

AVIATION MANAGEMENT AND SAFETY PLAN

EASTERN REGION

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EASTERN REGION

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I - INTRODUCTION

This plan addresses activities, management expectations, and procedures that will be used to manage the aviation program as it pertains to supporting Forest Service and Region 9 mission goals. This plan focuses on proper use of aircraft in a safe and cost effective manner. It must be understood that this plan is not a program in itself, but a tool to be used by knowledgeable and disciplined aviation managers to help them understand what we do, what is expected of us, where we are going in aviation, and how we will get there in support of line officers and daily mission accomplishment.

Each forest will have their own plan as a supplement to the regional plan to better clarify details of aviation activities conducted on their forests. This aviation and safety plan supercedes the Aviation Safety and Training/Aviation Accident Prevention Plan dated July 22, 1996, and establishes guides for regional compliance with the National Aviation Plan.

GOAL

The goal of aviation management in the Eastern Region is to ensure all three tangents of the "Aviation Triangle" are met by ensuring cost effective and correct use of aviation resources with employee safety as the foundation. Adherence to these three basic principles - safe, right, and cost effective, is the ultimate goal and driving force behind a successful program.

This plan will provide all employees with a comprehensive guide for aviation operations in this region. Aviation management objectives will be reached by following the Forest Service Manual, Handbooks, Guides, operating plans, contracts, and applicable Federal Aviation Regulations. This does not replace the need for good judgment and independent decisions where life or property is threatened.

OBJECTIVES

The objectives of this plan are:

1. To give clear understanding to all aviation managers and users regarding procedures that will be utilized by this region, including planning and conducting flight operations in support of the Forest Service mission.
2. To identify the roles, responsibilities, and training plan for individuals attached to the aviation mission.
3. To ensure aviation operations are conducted to the national standard by identification of those standards.
4. To minimize human exposure to hazards through identification of effective risk management techniques.
5. To minimize the likelihood of injury, death, or property loss from aviation accidents.
6. To implement the National Aviation Management Plan into regional operations.

II - MANAGEMENT PHILOSOPHY

AVIATION MANAGEMENT

Conducting aviation operations to the standards set forth in national policy is the only proper avenue for us. There is no substitute, and we will accept no less. We understand that many of the policies we use today have evolved from lessons learned at great expense in terms of dollars and human lives. Our own success will depend on technical competence, communication, and teamwork. It is the responsibility of every person who has a stake in aviation to understand what is required of them, and to have the ability to meet those demands. Training will continue to be a priority, as ignorance is not compatible with our requirements for success. Aviation managers assume great responsibility and must be willing to take control of their projects with confidence and an understanding that they will make decisions that affect the safety of their fellow employees. For this reason, there is no substitute for performance to standard.

POLICY

This Regional Aviation Management and Safety Plan is based on the following policies:

- Code of Federal regulations
- 14..Aeronautics and Space
- 49..Transportation
- FSM 5700
- FSH 5700
- Interagency Helicopter Operations Guide
- Cooperator's regulatory policy, when such policy is more restrictive than
- Forest Service.

Each forest will maintain an Aviation Plan covering additional local and cooperator policies and procedures.

It is the responsibility of all Forest Service employees to be familiar with policy and direction relative to their involvement with aviation services. Failure to meet standards will be considered negligence and handled accordingly.

III - AVIATION PROGRAM

PROGRAM OVERVIEW

The Eastern Region utilizes aircraft for support of wildfire suppression, remote sensing, insect and disease survey and control, law enforcement, special projects, and administrative transportation. This region's aviation oversight is shared between the USDA-FS Northeastern Area State and Private Forestry, located at Newtown Square, Pennsylvania, and USDA-FS R-9 Aviation and Fire Management. The two organizations work cooperatively and in a mutually supportive role. Both organizations provide technical skill in aviation management, operations, and safety oversight.

To support these operations, resources available to the region include four fixed-wing aircraft funded by working capital funds (WCF), aircraft provided by private vendors through contract and charter agreements, cooperator aircraft, and interagency aircraft arranged through basic ordering agreements (BOAs). These resources are obtained through requests via the forest or dispatch channels.

The Superior National Forest provides management and accountability for three DeHavilland Beavers based at the Ely, Minnesota, Seaplane Base. The primary use of these aircraft is to support fire suppression activities and other natural resource activity needs, such as aerial videography, animal radio tracking, and other special use missions. Access to these aircraft is through the Superior National Forest dispatch office. The Regional Aviation Office provides the management and accountability for one Beechcraft King Air for the purpose of meeting administrative needs and providing a back up to the National Infrared program and is available through the Eastern Area Coordination Center (EACC).

The Regional Aviation Group must maintain close ties with each forest through the Forest Aviation Officer (FAO)(FSM 5700). The relationship between the FAO and the Regional Aviation Group is essential to maintaining a safe and efficient operation. One of the primary roles of the Regional Aviation Group is to provide support and guidance to the forest through the FAO. This partnership is the cornerstone of the regional aviation program.

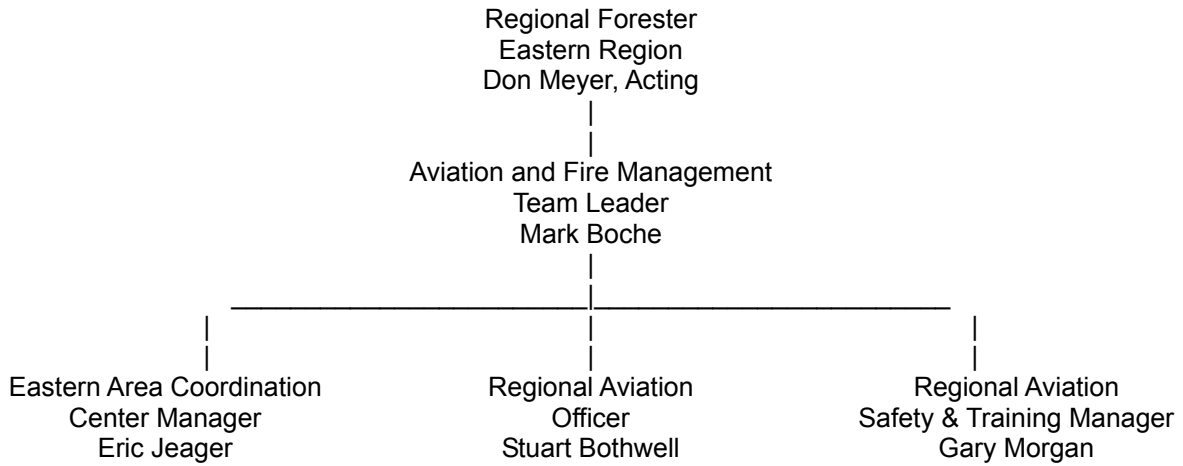
The major elements of the Aviation Program include:

- Aviation Safety - Ensuring aviation operations are conducted at a level of acceptable risk commensurate with the needs of the mission through training, communicating, and providing technical assistance to forests.
- Incident Support Coordination - Eastern Area Coordination Center (EACC) provides assistance and leadership in flight planning, flight following, and airspace coordination.
- Program Management - Providing guidance, direction, and coordination of safe and efficient aviation operations on the forests within the region. Ensures implementation of aviation policy in the principles of the aviation management triangle.

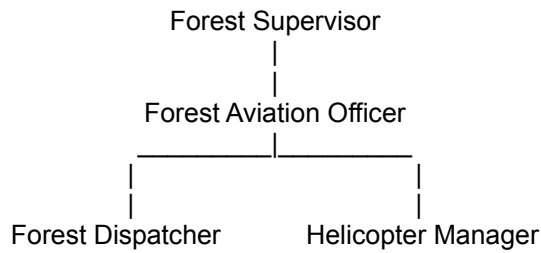
ORGANIZATION AND STAFFING

USDA-FS EASTERN REGION, R9

REGIONAL LEVEL

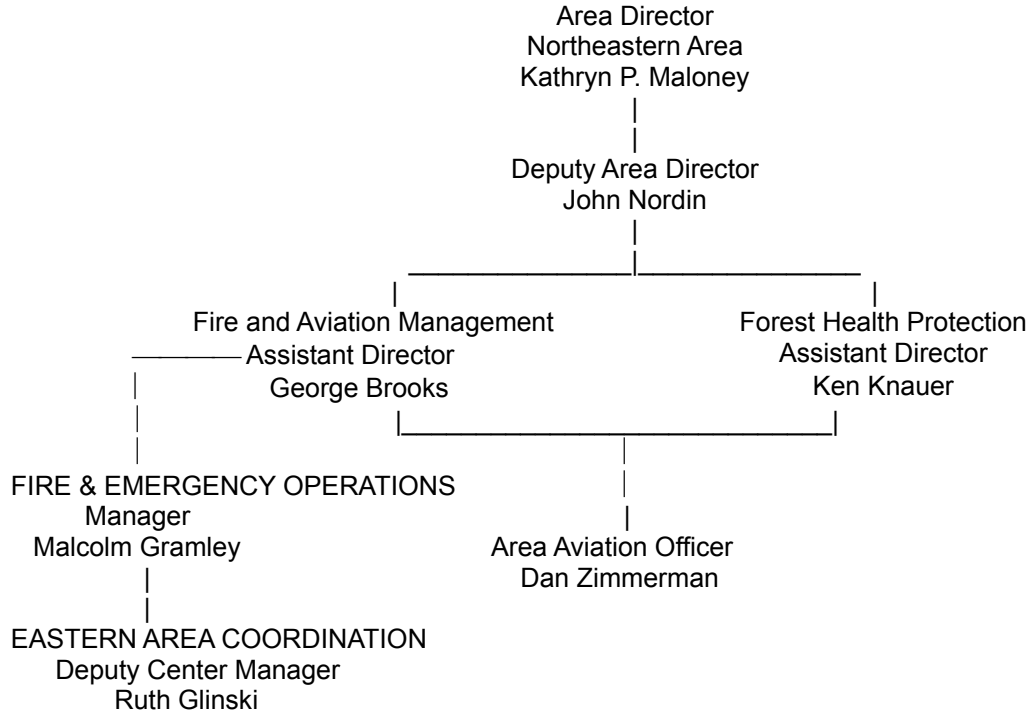


FOREST LEVEL

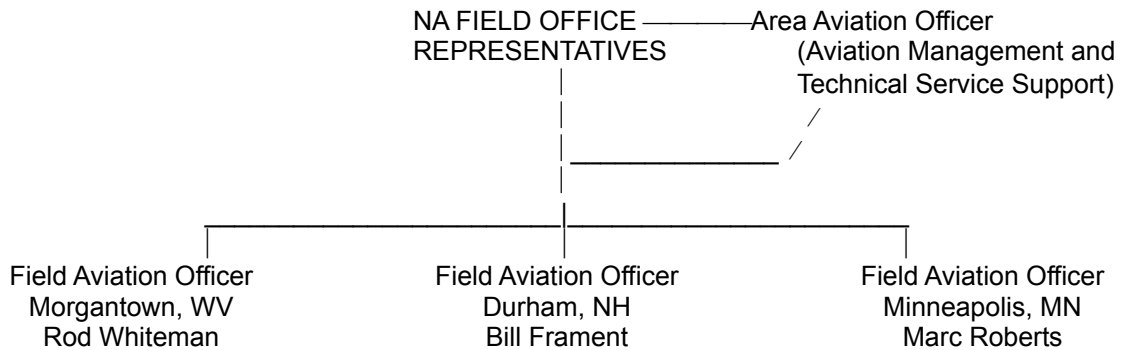


USDA-FOREST SERVICE NORTHEASTERN AREA, S&PF

NORTHEASTERN AREA HEADQUARTERS ORGANIZATION



NORTHEASTERN AREA FIELD OFFICE ORGANIZATION



ROLES AND RESPONSIBILITIES

EASTERN REGION, R9

Aviation and Fire Management Team Leader

The primary role of the Team Leader is to provide overall leadership to the regional and forest fire and aviation organizations. This position is the focal point for setting the tone with each Forest Supervisor for the expected level of aviation operational standards that are consistent with the Regional Forester's established safety expectations.

