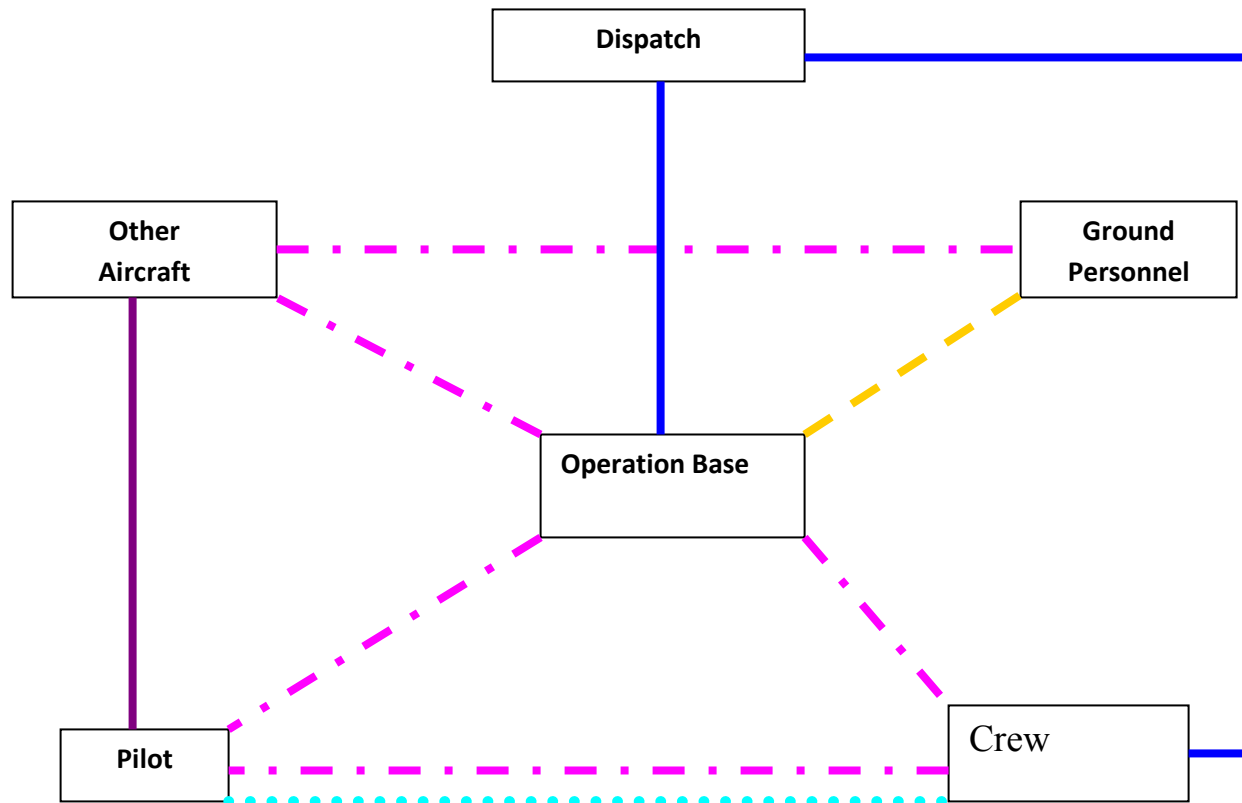
SPECIFIC INFORMATION AND INSTRUCTIONS (Utilize cell phone if possible. Do not use names over the radio)

- | | |
|----|--|
| 1. | Nature of the injury(s)/illness |
| 2. | Is medical help needed? If available supply vital signs! |
| 3. | What transportation is needed? Is patient(s) ambulatory? |
| 4. | Location of victim. |
| 5. | Route to be taken (use land marks as guide). |
| 6. | Equipment needed. |
| 7. | Name of contact on site. |
| 8. | Notify appropriate agency line officer. |

SITE CONDITIONS

Latitude:	Longitude:	Contact Freq:
-----------	------------	---------------

Wind Speed:	Elevation (msl):	Temperature:																													
Terrain Factors:	Helispot Minimum Size:																														
Proximity of Helispot to Injury Site :	Visibility/Sunrise/Sunset Limitations:																														
Flight Hazards:																															
Other Aircraft in Area (Call Signs & Freq.):																															
Ground Contact & Frequencies:																															
COMMUNICATIONS PLAN																															
<ul style="list-style-type: none"> • Legend • Command ————— • Air to Ground - · - · - · - • Tactical - - - - - • Flight · · · · · • Following • Air to Air ————— 	<ul style="list-style-type: none"> • Frequency List: <table border="1"> <thead> <tr> <th>Name</th> <th>RX / Tone</th> <th>TX / Tone</th> <th></th> </tr> </thead> <tbody> <tr> <td>•</td> <td>•</td> <td>•</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Name	RX / Tone	TX / Tone		•	•	•																					
Name	RX / Tone	TX / Tone																													
•	•	•																													