Regional Aviation Officer

The primary role of the Regional Aviation Officer (RAO) provides program leadership and technical guidance in the regional aviation organization and national forests. This position sets the standard for the level of safety expected within the aviation function and executes a safe WCF flight operation. The RAO and Aviation Team 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.

RAO responsibilities are to:

- Monitor forest, district, and project aviation planning as well as qualifications of Forest Service employees involved in aviation operations.
- Assist Forest Aviation Officers in the development of aviation-related plans and recommend/approve changes to these forest plans and aviation operations.
- Ensure specialized aviation training is provided to field units and employees.
- Provide technical input to Contracting Officers for development of standard contract specifications.
- Provide aircraft and pilot inspections and approvals as required by Forest Service direction, cooperative agreements, and contract specifications.
- Conduct safety evaluations of field aviation operations on a regular basis.
- Monitor contract and employee pilot performance.
- Provide for training, check rides, and approvals of Forest Service aviation employees as required by Forest Service Manual, Handbooks, and operating guides.

Regional Aviation Safety and Training Manager

The Regional Aviation Safety and Training Manager (RASM) serves as the principal advisor to the Team Leader 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 efforts in promoting safety awareness and developing safe attitudes in those people directly and indirectly involved in aviation operations. The RASM provides the concepts, principles, and procedures required for interfacing aviation safety practices into operational activities. 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 program.

RASM responsibilities are to:

- Review aviation planning, training, contract specifications, contract administration support, and recommend changes to the Team Leader and RAO.
- Participate on selected safety evaluations with other aviation staff members to review the ground operation monitoring programs and recommend changes to the RAO and Team Leader.
- Monitor and follow up actions recommended from safety evaluations, formal reviews, and accident Boards of Review.
- Review contract and employee pilot training and monitor activities to ensure compliance with Forest Service direction and make recommendations for changes to the Team leader and RAO.
- Ensure aviation accidents and incidents are investigated and corrective actions are taken to prevent future reoccurrences.
- Provide trend monitoring of accidents and incidents from 5700-14 reports, to help the RAO and Team Leader prioritize efforts in the areas presenting higher risk for mishap.

Forest Aviation Officer

The Forest Aviation Officer (FAO) is the primary authority for aviation activities that occur at the forest level. The FAO implements the Aviation Triangle (safe, cost effective, and correct aircraft), from planning through operations in support of the Forest Service mission. 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. The FAO develops, annually updates **and submits the Forest Aviation Plan to the Line Supervisor for approval**. He/She implements the Forest Aviation Plan and ensures completion of aviation use reporting through submission of AMIS inputs **into the National Database on a monthly basis**.

Due to the critical role the FAO performs in aviation and its impact on employee safety, it is imperative that FAOs possess the following qualities and qualifications:

- Strong interest and ability in planning and supervising aviation operations.
- Experienced in contract management or completed Contract Officer Representative (COR) training.
- Completed aviation management training that covers such areas as contracting aviation activities, aviation safety, aircraft capabilities and performance, and risk management (e.g., Interagency Aviation Management and Safety).
- Working knowledge of aircraft (fixed-wing and rotary-wing) including performance, capabilities, and limitations.
- Knowledge of Forest Service, FAA, state, and local regulations governing aviation operations.
- Capable and assertive in the development and management of the forest aviation planning documents (Forest Aviation Plan, mission safety plans).

NORTHEASTERN AREA, S&PF

Assistant Directors - Fire & Aviation Management / Forest Health Protection

The primary role of the Assistant Director(s) is to provide overall leadership to the Northeastern Area in implementing the lowest risk aviation program in the most efficient, cost-effective manner providing fire protection and suppression and forest health management protection. These positions are the focal point for setting the tone with each Staff Specialist and Area Line Offices for the expected level of aviation operational standards that are consistent with the Area Director's established safety expectations.

Area Aviation Officer

Serves as the Area Aviation Officer (AAO) and Area Aviation Safety Officer and is the principle point of contact for national, Northeastern Area (NA), Northeast Experimental Station, and 20 state cooperators with business regarding aviation management and aviation safety in the area. Organizes and participates in NA meetings and workshops, and represents the area at state, regional, and national meetings involving matters related to aviation management and safety, as related to NA programs and cooperators.

Conducts site surveys, functional assistance trips and short term training sessions necessary to enhance aviation management and safety in field operations, in particular, those of cooperating State Forestry and Agriculture aviation operations. Recommends long-term training for NA and Cooperator personnel. Develops systems, procedures, criteria, and analytical methods needed to review and analyze findings leading to curriculum development and subject matter for presentations.

Provides guidance and functional supervision to the Field Aviation Officers in the three NA field offices. Provides leadership in the implementation of aviation management and safety recommendations following organizational and activity reviews of Forest Health Protection and Cooperative Fire Protection activities. Is responsible for implementation and use of the Aviation Management Information System (AMIS) - a USDA and national reporting system. Is knowledgeable of the Federal Excess Personal Property (FEPP) program and its special requirements regarding the use of FEPP aircraft on loan to state forestry agencies to assist them in meeting wildland fire management objectives. Has a working knowledge of applicable Federal Aviation Regulations (FARs) and their unique application in Public Service and Restricted category operations. Assists State Foresters and State Aviation Transportation Directors in the development of Aviation Management Plans.

Field Aviation Officer

The Field Aviation Officer (FAO) is the primary authority for aviation activities that occur in the geographic area of a field office. The FAO implements the Aviation Triangle (safe, cost effective, and correct aircraft), from planning through operations in support of Forest Service missions. This position provides liaison between the Area Aviation Officer, and persons conducting aviation activities in the field office locations. The FAO plans and organizes aviation projects by coordinating with aircraft operators and ensuring compliance with policies and regulations governing air operations. The FAO develops aviation project plans when aviation resources are utilized to accomplish a project and submits them to the Area Aviation Officer for approval. If a national forest is included within the scope of state cooperator's work, the plan will also be submitted to the R9 RAO and RASM for review prior to approval. The FAO implements the approved Project Work Plan and Project Aviation Safety Plan. In addition, the FAO is responsible for meeting data reporting requirements in the Aviation Management Information System (AMIS), a national database requiring monthly reporting.

Due to the critical role that an FAO performs in aviation operations and the impact on employee safety, it is imperative that FAOs possess the following qualities and qualifications:

- Strong interest and ability in planning and supervising aviation operations.
- Experienced in contract management or completed Contract Officer Representative (COR) training.

- Completed aviation management training that covers such areas as contracting aviation activities, aviation safety, aircraft capabilities and performance, and risk management. (e.g., Interagency Aviation Management and Safety).
- Working knowledge of aircraft (fixed-wing and rotary-wing) including performance, capabilities, and limitations.
- Knowledge of Forest Service, FAA, state, and local regulations governing aviation operations.
- Capable and assertive in the developing, implementing, and administering Project Aviation Safety Plans and Work Plans.

IV - OPERATIONS

FLIGHT OPERATIONS

There is considerable risk involved with flying aircraft in the Forest Service, due to the typical mission profile (e.g., low altitude, mountainous terrain, poor visibility, turbulence, and traffic congestion in confined airspace). This environment is more demanding of pilot skills, reduces the allowable margin of pilot error, and limits the options and time to make good decisions for a safe outcome. While quality and operational limitations of aircraft are significant in risk management, statistics indicate the human element is the leading factor in aviation accidents. It is, therefore, imperative to have a means to develop and promote safe attitudes for those involved in flight operations. In addition, contract and management controls must be in place to ensure pilots are qualified, proficient, and current for the mission assigned.

Policy:

Each flight will be planned and executed such that safety considerations will take precedence over costs or mission accomplishment.

Each forest will have an aviation plan and aviation project plans.

Aviation safety objectives will be accomplished by adherence to regulatory documents referred to in this plan.

Air crew proficiency, currency, training, and standardization will receive high priority in an effort to prevent pilot error accidents.

Ground crew assigned to support aviation, either directly or indirectly, will be properly trained for the specific assignment.

Aircraft Procurement:

Each forest will ensure point-to-point aviation services are available for emergency mobilization.

All vendors providing point-to-point and special mission flight support will be identified to the Regional Aviation Officer (with a copy of the purchase agreement) by January 15 for use that calendar year. Once the vendors are identified, pilot and maintenance inspectors will be scheduled to inspect and approve all operators for use by Forest Service employees.

CHIEF OF PARTY

Any time a flight or mission involves more than one employee, a Chief of Party **shall** be designated. This person's primary role is to manage the flight to ensure passengers are transported safely and within prescribed procedures. He/she will ensure all passengers are briefed, manifested, and assembled for boarding in a timely manner. The Chief of Party will also keep track of flight progress and notify dispatch centers if there is any undue delay. Pilots and aircraft will be checked prior to flight for interagency cards that are correct and current for the mission flown. Finally, the Chief of Party will ensure the accounting form (FS 6500-122, Flight Use Report) is completed and signed. For additional information on qualifications and responsibilities of Chief of Party, refer to Chapter 60 National Mobilization Guide, Section 66.

TRAINING

Training is the key method to ensure that aviation technical staff and employees are knowledgeable of current procedures and techniques, thus enhancing a safe operation. It is essential that pilots, aviation users, supervisors, and managers be familiar with the inherent hazards of aviation operations. Forest Service management is dedicated to providing for professional and technical training of employees or

contract personnel in all levels of the organization that use or influence use of aviation resources. Each forest develops and implements plans for the identification of initial and recurrent aviation training needs specific to its missions. Documentation of training is critical in order to track currency and establish annual training plans on an individual basis. Employees must take care to ensure their training records are maintained and reviewed periodically. Areas of aviation training include:

- Chief of party roles and responsibilities
- Orientation and basic aviation safety for all users
- Dispatching and flight-following procedures
- Proficiency and special mission training for pilots
- Technical maintenance training on aviation equipment
- Management of aviation operations and equipment
- Human factors in aviation for aviation professionals and managers
- Aviation Safety Program Management and Accident Investigation
- Aviation Risk Management

SPECIAL MISSIONS

Any flight that is not point-to-point (direct airport-to-airport) is considered special mission. Pilots and aircraft must be carded to perform the particular special mission that is planned. Special missions include aerial reconnaissance, spraying, fertilizing, dropping fire retardant, low level surveys, passenger transport to unimproved runways or helispots, float plane operations, aerial photography, remote sensing, etc.

HELICOPTER OPERATIONS

Region 9 uses Type I, II, and III helicopters for natural resources projects and fire fighting. All helicopter operations are conducted under the supervision of a qualified helicopter manager and will operate in accordance with IHOG.

Helicopter Bucket Operations - All water bucket hookups to helicopters will be either by direct attachment to the belly hook, or with a minimum 50 foot longline. Two recent mishaps revealed that a significant hazard exists when attaching the water bucket to a lead line shorter than 50 feet.

PROJECT PLANNING

Planning operations involving aviation support should commence with sufficient lead-time to adequately provide for technical review and risk management if we are to ensure maximum safety and effectiveness of our flight resource. It is understood that emergency situations arise that require immediate action and shall be documented through a Safecom (5700-14) to the Regional Aviation Safety Manager.

When employees are first aware of a need for aviation support, the Forest Aviation Officer must be notified. This will give aviation managers adequate time to assist in the preparation of a project plan and hazard analysis. All aviation plans are subject to review from the Regional Aviation Officer. Plans that are incomplete will be returned for re-work and may delay the project. In the event cooperators are involved, a memorandum of understanding (MOU) or letter of agreement (LOA) will be necessary. A project aviation safety plan worksheet is included (Appendix 8) for assistance in plan development. If a job contract is needed, the contracting officer will be involved to ensure requirements are met by Federal Acquisition Regulations.

End Product Aviation Contracts (Job Contracts)

All Job contracts will have a project plan, reviewed by the RAO, and approved by the local line officer prior to procurement action. The contract project plan will establish product minimum standards in accordance with the chart in Appendix 9.

Approved Aircraft and Pilots

All flights involving Forest Service employees will be limited to aircraft and pilots who have been approved for that year by the USFS or OAS aviation inspectors. Proof of approval (either interagency card or letter of authorization) must be carried by the pilot and in the case of the aircraft, posted with the airworthiness certificate, and be available for inspection by any Forest Service employee. This restriction does not apply to regularly scheduled airlines (Delta, Northwest, Commuters, etc.). If there is a question about any aircraft, ask the local dispatcher or FAO.

Aircraft and Pilot Inspections

The Regional Aviation Officer will be responsible to ensure adequate resources are available to inspect pilots and aircraft for supporting aviation contracts and agreements on the Forests and Areas.

The Unit Aviation Officer (Field/Forest) will establish contact with vendors and cooperators necessary to support the aviation needs of the unit. Once aviation needs are identified, the unit aviation officer will develop a project plan and job hazard analysis from which a contract or MOU/Letter of Agreement will be drafted identifying methods and practices that ensure compliance with pertinent federal and agency policies. Once these documents are established and approved, the unit aviation officer will send the contract/MOU and plan to the Regional Office with request for technical support, which includes the dates of availability for the aviation vendor or cooperator for inspection.

Once the request for technical support is received, the RAO will assign an inspector(s) to the job of inspecting the vendor/cooperator and supply the inspector(s) with the pertinent documents (project plan, contract, MOU). The inspector(s) will use the project documents as an inspection guide to ensure the aircraft and pilots are capable of safely delivering the work as specified. Only interagency-approved maintenance inspectors that are rated Aircraft and Powerplant mechanics by the FAA shall perform aircraft maintenance inspections. Only interagency-designated pilot inspectors will conduct pilot inspections.

Unit aviation officers will ensure that contract and vendor information is entered promptly into the Aviation Resources Database located at <http://205.173.2.4/carding/logon.asp>. Once this information is established, the inspectors will enter the aircraft and pilot information and the inspections at the same website. Once this information is established, the operator and contract information will be available to all units as an aviation support resource.

Reconnaissance and Survey Minimum Horsepower Rating

Per FSH 5709.16 section 36, the Eastern Region requires single engine aircraft used for special missions (including reconnaissance) to have a power loading of not more than 13.5 pounds per horse power: and multi-engine airplanes shall be capable of at least 200 horsepower per engine (any engine developing less than 240 horsepower shall be turbo/supercharged).

Return to Contract Availability

When it is necessary to suspend flight operations for a maintenance discrepancy, or when an aircraft has unscheduled maintenance performed on it while attached to a Forest Service contract or agreement, that aircraft will not be used until it has been authorized for "return to contract availability" by an approved interagency maintenance inspector.

Personal Protective Equipment

Due to the likelihood of an unplanned landing, malfunction, or mishap, employees must wear appropriate personal protective equipment (PPE) for the type of flight they are participating in. PPE requirements have been developed from past experience and are intended to enhance survival in the event of an unplanned occurrence.

PPE requirements for helicopter flights are SPH 4 flight helmet, Nomex or leather gloves, flight suit (made of Nomex or other fire retardant material), and leather boots that provide suitable ankle support and protection. Firefighters transporting from point-to-point by helicopter who are not part of the flight crew may substitute hard hats with chinstraps for the SPH 4 flight helmet. PPE for fixed-wing flights below 500 feet AGL include helmet, gloves, and fire retardant flight suit. For all flights, passengers are encouraged to carry survival packs suitable for the environment they will be operating in. Natural fiber clothing should be worn since most synthetic fibers melt if exposed to fire.

Flight Scheduling

All Forest Service flights or cooperator flights involving Forest Service employees will be ordered through the Forest Dispatcher or EACC. Helicopter flights will further involve coordination with the helicopter manager. It is the Dispatcher's responsibility to dispatch all flights or specifically delegate that responsibility. Flight services requiring the use of 104Z will be arranged through EACC. Employees will not alter or re-schedule flights with vendors without first contacting dispatch. Requests for flight service may be made via E-Mail or phone.

The following information is required:

- Passenger name(s)
- Mission
- Date and time of departure
- Pick up location and destination
- Weights, sizes, and types of freight or special needs
- Management code
- Hazardous materials

The dispatcher may coordinate the flight with other users to maximize available aircraft resources.

Flight Following

All Forest Service flights will be flight followed in accordance with FSM 5700 and Interagency Helicopter Operations Guide (IHOG). When flights cannot be followed by a dispatcher, prior approval and plans for flight following must be approved by the FAO. For non-fire administrative point-to-point flights, flight following may be accomplished through an IFR flight plan. The pilot will contact the dispatching office to report arrival at the final destination, delays, and enroute stops. Law enforcement operations may elect to flight follow sensitive operations with on-scene aviation project managers (see Law Enforcement Aviation Operations below). The national flight following FM radio frequency is 168.650. The national emergency (guard) frequency is 168.625. All forests must maintain this radio capability to enable them to flight follow aircraft at any time. Radio call intervals for flight following are normally 15 minutes. In the event of a missed radio call, dispatchers will attempt to locate the aircraft by radio. If unable to regain radio contact, the dispatcher will initiate the emergency action plan. Point-to-point flights may use FAA flight plans for flight following purposes.

Administrative Flights

When using charter, contract, or WCF aircraft for administrative purposes such as to attend conferences or meetings, routine site visits, or to make speeches or presentations, employees are required to complete a flight request/flight justification for administrative flight use (Form 5700-10). These forms may be obtained through dispatch. A copy may also be found in the appendix to this plan.

Hazardous Materials

Transportation of hazardous materials is addressed in the Code of Federal Regulations (CFR), the "Forest Service Aviation Transport of Hazardous Material Guide," and in FSM 2161.44. The Forest Service and Department of Interior agencies presently operate under an exemption (DOT - 9198) to the Department of Transportation (DOT) Hazardous Materials Rule (HMR) at 49 CFR Part 171-180. This exemption permits some deviation from the regulations on Forest Service mission and field aircraft only.

If your hazardous material is not listed in the exemption or the Forest Service Guide, it must be shipped in accordance with the HMR. Transport of any hazardous material on commercial flights fall under the HMR requirements. When planning flights involving hazardous materials, indicate your intentions to the dispatcher when ordering the flight. Although exempt from the HMR, the Forest Service has developed a policy (FSH 6709.11, Chapter 9-4) that all containers of hazardous materials must be properly packaged, labeled, and placarded in accordance with 49 CFR 100 - 199. Depending upon the quantity of hazardous materials, shipping papers may also be required (see 49 CFR 172.504). A copy of the USFS Hazardous Materials Declaration form may be found in Appendix 5.

All hazardous waste shipping falls under 40 CFR Part 262. These regulations, promulgated by the Environmental Protection Agency (EPA), outline hazardous waste shipping requirements including packaging, labeling, and manifesting.

Transportation of irritants on aircraft (mace or pepper spray) may be conducted provided the pilot is informed and the material is stored in a leak-proof and airtight container, such as a PVC bear spray cylinder or metal ammunition can, that has been approved by the Forest Aviation Officer.

Load Calculations

Accurate weights of passengers and gear/cargo shall be computed for each flight. Normally the helicopter manager will calculate this figure on rotary-wing missions and the dispatcher will monitor it for fixed-wing flights. The Pilot in Command has the ultimate responsibility to ensure the aircraft is within weight and balance limits.

Military Aircraft Use

Military aircraft are authorized for use in support of Forest Service missions when properly approved. All projects involving military aircraft shall require a project aviation plan and letter of agreement to be submitted to the RAO for review and approval. Pilot requirements may differ from the national contract standards, and all pilots eligible for use shall be identified in the letter of agreement. Aircraft will be suitable to project needs and be capable of operating to Forest Service standard. Proposed aircraft will also be identified in the letter of agreement.

Forest Service employees using military aircraft will wear PPE prescribed by FSM and IHOG. Flight following will be accomplished and identified through the project plan and letter of agreement.