Risk Assessment Matrix				
	Severity			
Likelihood	Negligible IV	Marginal III	Critical II	Catastrophic I
Frequent A				
Probable B				<i>High 4</i>
Occasional C			<i>Serious 3</i>	
Remote D		<i>Medium 2</i>		
Improbable E	<i>Low 1</i>			

Severity Scale Definitions		
Catastrophic	Results in fatalities and/or loss of the system.	
Critical	Severe injury and/or major system damage.	
Marginal	Severe injury and/or minor system damage.	
Negligible	Less than minor injury and/or less than minor system damage.	
Likelihood Scale Definitions		
Frequent	Individual Fleet	Likely to occur often. Continuously experienced
Probable	Individual Fleet	Will occur several times. Will occur often.
Occasional	Individual Fleet	Likely to occur sometimes. Will occur several times.
Remote	Individual Fleet	Unlikely to occur, but possible. Unlikely but can reasonably be expected to occur
Improbable	Individual Fleet	So unlikely, it can be assumed it will not occur. Unlikely to occur, but possible.

SAFETY MANAGEMENT SYSTEM ASSESSMENT AND MITIGATION			
Assessment and Mitigation of:			
System-			
	Pre Mitigation		Post Mitigation

The below matrix is utilized for decision making during the operation period

Appropriate Management Level for Operational Risk Decisions		
Risk Level	Fire	Project
High	Incident Commander or Operations Sections Chief	Line Officer/Manager
Serious	Incident Commander or Operations Sections Chief	Line Officer/Manager
Medium	Air Operations Branch Director	Project Aviation Manager
Low	Base Manager	Helicopter or Flight Manager

Sub System	Hazards	Likelihood	Severity	Risk Level	Mitigation	Likelihood	Severity	Risk Level
EXAMPLE: Environment	Conflicting Airspace Environment	Occasional	Critical	Serious	Local agency must provide orientation and “situational awareness” overview to SEAT pilots on Special Use Airspace, MTR, TFR, ect. Assure that dispatch and aviation personnel are trained. In dispatch procedures for SUA. Use aerial supervision when available.	Remote	Critical	Medium
Final Assessment Value:				Prepared By:		Date:		
Operation Approved By:				Title:		Date:		

PROJECT AVIATION SAFETY PLAN BRIEFING

A copy of this briefing page will be submitted to the Agency Forest Aviation Officer/Unit Aviation Manager within 5 days of the completion of this project.

Briefing Leader: _____

Briefing Date: _____ Time: _____ Location: _____

Discussion Items:

- a. Hazard Analysis (as outlined in plan)
- b. Safety Air Ops (Ground)
- c. Safety Air Ops (Flight)
- d. Military Training Routes
- e. Flight Following
- f. Frequencies
- g. Fueling
- h. Emergency Evacuation. Plan
- i. Authorities
- j. Weather Considerations
- k. Other

SPECIFIC TO LAW ENFORCEMENT MISSIONS—refer to the **LAW ENFORCEMENT AVIATION MANAGEMENT PLAN** for protocol for these items:

- Weapons carried aboard aircraft
- Hazardous Materials---mace/pepper spray
- Canines aboard aircraft
- Prisoner Transport
- Covert flight following procedures
- Risk assessment protocol for unplanned landings, etc

**PROJECT AVIATION SAFETY PLAN BRIEFING
SIGNATURE PAGE**

Attendees Signature and Concurrence:

Name	Project Responsibility/Role	Date

Appendix 10.13

Regional Aviation Safety Plan Guide for Forest or Unit Plans

The format of the new National Aviation Safety and Management Plan (NASMP) is changed from the format we have used in the past. We will transition to this format for the Regional Aviation Safety and Management Plan (RASMP) as soon as possible. Because this will require extensive re-writing of all submitted Plans we have provided a guide to assist in this process.