LAW ENFORCEMENT AVIATION OPERATIONS

When planning Law Enforcement Aviation missions, the Supervisory Law Enforcement Officer (SLEO), the Forest Aviation Division Chief (FADC), or the Forest Aviation Officer (FAO) SHALL be consulted to ensure compliance with guidelines and procedures and ensure that all aircraft and pilots are approved for Law Enforcement (LE) missions (refer to Interagency Helicopter Operations Guide (IHOG) chapter 16-3 for exceptions).

It is neither the intent nor the responsibility of the Forest Service to regulate air space over the forest with any other agency; however, aviation coordination is necessary when the Forest Service has knowledge of Forest Service sponsored flights that may conflict with other Forest Service aviation uses.

Normal Operations

The FAO or assistant shall be notified of Forest Service law enforcement aviation missions on the forest with locations and planned dates and times anytime Forest Service personnel are involved in flights in carded aircraft. This notification is the responsibility of the RSA.

Personnel

As stated in the IHOG chapter **2-31**, all law enforcement aviation operations shall be conducted by either

a qualified Project Helicopter Manager or by a Project Flight Manager, depending on mission complexity. The only exception is when the agency is utilizing other government agency or military aircraft and the provider of the aircraft is also providing the helicopter and/or helibase management services (e.g., flight following, loading/unloading of personnel/cargo, external load operations, etc.)

Aircraft

LE aviation missions may be accomplished utilizing agency-owned, contracted, rented, other-government agency, or military aircraft that are carded and approved, or approved by a Letter of Agreement (LOA) or a Memorandum Of Understanding (MOA) (IHOG chapter 5-3, 16-3).

Flight Following

When the Forest Service is to flight follow LE operations, it will take place either through Dispatch or will be accomplished using Forest Service LE personnel in the field. It is not a requirement that all flight following be accomplished via Dispatch, but that flight following be accomplished within the guidelines of IHOG, Chapter 4. If Dispatch is not to be used for flight following, they will be notified of the date the mission will take place, the location, and frequencies being used.

Personal Protective Equipment

Refer to IHOG Chapter 9 for specific mission requirements for personal protective equipment.

Pilot Qualifications

All aircraft used to fly Forest Service LE personnel will be flown by pilots who meet agency standards and possess a current Interagency Pilot Qualification Card (IHOP Chapter 5-1). Use of other LE agency, Department of Defense, or National Guard aircraft requires acceptance of that agency's pilot qualifications if operating under a current MOU (IHOG Chapter 2-33). Any pilot not meeting the above criteria will not be used unless requested through the RSA or Acting, to the FADC or FAO, and then routed to the region for approval or denial of use.

Load Calculations and Manifests

When utilizing aircraft other than military, load calculations and manifests are required. When utilizing military aircraft, use of standard military methods such as a Performance Planning Card (PPC) is acceptable along with a manifest (IHOG Chapter 7).

Emergency And Covert Operations

The FAO or Assistant shall be notified of emergency and covert Forest Service LE aviation missions (including flights benefiting the Forest Service LE mission, but where no Forest Service employees are on board the aircraft) that take place on the forest by the RSA, LE Duty Officer, or assigned aviation manager. The FAO will be notified the day of the mission and will ensure that mission security is maintained. Undercover operations will be coordinated through the Regional Office so that confidentiality is assured. It is the responsibility of Regional Office LE to coordinate with the Regional Aviation Group when missions of this nature occur.

Uncarded Aircraft/Pilots

In certain emergency situations (special investigations, hot pursuit, or undercover operations), it may be necessary for personnel to ride in unapproved aircraft/or with unapproved pilots. In these situations, the RSA or LE Duty Officer will inform FAO as soon as reasonably possible (officer safety or mission will not be compromised). A written justification shall be prepared and attached to an agency Safety Committee Report and submitted to the Forest Aviation Division Chief or FAO within 24 hours of the completion of the mission.

PPE Exemption

Exemptions from agency aviation personal protective equipment (PPE) requirements are listed in IHOG Chapter 16-4.

Flight Following

Forest Service resource tracking and communications procedures SHALL be followed, except for covert operations where the need for secure communications is essential. In those cases, one of the following procedures SHALL be utilized:

- Grid map reference check-ins.
- Flight following through another agency.
- Satellite flight following.

Prior notifications shall be made to the LPCC Manager or assistant of the planned flight following procedure and frequencies being monitored by the aircraft in addition to the general location of the mission and the time frame of operations. Mission security will be assured.

Co-op Aviation Operations

Co-op agencies conducting LE operations on the forest shall be encouraged to notify the LPCC Manager, assistant, or LE Duty Officer of the following:

- General location of flight.
- Date/time/duration of flight.
- VHF monitored frequency and call sign.

Operational Briefing Requirements

Use the following checklist to brief personnel at the start of the operational period. Address all major operational areas. All items must be checked and initialed.

ORGANIZATION AND PERSONNEL

- _____ Personnel safety overview (ground and aircraft) and PPE.
- _____ Personnel responsibilities and authorities.
- _____ Pilot and aircraft agency approval met (refer sec. 61.5)
- _____ Flight and duty limitations met.
- _____ Aviation Manager or Chief of Party has Operations Plan and personnel have reviewed.

COMMUNICATIONS

- _____ Communications Plan in effect and reviewed with personnel.
- _____ Flight following procedures in effect and discussed.
- _____ Radios/batteries checked.

LANDING AREAS

- _____ Landing zones have prior approval by authorized personnel (Wilderness requires Forest Supervisor/Regional Forester exclusive approval(s)).

SAFETY

- _____ Operational area hazards reviewed.
- _____ General flight routes discussed.
- _____ Fire safety briefing and expectations discussed.
- _____ Military training routes and special operating areas discussed (wildlife, wilderness, etc).
- _____ Pilot/passenger safety briefing completed.
- _____ Emergency rescue procedures discussed (aircraft and medivac).
- _____ Firearms safety procedures discussed.

OPERATIONS

- _____ Load calculations/manifests completed.
- _____ Lead agency identified in notification procedures.
- _____ Weather forecast and adverse conditions discussed.
- _____ External load operations discussed.
- _____ HAZ MAT materials procedures discussed.
- _____ EOD procedures discussed.

Canadian Air Operations Protocols

The USFS and the Ontario Ministry of Natural Resources (OMNR) maintain a border firefighting agreement allowing mutual suppression assistance within five statute miles either side of the international boundary. This agreement allows both logistical and tactical use of U.S. and Canadian aircraft. Canadian aircraft can be expected to be involved in initial attack efforts within the agreement zone. Such foreign resources may include the CL 215, CL 415, DHC-6 Twin Otter, Type II and III helicopters, and lead plane/air attack (Bird dog).

If a fire within the zone has the potential for going into extended attack, or an extended attack situation occurs outside the zone but in a reasonable proximity to the border, The IC needs to order U.S. Federal resources via Superior Dispatch to fight the fire. Canadian resources may still be used in accordance with guidelines in the National Mobilization Guide (Chap 27). Dispatch will still order U.S. resources through the EACC. If U.S. resources are available but are a significant distance away, Canadian resources may be requested on an emergency basis with prior approval through dispatch ordering channels (Reference National Mob Guide International Agreement). Upon arrival of U.S. Resources, the Canadian resources will be demobilized if no longer needed. If there are no U.S. resources available, Canadian resources can be ordered for longer deployment through proper dispatch ordering procedures. For additional information on international cooperative operations and procedures, see the appropriate Forest Aviation Plan.

IV - FLIGHT SAFETY

MANAGEMENT PHILOSOPHY

Since the safety and health of Forest Service employees is the first and foremost goal of the Forest Service, "no mission is so important that a life must be endangered to complete it." No method of transportation is totally risk-free. However, basic risk management involves taking all possible actions to minimize the likelihood of a mishap, and if such an unlikely event should happen, all steps will have been taken to reduce the amount of damage or injury. Since human failure is, by far, the leading contributor to aviation accidents, we use three basic axioms to address this issue and prevent mishap. They are: knowledge, communication, and discipline. Through training and experience we gain knowledge to recognize a dangerous situation and the wisdom to deal with it. Through communication we extend to others the benefit of our learning and experience, as well as information sharing of known hazards. Through discipline, we learn to say no even when we really want to take the risk. History is known to repeat itself, and there are no new accidents. The Rules Policy and Guidelines instituted by the Forest Service are largely based on lessons learned from numerous costly mishaps. Our goal is to achieve safe operations on every mission every time by following the requirements set forth in:

- Forest Service Manual (5700, 6179.1, 6181)
- Interagency Helicopter Operations Guide (IHOG)
- Forest Service Handbook 6109.13, Health and Safety Code
- Pertinent Federal Aviation Regulations
- State and local laws

HUMAN FACTORS

Human error is the single area that, if possible to eliminate or reduce, would pay the greatest dividend in accident prevention since it touches every operation. Human behavior is so complex that it is unrealistic to think human error can be eliminated. Realistic training and experience are the most effective methods of minimizing human error accidents. When a person reacts to a rapid emergency situation, they almost always rely on trained (reflex) reactions or past experiences and do not have time to isolate individual corrective actions or analyze risks.

Human factors such as desire to accomplish the mission, peer pressure, insecurity, distraction, fatigue, management pressure, and others contribute to poor judgment and clouded reasoning ability that lead to accidents.

Management or supervisory errors that directly or indirectly exert pressure on individuals to act against their judgment, stretch or ignore policy and standard operating procedures, or complete the mission regardless of risk is another form of human error which contribute to accidents.

REACTIVE ACCIDENT PREVENTION

Reporting accidents

The following National Transportation Safety Board definitions apply to Forest Service operated, owned, contract, leased, and borrowed aircraft.

1. Aircraft Accident. An occurrence associated with the operation of an aircraft, which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.
2. Serious injury. Any injury which:
 - a. Requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received.

- b. Results in a fracture of any bone (except simple fractures of fingers, toes, or nose).
 - c. Causes severe hemorrhages, nerve, muscle, or tendon damage.
 - d. Involves any internal organ.
 - e. Involves second or third degree burns, or any burns affecting more than five percent of the body surface.
3. **Substantial Damage.** Damage or failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. Examples of failures that would not be considered "substantial damage" are:
- a. Engine failure
 - b. Damage limited to an engine
 - c. Bent fairings or cowlings
 - d. Dented skin
 - e. Small puncture holes in the skin or fabric
 - f. Ground damage to rotor or propeller blades
 - g. Damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips
4. **Aircraft Incident.** An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

All reports of aircraft accidents and incidents with potential shall be forwarded to the National Aviation Safety Manager immediately and followed up by telephone notification by calling 1-888-4MISHAP.

Investigation of accidents

The primary purpose of aircraft accident and incident investigations is the prevention of repeat occurrences. Investigations are conducted to identify and determine cause factors. Reactive hazard detection is accomplished through the identification of the cause(s) of accidents and then taking corrective action to prevent repetition. Factors that could have a system-wide adverse effect on the safety of personnel, whether or not they contributed to the accident, are included in the investigation.

Forest Service investigations are to be conducted by professional aviation investigators to the greatest extent possible. Experience has shown that investigations performed by experienced professional investigators reveal more about what is causing accidents. In addition to determining cause factors, investigators are to coordinate efforts with management professionals to disclose concerns and determine management contributors related to the occurrence.

Data obtained from investigations are entered into the Regional Trend Monitoring Information Base and are used as a source of institutional memory.

Hazard Correction

The causes of most accidents reveal failures to observe controls already established through previous risk management efforts and accident experiences. In addition, some accident cause 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.

PROACTIVE ACCIDENT PREVENTION

Hazard Detection and Incident Reporting

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 most efficient and direct detection of hazards/incidents is accomplished by the individual or organization with first-hand knowledge of the circumstances pertinent to the hazard/incident.

Each individual and each unit has an obligation to others in aviation to share hazard, mishap, and cause information. Each unit's aviation plan contains provisions for encouraging the reporting of such information by individuals. The information is documented and processed for region-wide and system-wide distribution on the Safecom Form (5700-14) located in Appendix 1.

Reporting Hazards

The individual involved or with first-hand knowledge of a hazard/incident should fill out the 5700-14 form and submit it to the Forest Aviation Officer for upward reporting.

This report is a Safecom and is forwarded to the Safety manager via the Safecom National Reporting Database.

The RASM coordinates any follow-up action to the report.

The RASM forwards the report to:

- Each individual in the regional aviation unit
- All Forest Aviation Officers
- National Aviation Safety Officer
- Other units which may be affected

The Forest Aviation Officer will forward a copy to the dispatch and helicopter management employees on the Forest/Area.

Each aviation base will post the reports in an accessible location for all interested persons to see.

Additionally, the forests should periodically instruct their employees in the procedures to submit and review Safecom on the National Aviation Safety Website.

Corrective Action

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.

Monitoring Corrective Action

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 staffs are responsible for monitoring corrective action.

Trend Monitoring

The identification of prevailing events serves to indicate areas of risk so that appropriate action may be taken. Trends develop when singular events re-occur at a rate where a general direction or tendency is detected. Trends that develop are more apparent when frequency is high and events are recent; however, events that occur sporadically also develop trends that, if corrected, can reduce operational risk. Since most aspects of Forest Service aviation are generally similar, system-wide events that occur locally should be monitored for local trend development and also forwarded on Form 5700-14 for inclusion in the national database. Attention to hazards and cause factors that compromise flight safety can reduce our aviation risk significantly. The use of Form 5700-14 information for trend monitoring is a key component

in successful accident prevention.

Operating Plans

It is imperative that all aviation operations be planned with consideration for safety goals that meet or exceed aviation safety standards established by the Forest Service. Forethought must be given to effective risk management. Each operating plan is used to set procedures and state how aviation resources are to be utilized. Many factors are involved and each location has different needs. Plans must be continually reviewed and updated, as aviation operations are dynamic and evolve through operational experience. Each operating plan is approved by the next higher level in the organization. Both ground and air operations personnel must review the approved operating plan prior to beginning the planned mission.

Standard Contract Specifications

The majority of Forest Service aviation services are provided by contractors. Therefore, national standard contract specifications have been developed for the technical aspects of administering contractor-furnished aviation services. 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 using or managing contractor-furnished aviation services is required to immediately notify the CO, or designated COR 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 and the occurrence reported on Form 5700-14.

Inspections and Approvals

The Forest Service has adopted requirements and developed inspection procedures for Forest Service aviation inspectors to verify and evaluate contractors and cooperator-provided flight crews, aircraft, and certain required equipment. The requirements, which are the foundation of the approval system, have evolved through operational experience and are the minimally acceptable criterion for providing an adequate standard of safety while conducting Forest Service missions. The inspection procedures are intended to provide the pilot inspectors with a means of determining the flight crew's qualifications, level of proficiency, and application of accident prevention measures. In addition, the procedures also provide equipment inspectors with a means of determining the condition of the aircraft, required equipment, and the level of compliance with an approved maintenance program. Each employee that uses or causes the use of contractors and cooperator-furnished aircraft is required to determine that the pilots and aircraft have been approved for the specific Forest Service mission.

Safety Evaluations

Safety evaluations are a means of determining compliance with safety standards and to detect unsafe conditions prior to experiencing 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.

Informal evaluations are conducted on a more frequent basis and are performed by aviation specialists during field assistance visits to forests, ranger districts, and projects. In all cases, follow-up is in order to see that corrective actions are taken.

APPENDIX

1. Safecom/Aircraft Incident/Accident Report, FS 5700-14
2. Administrative Use Form, FS-5700-10
3. Day Trip Authorization, FS-5700-12
4. **Cost Comparison**
5. Hazardous Materials Declaration
6. Aircraft Pre-Accident Plan
 - a. Overdue Aircraft Information
 - b. Accident Action Items Response Checklist
7. On Site Fatality Protocol
8. **Project Plan Guide**
9. **Aviation Services Contract Minimum Standards**

APPENDIX 1

INCIDENT REPORTING (SAFECOM)

Beginning in FY 1999, the safecom reporting system has become an internet-based database including all Forest Service and state safecomms that are reported. If you do not have access to the internet, Safecomms can still be reported via telephone or standard form, mailed to the Forest Aviation Officer or Aviation Safety Manager.

For Internet reporting, follow these procedures:

1. Access the USDA-FS Aviation Safety Homepage via the Internet at <http://205.173.2.4>.
2. When the homepage main menu appears, select and left-click on "Submit SafeCom."
3. Complete the form as much as possible, using pull down menus available. Complete the narrative and corrective action sections, if appropriate. If you wish to keep a hard copy of the report, click on the print icon on your browser at this point, since you will not be able to print once the form has been submitted.
4. The final step will be to select the pull down menu for "Region" at the bottom of the page. Select the Region where the incident occurred. This will ensure the Regional Safety Manager is informed and sent a copy of the report. If you wish to start over, select "Clear Form" and this will wipe out the existing information. If you are ready to submit the form, click on the "Submit" button.

REVIEWING SAFECOMS

If it is desired to review Safecomms, access to the Database is available to anyone. You may research by many categories, such as region, year, aircraft type, incident type, etc.

To review Safecomms, follow these procedures:

1. Access the USDA-FS Aviation Safety Homepage via internet address indicated in step one for reporting.
2. Select and click the "Search Safecomms" option.
3. Select and click on "Public Access Area."
4. Identify the category you desire to search.
5. Select and click on the "Submit" icon.

Appendix 2

USDA Forest Service

FS-5700-10 (9/93)

FLIGHT REQUEST/JUSTIFICATION FOR ADMINISTRATIVE USE OF AIRCRAFT
(FSM 5710; FSH 5709.11, Ch. 10)

User (Agency/Unit):

Date(s) Of Use:

Purpose Of Trip:

Service Requested:

Planned travel requires the use of air transportation, and Forest Service-operated or charter aircraft will be used because (check a, b, or c. If c is checked, attach a cost comparison):

- (a) The aircraft is scheduled to perform a bona fide mission, training, or proficiency activity compatible with secondary use of the flight for transportation, and the minimum mission, training, or proficiency requirements have not been exceeded.
- (b) No airline service is reasonable to effectively fulfill the transportation requirement, that is within the same calendar day as required.

Explanation:

- (c) The actual cost¹ of using this aircraft is not more than other suitable and available air transportation.
(Use FS-5700-11, Cost Comparison Travel Worksheet.)

Signature

Title

¹ This cost should be the total cost to the Government; calculations should include per diem, overtime, and lost work time as well as actual transportation costs.

Appendix 3

USDA Forest Service
FS-5700-12 (9/93)

DAY TRIP AUTHORIZATION
(FSM 5710: FSH 5709.11 Ch. 10)

Date: _____

Make/Model of Aircraft: _____

Registration No: _____

Operator: _____

Purpose of trip: _____

Route of flight:

Passenger Name	Affiliation

Forest Service sponsoring unit:

I certify that the person(s) listed above has an official purpose for being on this flight and any associated surface transport. I recognize that the Government may incur increased liability exposure under the Federal Tort Claims Act, 28 U.S.C. 2671-2680, and that ownership of the conveyance(s) in question does not alter the Government's liability (Comptroller General Decision B-231814, January 19, 1989). I have determined that the benefits justify the operation.

Signature and title of sponsoring unit representative (FSM 5716.4)

Appendix 4

USDA Forest Service
 FS-5700-11 (09/93)

COST COMPARISON TRAVEL WORKSHEET
 FSM 5710; FSH 5709.11, Ch. 10)

ITEMS TO BE COMPARED: GOVERNMENT OPERATED AIRCRAFT, AIRLINE, COMMERCIAL AIRCRAFT UNDER CONTRACT AND ANY OTHERS.

STEP 1: ANALYZE TRAVEL NEED

Consider number of travelers, weight and nature of baggage or cargo, and all known constraints. Typical constraints could be time away from home station, working time needed at destination(s), specific dollar limits, and vulnerability to weather delays. Do not include a method of transport that is obviously unsuitable. Normally, the decision to travel by air will have been made before using this form, but columns for other means are provided for use when appropriate. Summarize analysis: (example) Government-operated and charter aircraft both capable of performing requested service. Airline service did not meet time constraints for conference, nor did any form of ground transport.

STEP 2: COST COMPARISON

	Common Carrier (Airline)	Common Carrier (Rail)	Government Owned Aircraft	Commercial Aircraft (Contract)	Other	Other
1. Fares/Flight costs						
2. Per diem/overnight charges						
3. Lost worktime						
4. Local transportation						
5. Overtime/standby						
6. Other						
7. Total cost						

 Name of Preparer

 Unit

PASSENGER MANIFEST

Aircraft/Flight No: _____

Date of flight: _____

Name	Affiliation (Agency/Unit/Mgmt Code)	Sponsor (Non-Fed)	SES (Yes/No)	Flight Leg(s)

Appendix 5

UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE
EASTERN REGION

Declaration of Hazardous Materials

SHIPPER'S DECLARATION AND PILOT NOTIFICATION FOR THE CARRIAGE OF HAZARDOUS MATERIALS BY
CARGO AIRCRAFT

QUANTITY	PROPER SHIPPING NAME	HAZARD CLASS	UN NUMBER	PACKING GROUP	TOTAL WEIGHT	LOCATION

SHIPPER'S DECLARATION

I CERTIFY THE CONTENTS OF THIS CONSIGNMENT ARE FULLY AND ACCURATELY DESCRIBED BY PROPER SHIPPING NAME AND ARE CLASSIFIED, PACKED, MARKED, AND LABELED, AND IN PROPER CONDITION FOR CARRIAGE BY AIR ACCORDING TO APPLICABLE NATIONAL GOVERNMENTAL REGULATIONS.