This guide is provided to assist transition to National Aviation Safety Plan format and meet several objectives for Plans created in the Region. Each aviation Plan is the description of how to perform aviation services safely and efficiently. One objective is to offer suggestions for minimizing the amount of work required to generate a comprehensive Plan. Another is to make changes to the Plan format that follows the National Plan. Another objective is to incorporate the items that are addressed in the NASMP, but not included in the RASMP or Forest and Unit Plans. The last objective is to provide processes that can accommodate change while maintaining function.

The new format titles for each section are identified, followed by the previous Regional titles and Regional content information, shown in parentheses, appropriate for the section.

There are new titles that will require new or original input. You may be able to use the NASMP as a guide for a new section. Some references can be made to existing Policy without listing the coverage in its entirety, i.e. Statements that indicate compliance with the reference Plan guidance include: “In Accordance With” (IAW), or “As Described in the NASMP”. The term “As desired” indicates that you can add items, use “Reserved” to indicate a part not needed at this time.

Some parts of the new Plan are extensive in that they address many items not addressed in the earlier version. Some parts are not applicable and will be labeled “Reserved”. If they are needed in the future they can be updated at any time. The goal should be to fill in those parts in a progressive fashion, keeping in mind that we desire to have a complete transition before the 2012 Plan is submitted. We will be updating the RASMP Plan and forwarding parts as they

are completed. Forests and Units should forward updated parts as they are available.

The simplest approach may be to follow the new format and cut and paste and missing information or old Plan items to the new format. The new format requires that Forest and Unit Plans will be divided into the Sections as listed and a separate complete document forwarded to the Region office for review/approval.

The Regional Plan has additional materials that were appropriate in order to function as a guide for the other entities using the Regional Aviation Safety and Management Plan. Your local Plans will contain what you consider appropriate-the only requirement is to follow the format, include all titles with information or appropriate notation.

This is meant as a guide to assist in meeting the goal of transitioning the Regional Plans to the new format as soon as possible with as little difficulty as possible

1.0 Aviation Management Plan

1.1 Purpose- Include (Scope, Purpose, and Objectives)

1.2 Mission Statement- include (Overview)

1.3 Leaders Intent-New, Recommend: Summarize NASMP, or create to reflect local need

1.4 Aviation Doctrine-New, Recommend: Summarize NASMP, (IAW, reference to Doctrine website, use link (<http://www.fs.fed.us/fire/doctrine/index.html>))

1.5 National Aircraft Management Strategy-New, Recommend: Summarize NASMP

1.6 Authority-New, Recommend: Summarize NASMP, or create to reflect local need

1.7 General policy-New, Recommend: Summarize NASMP, or create to reflect local need

2.0 Aviation Organization and Responsibilities

2.1 Organization-(Describe Positions as necessary for your use)

2.2 The Washington Office (WO) Staff (Not necessary to repeat)

2.3 The Regional Office (RO) Aviation Staff (As desired)

2.4 Forest Aviation Staff- Include

2.5 Additional Aviation Positions-As desired

2.6 National Groups/Committees-As desired

2.7 Program Overview-Use previous Overview information

3.0 Administrative Direction (Chapter 4 of old Plan)

3.1 General-follow NASMP/RASMP

3.2 Reporting and Documentation Requirements-follow NASMP/RASMP

- 3.3 Aviation Plans-**
- 3.4 Aircrew Orientation Briefing Package**
- 3.5 Land Use Policy for Aviation Activities**
- 3.6 Budget**
- 3.7 Contracting**
- 3.8 Aircraft Contracting Start / Modification/ Extension**
- 3.9 Contractor Performance**
- 3.10 End Product Contracts**
- 3.11 Supplemental Fire Aircraft Acquisition**
- 3.12 Cooperator Aircraft**
- 3.13 Aircraft Administrative Use and Reports**
- 3.14 Dispatching**
- 3.15 Flight Use Reports-Daily, Annual, Senior Travel etc.**
- 3.16 Charge Codes**
- 3.17 Working Capital Fund (WCF)**
- 3.18 Federal Excess Property (FEPP)**
- 3.19 Financial Business Management System (FMBS)**
- 3.20 Program Reviews**
- 3.21 New Program Requests**
- 4.0 Aviation safety Management Systems (Chapter 5 of old Plan)**
 - 4.1 General**
 - 4.2 Safety Management Systems (SMS)**
 - 4.3 Policy**
 - 4.4 Risk Management**
 - 4.5 Assurance**
 - 4.5.1 Safety and Technical Assistance Team (STAT)**
 - 4.5.2 Aviation Safety Communiqué**
 - 4.5.3 Aircraft Accident Investigation Process**
 - 4.5.4 Project Aviation Safety Planning (PASP)**
 - 4.6 Promotion**
 - 4.6.1 Human Factors**
 - 4.6.2 Aviation Safety Awards Program**
 - 4.7 National Fire and Aviation Operations Alert System**
- 5.0 Aviation Operations (Section 2 of old Plan)**
 - 5.1 General**
 - 5.2 Operational Guides and Handbooks**
 - 5.3 Public/ Civil Aircraft Operations**
 - 5.4 Employee on Non-Forest Service Aircraft**
 - 5.5 Emergency Exceptions to Policy**
 - 5.6 Category of Flight**
 - 5.7 Flight Planning**
 - 5.8 Flight Following**
 - 5.9 Radio Frequency Management/ Communications**
 - 5.10 Overdue or Missing Aircraft**
 - 5.11 Mishap Response**
 - 5.12 Passengers**