NAME OF SHIPPER: _____

ADDRESS OF SHIPPER: _____

SIGNATURE OF SHIPPER: _____

DATE: _____

24-HOUR EMERGENCY CONTACT NUMBER: _____

PILOT NOTIFICATION

AIRCRAFT REGISTRATION: _____

AIRCRAFT BASE LOCATION: _____

POINT OF DEPARTURE: _____

DESTINATION: _____

DATE: _____ PILOT'S SIGNATURE: _____

PARTIAL LIST OF COMMON HAZARDOUS MATERIALS SHIPPED ON FS "CARGO ONLY" AIRCRAFT.
FOR A COMPLETE LIST SEE 49 CFR 172.101.

Shipping Name	Hazard Class	UN-Number	Packing Group
Acetylene, dissolved	2.1	UN 1001	2.1
Aerosols, non-flammable (each not exceeding 1L capacity)	2.2	UN1950	2.2
Batteries, dry, containing potassium hydroxide solid, electric, storage	8	UN3028	III
Batteries, wet filled with acid	8	UN2794	III
Batteries, wet filled with alkali	8	UN2795	
Batteries, wet, non-spillable	8	UN2800	III
Cartridges for small arms	ORM-D		
Diesel, fuel	3	NA1993	III
Engines, internal combustion, including when fitted in machinery or vehicles	9	UN3166	9
Fire extinguisher, containing compresses or liquefied gas	2.2	UN1044	2.2
Fuel, aviation, turbine engine	3	UN1863	III
Fusee (railway or highway)	4.1	NA1325	II
Gasoline	3	UN1203	II
Life-saving appliances, not self inflating	9	UN2990	
Lithium battery	9	UN3090	II
Matches, safety (book, card or strike on box)	4.1	UN1944	III
Nitrogen, compresses	2.2	UN1066	2.2
Nitrogen, refrigerated liquid, cryogenic liquid	2.2	UN1977	2.2
Oxygen, compresses	2.2	UN1072	2.2, 5.1
Paint including lacquer, enamel, stain, shellac solutions, varnish, polish, liquid filler, and liquid lacquer base.	3	UN1263	1
Petroleum gases, liquefied or liquefied petroleum gas	2.1	UN1075	
Petroleum oil	3	NA1270	III
Potassium permanganate	5.1	UN1490	II
Propane	2.1	UN1978	
Wood preservatives, liquid	3	UN1306	III

APPENDIX 6



FIRE AND AVIATION MANAGEMENT
EASTERN REGION
FOREST SERVICE

April 2001

AIRCRAFT CRASH, SEARCH, AND RESCUE GUIDE

Local Review

By:

Date:

Thoughts to consider in any aviation operation:

You are now in charge of a **sacred trust, the safety of human lives.**

You **must not let undue pressure (expressed or implied) influence your judgment** during the performance of this sacred trust.

You must be able to **“develop a team”** in which members must participate and contribute to the safety of the operation.

You must **delete “false pride, calculated risk, real world, and good enough for Government work”** from your professional vocabulary.

You **must not let your actions instill the attitude of competition between pilots or team members.** This attitude may hinder their performance and may compromise the safety of the mission

You will not be criticized or stigmatized for any decision you make which will ensure added safety to an operation.

PLAN*ACT*INFORM*COORDINATE*LOCATE*RECOVER*SECURE*RECORD

Someone’s Life May Depend on Your Actions

AVIATION INCIDENTS

Aviation incidents include hazards, maintenance deficiencies, airspace conflicts or any act, event, or circumstance that affects or could affect safety of aircraft operations.

Anyone may (and should) report aviation incidents. This includes pilots, passengers, dispatchers, aircraft managers, ground personnel, etc. The reporting and wide dissemination of aviation incidents is a good accident prevention tool. It identifies safety concerns and increases safety awareness, may indicate trends, may prevent similar situations from re-occurring and promotes aviation involvement and team building.

Aviation Incidents are reported on the **SAFECOM form (OAS-34/FS 5700-14)**. Anyone may fill out this form, but dispatchers or aviation personnel should process them. They may be submitted anonymously. If an individual(s) is not comfortable or able to complete the written report, they should at least report the incident verbally to Dispatch or Aviation staff.

REPORTING PROCEDURES:

- 1) Fill out form completely and legibly. The narrative should be concise, factual, and objective.
- 2) Submit to local/Incident Dispatch or Aviation Staff as soon as possible.
- 3) Dissemination: one copy to each person under respective column (electronically/fax/mail).

Unit Aviation Officer:	
Regional Aviation Safety Manger: Gary Morgan 414 297-3632 (FAX: 3642)	
USFS	BLM/DOI
National Aviation Safety Manager: Vacant 208-387-5607 (FAX 5398)	National Aviation Safety Manager: Larry Mahaffey 208-387-5160 (FAX: 5199) OAS Aviation Safety Manager: Bob Galloway 208-387-5803 (FAX: 5730)
Retain copy in local files	Retain copy in local files

- 4) Action. Local Aviation manager may take corrective action, if possible. National, State or Regional levels may provide follow-up, feedback or action. ***Airspace incidents should be reported through normal channels (SAFECOM).**

OVERDUE AIRCRAFT

An aircraft normally will be considered "overdue" when it has not completed a required check-in by radio or telephone within the time frame specified in the flight request, flight plan, or resource order. This time frame may be an elapsed time period (15 minutes) for agency flight following or may be Estimated Time of Arrival in a point-to-point itinerary/FAA flight plan. Dispatchers or other personnel tasked with flight following are responsible for initiating actions, making appropriate contacts, and documenting their efforts as specified below. When the status of overdue aircraft changes (especially locating the aircraft), all contacts must be re-notified and updated.

*****DO NOT ANNOUNCE NAMES OF INDIVIDUALS INVOLVED OVER THE RADIO*****

TIME	ACTION	CONTACT & PHONE	TIME LOG
Immediately at overdue time	Attempt to contact by radio or phone. Contact destination agency airbase or airport. Complete Overdue aircraft Info Sheet (below)		
15 minutes past due	Contact originating or enroute agency dispatch. Contact originating or enroute agency air base Contact originating or enroute airports		
30 minutes past due	Contact vendor home base for possible information Contact FAA Flight Service Station (FSS): -Give known flight information (below) - Request commo, ramp, ELT check		
Fuel duration exceeded	Declare as "Missing Aircraft" Inform local Aviation Manager		

OVERDUE AIRCRAFT INFO SHEET (Complete as information becomes known)

1. Type of aircraft:	2. FAA REG #:	3. Color:
4. Type of mission:	5. FAA or Agency flight Plan:	
6. Name of pilot(s):		
7. Number and names of passengers:		
8. Departure point/time:		
9. ETA at destination:		
10. Last known location, time, latitude, and longitude.		
11. Amount of fuel on board or maximum flight time for aircraft.		
12. Other Information:		
1. Type of Aircraft:	2. FAA REG#:	3. Color:

MISSING AIRCRAFT

An aircraft is officially missing when its fuel duration has been exceeded and aircraft's location is not known. The Missing Aircraft designation requires that all the items on the Overdue Aircraft check list are completed and available for reference (previous section). The unit Aviation Manager should be involved as described below; if unavailable, Dispatch must complete all items.

ACTION	CONTACT & PHONE	TIME LOG
DISPATCH: Inform Eastern Area Coordination Center (EACC)	612-713-7300	
Continue radio and phone search		
Alert county Sheriff of possible SAR		
Assist/Coordinate agency SAR effort		
Continue documenting actions and information		
Local Aviation Manager: Request SAR with FAA Flight Service Station (FSS)		
Inform Regional Aviation Officer	Stuart Bothwell 414-297-3744	
Inform Local agency Unit Line Manager		
Inform Local Agency Public Information Officer		
Inform local agency Law Enforcement Officer		
Complete SAFECOM (5700-14/ OAS-34)		

AIRCRAFT ACCIDENT

Aircraft accidents may be reported by: individuals involved in the accident; witnesses; search aircraft; general aviation; and others. The agency Dispatch/office receiving the report becomes responsible for action, rescue, notification, coordination, and documentation. The following required actions are listed by priority:

ACCIDENT INFORMATION (Document as much information as possible)

Name of person reporting accident:	Phone# and/or Radio Frequency:
Date & Time reported:	Date & Time of Accident:
Location of accident: Geographic:	
Lat/Long:	
VOR: _____	Degrees _____ NM
VOR: _____	Degress _____ NM
Access to crash site: Road?	Helispot?
Number and type of injuries:	****Do not announce names over radio****
Number of fatalities:	****Do not announce names over radio****
Type of aircraft:	FAA Reg#: _____ Color: _____
Owner/Vendor:	Pilot(s) name:
Departure point & time:	Destination & ETA:
Type of mission:	
Other information:	

TAKE ACTION

ACTION	CONTACT & PHONE	TIME LOG
Maintain communication with Crash site or person reporting		
Activate local airbase Crash Rescue Plan (if applicable)		
Activate Ground Ambulance (if applicable)		
Dispatch Helitack with EMT (if applicable)		
Activate Air Ambulance (if applicable)	See Helicopter Ambulance Section of this guide.	
Activate Military Rescue (if applicable)		
Inform County sheriff		
Inform County Coroner (if applicable)		
Inform FAA Flight Service Station (FSS)		
Notify Hospital		
Request a Temporary Flight Restriction (TFR) through the FAA Air Route Traffic Control Center (ARTCC) (if applicable)		
Ensure security at crash site	See Preparing for Investigation Section of this guide.	
Make Agency notifications		

MAKE NOTIFICATIONS (SEE PHONE CONTACT LIST FOR AFTER HOUR NUMBERS)

NOTIFICATION	CONTACT & PHONE/CELL/HOME	TIME LOG
Dispatch Notifies: Local Aviation Manager		
EACC	612-713-7300	
Local Aviation Manager Notifies: Regional Aviation Safety Officer	Gary Morgan (O) 414-297-3632 (C) 414-349-0163	
Regional Aviation Manager	Stuart Bothwell (O) 414-297-3744 (C) 414-349-0162	
Local Public Affairs Officer (PAO)		
Regional Aviation Safety Manager Notifies:	Tony Kern 208-387-5607 FAA Chicago 414-747-5531 10 NTSB Chicago 603-377-8177 Evening 271-5936	
Regional Fire & Aviation Officer	Mark Boche (O) 414-297-1280 Pager 888-342-2052	
Local PAO Notifies: Local unit Agency Line Manager		
Local Agency Law Enforcement Officer (LEO)		
Local Agency Personnel Officer		
Regional PAO	Sherry Wagner 414-297-3640	
Regional PAO Notifies:		
Regional Forester	Vacant 414-297-3765	
Regional Deputy Forester	Don Meyer 414-297-3766 Ruth Voltz 414-297-3710	
Regional Law Enforcement Special Agent	Richard Glodowski (O) 414-297-3198 Pager 800-719-1423	
Zone Safety Officer	Michael Anderson 414-297-3769	
Regional Personnel Officer	Jim Frey 414-297-3638	
National Public Information Officer	Mike Apicello 208-387-5460	

LOCAL UNIT:			
Aviation Manager/FMO			
Public Information Officer			
Law Enforcement Officer			
Personnel Officer			
Line Manager			
LOCAL EMERGENCY CONTACTS:			
County Sheriff			
City Police			
State Police			
Ground Ambulance			
Air Ambulance			
Military Rescue			
Hospital			
Burn Center			
Crash Rescue at Local Airport			

Contact/Phone List

	NAME	OFFICE/CELL/PAGER	HOME
Local Airport Tower			
Local FAA Flight			
Service			
Station (FSS)			
FOREST/DISTRICT			
Dispatch			
EACC		612-713-7300	
Aviation officer			
Fire Management Officer			
Public Affairs Officer			
Law Enforcement			
Personnel Officer			
Administrative Officer			
Manager/Supervisor			
USFS REGION 9:			
Regional Aviation Officer	Stuart Bothwell	(O) 414-297-3744	(C) 414-349-0162
Regional Aviation Safety Officer	Gary Morgan	(O) 414-297-3632	(C) 414-349-0163
Eastern Enterprise Zone Safety Officer	Mike Anderson	(O) 414 297-3052	

USFS REGION 6	NAME	OFFICE/CELL/PAGER	HOME
Regional PAO	Sherry Wagner	414-297-3640	262-375-9128
Special Agent LEO	Richard Glodowski	(O) 414-297-3198 (P) 800-719-1423 (C) 414-315-9581	414-284-2385
Regional Personnel Director	Jim Frey	(O) 414-297-3638 (C) 414-217-3638	414-255-2563
Regional Contracting Officer	Sue Poetz	(O) 414-297-3150	262-242-6984
Dep. Regional Forester	Don Meyer	(O) 414-297-3766 (C) 414-581-0359	262-785-9668
Dep. Regional Forester	Ruth Voltz	(O) 414-297-3710 (C) 414-861-7580	414-228-1672
Regional Forester	Vacant	(O) 414-297-3765 (C) 414-861-7571	262-574-9035
NATIONAL OFFICE			
	Tony Kern	202-205-1505	
USFS Aviation Officer NIFC	Asher Williams	208-387-5617	
USFS Aviation Safety NIFC	Vacant	208-387-5607	

CONTACT/PHONE LIST

	NAME	OFFICE/CELL/PAGER	HOME
OAS			
Aviation Safety Manager	Bob Galloway	(O) 208-387-5803 (C) 208-867-7875	1-888-4mishap
Air Safety Investigator	Larry Brosnan	(O) 208-387-5804 (C) 208-867-7876	1-888-4mishap
Air Safety Investigator	Steve Rauch	(O) 208-387-5805 (C) 208-867-4973	1-888-4mishap
Contracting Officer	Sam Stivison Toni Musgrove Bob Carr Dale Gastin	208-387-5761 208-387-5762 208-387-5763 208-387-5819	208-343-9324
National Transportation Safety Board			
FAA			
Air Route Traffic Control Centers			
Flight Services Stations			
Flight standard District Offices			
Airport Towers			

CONTACT/PHONE LIST

	NAME	OFFICE/CELL/PAGER	HOME
Airport Towers			
Air Ambulance			

Contact/Phone List

	NAME	OFFICE/CELL/PAGER	HOME
Burn Centers			
Poison Center			
Emergency Service			

Military Training Routes (MTR)

Contact	Phone	Routes	Routes

Military Operation Areas (MOA)

State	MOA	Contact	Phone

HELICOPTER AMBULANCE REQUEST INFORMATION

A. Injury Information

1. Total personnel involved in mishap _____
2. Time of mishap _____
3. Type or extent of injuries (vitals, other medical personnel on scene):

B. Mishap Site Information

1. Unit/Agency _____
2. Contact telephone number _____
3. Radio frequency to contact unit/agency: VHF - AM _____ VHF-FM _____
4. Location of mishap:
 - a. Township _____ Range _____ Section _____ 1/4 Section _____
 - b. Latitude _____ Longitude _____
 - c. _____ Nautical miles at _____ Degrees from _____ VOR
 - d. Prominent landmark: Distance _____ Direction _____
5. Site Contact: _____
Radio frequency at mishap site: Primary: VHF-AM _____,
VHF-FM _____
Secondary: VHF-AM _____, VHF-FM _____
6. Other known aircraft in the area (call signs) _____
Air-to-Air Frequency Primary: VHF-AM _____, VHF-FM _____
Secondary: VHF-AM _____, VHF-FM _____
7. Special information, flight hazards, MOAs, MTRs, etc. _____

8. Landing site(s) and conditions (is it completed or when will be completed)

9. Proximity of landing site to mishap site _____

10. Nearest available AV Gas/Jet A fuel _____
11. Conditions at the mishap site: Wind direction _____, Wind velocity _____,
Ceiling and visibility _____, Obstructions to visibility _____,
Obstructions to visibility _____, Temperature _____,
Degrees (F or C) _____, Elevation _____, Sunrise _____, Sunset _____,
Description of Terrain _____

Note: EMS helicopters do not usually carry extrication equipment nor are the EMS personnel always trained in these procedures: Ensure that if this capability is needed, it is immediately ordered from a locally known source (The local sheriff is a logical contact point).

HELICOPTER AMBULANCE/HELICOPTER LIFEFLIGHT IN & ADJACENT TO REGION 9

Base	Aircraft Make and Model	Contractor	Telephone No	Comments

AIRCRAFT COMMUNICATION PLAN AND FREQUENCY USER'S GUIDE

TRANSPORTING INJURED PERSONNEL BY HELICOPTER

USING "HEAR"* SYSTEM

When transporting injured personnel by helicopter under Forest Service Contract, the Forest Dispatcher will telephone the appropriate hospital and request they monitor their "HEAR" system radio. The aircraft pilot or foreman will tune in the "HEAR" Frequency (normally 155.340 as primary) on the aircraft multi-channel radio and establish direct communication with the hospital staff. Helicopter will verify frequency through Forest Dispatcher.

Local police will be requested to secure landing area when needed.

The following information was obtained from hospitals in Region 6. It is not a complete listing. Individual Forest Aviation plans may list others and helicopters could be instructed to use those.

This procedure is to be used only for emergencies that warrant immediate hospital services.

*** Hospital Emergency Administrative Radio**

* Excerpt from Region 6 Guide, Reference this guide for further clarification.

PREPARING FOR THE ARRIVAL OF THE INVESTIGATION TEAM

An aircraft accident can be a serious and traumatic event. This is a checklist of some tasks, which both the Line Manager and Aviation Manager can use to take charge of the accident scene and prepare for the arrival of a trained aircraft accident investigator and/or the aircraft accident investigation team. Some items may not be applicable and others may need to be added, depending on the circumstances of the accident. This list was developed with the objective of providing a place to start during upsetting times. Utilize the Agency Administrator Guide to Critical Incident Management.

- A. General. The local Line Manager should establish an Officer-in-Charge of Search/Rescue. The first agency employee to arrive at the scene of the accident will be responsible for crash site protection until relieved by Agency Officer-in-Charge or by the appointed accident investigation team. Accident scene protection by the Line Manager can last from a few hours to several days, depending upon location, accessibility, etc. The time will depend on which level of the organization will take jurisdiction, what intermediate actions are taken and how long it will take the investigation team to travel to the site, assemble, organize, and take charge.
- B. Off-Scene Responsibilities. The Agency Officer-in-Charge will ensure the following off-scene tasks are accomplished:
1. Procedures in this Aircraft Crash, Search, and Rescue Guide are followed; emergency notifications made promptly.
 2. Determine accident scene land ownership. If the accident site is determined to be on Private or State Lands, ensure that notification is made to the appropriate parties.
 3. Inform receptionists and others who may answer the telephone to pay particular attention to anyone calling in who may have witness information. The investigation team will want to contact those persons, so they will need names and telephone numbers for later contact.
 4. Prepare a list of names, telephone numbers, addresses, etc. of all known witnesses at or near the accident scene.
 5. Obtain all available weather data for the area. Order additional weather information to be taken at weather stations in the area, and be prepared to do it again 24 hours later. The information may be needed to compare with weather readings at the accident scene to estimate the weather at the time and place of the accident.
 6. Determine when and where the aircraft was last fueled, and request the supplier to take fuel samples for the agency to pick up later. It is best if the Agency Officer-in-Charge can do the fuel sample at the last fueling site; but it is recognized that this is not always possible.
 7. Secure the following names and telephone numbers:
 - a. The sheriff or other local law enforcement officer having jurisdiction.
 - b. The coroner or other person having jurisdiction over the removal of the remains.
 - c. The attending medical doctor for those injured in the accident.
 - d. The landowner if the accident occurred off Federally owned lands.
 - e. The names and telephone numbers of any reporters who have requested information for media dissemination. The chief investigator or Agency PAO will be in touch with them, when information becomes available.
 8. Arrange transportation for the use of the investigation team. Two vehicles will probably be needed and one person who is familiar with the area-hospital, sheriff's office, witness addresses, etc. A helicopter and/or airplane may be needed for transportation of the team to remote sites.