- 5.13 Transport of Hazardous Materials**
- 5.14 Invasive Species Control**
- 5.15 Fire Chemicals and Aerial Application Policy near Waterways**
- 5.16 Search and Rescue (SAR)**
- 5.17 Air Tanker Operations**
 - 5.17.1 Very Large Air Tankers (VLAT)**
 - 5.17.2 Air Tanker Base Personnel**
- 5.18 SEAT Operations**
- 5.19 Aerial Supervision/ Lead Plane Operations**
 - 5.19.1 Aerial Supervision Personnel**
- 5.20 Helicopter Operations**
 - 5.20.1 Helitack**
 - 5.20.2 Rappel**
 - 5.20.3 Cargo Letdown**
 - 5.20.4 Rope Assisted Deployment System (RADS)**
- 5.21 Aerial Ignition Operations**
- 5.22 Wild Horse and Burro Operations (Reserved)**
- 5.23 Aerial Capture, Eradication and Tagging of Animals (ACETA) (Reserved)**
- 5.24 Smokejumper Operations (Reserved)**
 - 5.24.1 Smokejumper Personnel**
 - 5.24.2 Smokejumper Aircraft**
- 5.25 Light Fixed-Wing Operations**
 - 5.25.1 Reconnaissance or Patrol Flights**
 - 5.25.2 Single Engine Night Flights**
 - 5.25.3 Backcountry Airstrip Operations**
- 5.26 Law Enforcement and Investigation (LEI) Operations**
 - 5.26.1 Special Law Enforcement Aviation Projects**
 - 5.26.2 Rapid Assessment and Initial Detection (RAID)**
 - 5.26.3 LEI Training**
 - 5.26.4 Civil Air Patrol (CAP) (Reserved)**
 - 5.26.5 Department of Homeland Security (DHS)**
 - 5.26.6 LEI Personal Protective Equipment (PPE) During Tactical Operations (Reserved)**
 - 5.26.7 Emergency Operations**
 - 5.26.8 LEI Short-Haul and Hoist Operations (Reserved)**
- 5.27 Unmanned Aerial Systems (UAS) (Reserved)**
- 6.0 Aviation Training**
 - 6.1 Aviation Training for All Flight Activities and Positions**
 - 6.2 Responsibility**
 - 6.3 Instructor Standards**
 - 6.4 Records Management**
 - 6.5 Tuition and Travel**
 - 6.6 Development**
 - 6.7 IAT/ NWCG Crosswalk**
 - 6.8 Contract Contracting Officer Representative (COR) Requirements**
- 7.0 Airspace**

- 7.1 Interagency Airspace Coordination**
- 7.2 Fire Traffic Area (FTA)**
- 7.3 Temporary Flight Restriction (TFR)**
- 7.4 Aircraft Transponder Code (Firefighter)**
- 7.5 Airspace Boundary Plan**
- 7.6 Airspace De-Confliction**
- 7.7 Airspace Conflicts**
- 7.8 Airspace Agreements- Memorandum of Understanding**
- 8.0 Aviation Security**
 - 8.1 Aviation Security**
 - 8.2 Forest Service Facilities Security Risk Assessments**
 - 8.3 Forest Service Security Response Actions**
 - 8.4 Regional Homeland Security Advisory System Response Plan**
 - 8.5 Facility Homeland Security Advisory System Response Plan**
 - 8.6 General Aviation**
 - 8.7 Aircraft Security Information (Cooperators)**
 - 8.8 TSA Commercial Airport Security**
 - 8.9 TSA Security requirements for non-commercial operations**