9. Arrange lodging for the team at a city/town nearest the accident site.
 10. Prepare for a brief entrance conference with the chief investigator upon his/her arrival. The local Line Manager should make available all personnel involved in the flight (Aviation Manager, Dispatcher, etc.)
 11. Secure five topographic and agency maps of the area. Aerial photographs, if available, plus any other maps the unit believes will be helpful to the investigation team, should be included.
 12. If the aircraft was under contract to the agency, secure a copy of the contract for the investigation team.
 13. Secure agency radio logs, tapes, flight request/schedule, weather observations and forecasts, etc. that may contain information (no information can also be evidence) relating to the accident.
 14. Take custody of pertinent records and documents. Aircraft maintenance logbooks, Pilot records, Dispatch flight following and scheduling documents, Job hazard analysis, Weather Report.
 15. Determine whom the Line Manager wants to designate as the unit's primary contact with the chief investigator.
 16. Establish a work area with desk, telephone, and computer station for use by the chief investigator.
 17. Assign adequate personnel to provide 24-hour security of the site.
- C. On-Scene Responsibilities. The Agency Officer-in-Charge will ensure the following on-scene tasks are accomplished:
1. Deactivate (disable) the emergency location transmitter (ELT). (Most positive method is battery removal).
 2. Prevent unauthorized people from conducting activities that will destroy important information. Ground impact points should be preserved; that is, people should not be walking around to satisfy their curiosity. They may damage evidence.
 3. Ensure that personnel involved in the search and rescue do not broadcast the names of aircraft occupants or state the extent of injuries over the radio system.
 4. Personnel should be advised that the wreckage is hazardous. Fuel can burn; tires can explode; gases and metals can be ingested by the body; bacteria can be present; corrosive liquids may be exposed; liquid and solid poisons may be present; chemical reactions may have occurred, especially if there has been a fire; personal baggage and equipment contain unknown items; etc. The Officer-in-Charge should stay away from the wreckage and keep others away from it until a trained aircraft accident investigator arrives. The untrained person is subject to personal injury, some of which can be permanent. Personal risk should only be taken to assist evacuation of the injured. The removal of bodies falls within the Coroner's (local/State/county) authority. No effort, other than a warning concerning hazards posed by the wreckage, should be exerted to prevent these people from doing their jobs. No smoking should be permitted near the wreckage.
 5. Prepare written notes on all activities at the accident scene. Each recording should include the date and time of the activity and observation. Ensure an accurate recording will be made by someone until the wreckage is removed. Examples include:
 - a. The time the agency Officer-in-Charge arrived at the scene.
 - b. Other personnel who were or may have been at the accident location (date/time/location relative to the crash site) before the arrival of the Officer-in-Charge.
 - c. Weather observations and any odors (such as fuel) noticed upon arrival.

- d. Any wreckage moved or removed and by whom.
- e. First aid and medical assistance rendered to the injured.
- f. Removal of fatally injured persons necessitates the recording of:
 - (1) Which body came from which seat, or where it was found.
 - (2) Seat belt usage (or lack thereof).
 - (3) A description of type and color of clothing.
 - (4) A witnessed statement (inventory of personal effects removed, such as counting cash in wallet, listing all identification cards, match books, loose pocket change, keys, pocket notebooks, pens, personal protective equipment worn or found).
 - (5) Names of all persons visiting the accident scene after arrival of the Officer-in-Charge.
 - (6) Any other information that might help the investigation team.
- 6. Take photographs, if possible, before removing remains or disturbing wreckage. This should be foregone if there are injured that need to be evacuated. In that case a written recording and/or photographs taken after the fact will suffice. Preserving life is the number one priority.
- 7. Flag or rope off the accident scene to prevent unauthorized access. Colored flagging is preferred, to allow for later pictures taken from the air by the investigation team.
- 8. Accept all written narrative witness statements, place them in an envelope, and transmit them to a central point for collection by the investigation team or by the first trained investigator that arrives. To the extent possible, do not allow anyone to verbally question the witness. Questions by an untrained person can contaminate (modify and/or change) the information the witness will provide. Encourage written statements made by each person; attempt to separate all witnesses.
- 9. Take all other prudent actions to:
 - a. Preserve life
 - b. Protect people at the scene
 - c. Protect and preserve information

Summary

These initial steps are a recommended guideline to help start a good investigation. Once the aviation operations and safety personnel are notified, they will follow their own checklists. This should not prevent initial responders from using their own judgment in deviating from this list.

APPENDIX 7

ON-SITE FATALITY PROTOCOL

PURPOSE: The intent of this guide is to list the steps that must be taken in response to fatalities, to list the people with whom coordination must be maintained, where information is found, and responsibilities for the modified Incident Management Team members.

RESPONSIBILITY: Until delegated, responsibility for response lies with the unit where the event took place.

1. DO NOT MOVE THE DECEASED. PROTECT THE REMAINS FROM PUBLIC VIEW.
2. Notify the State Police, who will notify the Coroner's Staff.
3. Protect the site for investigation.
4. DO NOT USE THE NAMES OF THOSE INVOLVED ON THE RADIO.

CONTINUING FIRST PRIORITY: Swift delivery of accurate information on fatalities and injuries to home units/families before news media spread information.

ORGANIZATION:

1. Establish a modified Incident Management Team for the fatality situation, with formal delegation of authority to the RF. Minimum positions are: Incident Commander, Finance Section Chief (with Procurement Unit Leader and Compensation for Injury Unit Leader) Logistics Section Chief, and Incident Information Officer. Other positions will be filled as needed by the IC, depending on the situation. DOCUMENTATION IS CRITICAL. Incident Information Officer may coordinate/facilitate communication with home units and family liaisons.
2. Consider establishing unified command with State Police, the jurisdictional agency, and possibly the Coroner's Office.

NOTIFICATION ABOUT INCIDENT:

1. Notify Regional Safety and Health Officer, who will coordinate further distribution of information.
2. Establish a process to make sure coordination is achieved and information is managed.

FATALITIES:

1. Identification (Dead, Missing, Injured, Survivors):
 - a. Work with local jurisdiction on identification procedures and needs to facilitate that process. This may require additional data for forensic identification. If necessary, transport the data by courier.
2. Notification:
 - a. Coordinate notification procedures with local jurisdiction and affected home units.
 - b. The home unit may identify liaison personnel to coordinate all communication to and with the families.

3. Transportation:
 - a. Coordination Team works with incident mortuary for transportation (Agency, Commercial, Contract)
 - b. Government pays (through OWCP) preparation, transportation and delivery to the receiving mortuary.
 - c. Check with OWCP specialist for coverage of funeral expenses.
 - d. Identify one escort for transportation and delivery of the remains.
 - e. Coordinate with Home Unit for delivery of remains.
 - f. RESOURCES -- Finance Section Chief, Procurement Unit Leader, Compensation or Injury Specialist, REGIONAL OWCP SPECIALIST, Regional Procurement Staff, and Regional Incident Business Management Coordinator.

CO-WORKER SURVIVORS:

1. Arrange for medical care, if needed.
 - a. RESOURCES -- Finance Section Chief, Comp/Claims Unit Leader, REGIONAL OWCP SPECIALIST.
2. Consider need to pull from field duties. Consider the need for Critical Incident Stress De-Briefing.

FAMILY SURVIVORS:

1. Notification:
 - a. Speedy, accurate information on status of relative is imperative.
 - b. Usually handled, by person in uniform, or arranged by home unit.
 - c. Inform family who will be agency contact person (liaison) for details. This person explains benefits, determines family wishes, helps family as needed, and is focal point for all communication with family.
2. Coordination: Forest Supervisor, Personnel Officer, Public Affairs Officer coordinate information release to protect notification process.

MISCELLANEOUS TRAVEL ISSUES: Questions may arise on family travel or escorts for remains.
CONTACT REGIONAL FISCAL AND OWCP PERSONNEL FOR INFORMATION.

BENEFITS:

1. Person managing the fatality situation works with incident mortuary to initiate requests for Death Certificates.
2. Contact OWCP specialist for Administrative Agency or Regional Office where incident occurred. They have current benefits information and initiate paperwork. They will be contact for other agencies such as Dept. of Justice for Public Safety Officers' Benefit Act.
 - a. RESOURCE -- National OWCP Coordinator for the Forest Service is in the Safety and Health Branch, USFS Personnel office in Arlington, VA. (703-235-8102).
3. Home unit OWCP staff initiates action for benefits.

APPENDIX 8

Project Aviation Worksheet

Supervisor	Coordinator
Phone	Phone

Project Name and objective:

Management Code: Contract/MOU number:

Proposed Date: Proposed Time:

Location:

Project Participants and/or cooperators:

Project Aircraft Base:

- Name
- Lat/Long
- Map Reference
- Off Base Landing Sites, Emergency Divert fields

Aerial Hazard Analysis - Hazard Map with the following:

- Military Training routes and other conflicting airspace
- Power lines
- Towers, stacks, and other obstacles
- Commercial hazards (blasting etc)
- Local concerns (noise abatement, sensitive areas, no fly zones)
- Date of last analysis of project area
- Local weather patterns, prediction/ source of weather update information

TFR requirements:

- Required/ Not Required
- If Required,
 - Who initiates and manages
 - Type, size, duration

Daylight (sunrise sunset) forecasts for project period:

Sunrise	Sunset	Date
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Pilot Requirements:

Type aircraft requested:

- Capabilities/Limitations
- Alternate aircraft
- Reason for aircraft selection

Communications and Flight Following:

- Who provides flight following?
- How is flight following accomplished?
- Radio Frequencies (primary and secondary)
- VHF monitoring capabilities
- Deviations from normally accepted flight following procedures (approved?)
- Back up flight following plan
- Emergency action plan (or reference to what existing plan will be used)
- Special communications information (conflicting frequencies, special frequencies)

Hazardous Materials:

- Identify HAZMAT
- Action plan for spills
- Compliance with Interagency Transport of Hazardous Materials Guide

Manifests and Load Calculations

Special Equipment Needed:

- PPE
- External Load Systems
- Dispersal Systems (seed bucket, spray boom)
- Aircraft support equipment (fuel truck)

Support Personnel:

- Government/Private/Qualifications needed
- Roles and responsibilities

Forest Service Manual, IHOG, FAR review for compliance

Yes / No

APPENDIX 9

Mission Profiles	(1) Landing Areas	(2) Communications	(3) Flight Crew PPE	(4) Operational Period	(5) Flight Planning	(6) Management Oversight	(7) FAR Requirements
* Aerial Application	X	X	X	X	X		137
Personnel Transport:					X		
Fixed-wing	X	X		X	X		135
Helicopter	X	X	X	X	X	X	135
High Level Mission Profile: > 500'		X		X	X		91
Low Level Mission Profile: < 500'	X	X	X	X	X	X	91
External Loads	X	X	X	X	X	X	133

Minimum Requirements for Aviation Job Contracts

* Excluding Aerial Ignition.

- (1) Landing locations identified.
- (2) Communications/flight following established.
- (3) Personal protective equipment required.
- (4) Specific hours for flight operations identified.
- (5) Flight planning/hazard identification.
- (6) Identify if a helicopter manager is necessary on the site and their responsibilities.
- (7) Minimum Federal Aviation Regulations (FAR) to be followed.