



Department of the Interior

---



Bureau of Land Management - Alaska

# 2008 ALASKA State Aviation Plan

A COMMITMENT TO AVIATION SAFETY

**ALASKA AVIATION OFFICE**

Bureau of Land Management  
Alaska Division of Aviation  
907-356-5523  
Alaska Fire Service  
1541 Gaffney Road  
P.O. Box 35005  
Ft. Wainwright, Alaska 99703-0005

Reviewed By Chip Houde Date 20 MAY 2008  
Chip Houde, Aviation Manager

Reviewed By John Gould Date 5/21/08  
John Gould, Manager Alaska Fire Service

Approved By T. B. Lonnie Date 5-30-08  
Thomas Lonnie, Alaska State Director



## United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Alaska State Office  
222 West Seventh Avenue, #13  
Anchorage, Alaska 99513-7504  
<http://www.blm.gov/ak>



In Reply Refer To:  
9400 (310) I

June 11, 2008

Information Bulletin No. AK- 2008- 012

To: Alaska Leadership Team  
From: State Director  
Subject: 2008 Alaska State Aviation Plan

Attached is a copy of the Alaska State Aviation Plan for 2008. Please ensure that the aviation users within your organization implement the guidance contained within this plan as they accomplish their mission using aviation assets.

For questions contact Chip Houde, State Aviation Manager at 907-356-5523.

Signed by:  
Thomas Lonnie  
State Director

Authenticated by:  
Anita R. Jette  
Records Specialist

Distribution  
FA-500

Attachment  
2008 Alaska State Aviation Plan

# TABLE OF CONTENTS

Chapter 1.0	BUREAU OF LAND MANAGEMENT ALASKA AVIATION PLAN	4.14	Aviation Program Reviews
1.1	Purpose	Chapter 5.0	AVIATION USE STANDARDS
1.2	Mission Statement	5.1	General-Use Flight Requirements
1.3	BLM Alaska aviation Philosophy	5.2	Special-Use Flight
1.4	References	5.3	Training
Chapter 2.0	ORGANIZATION AK-360	5.4	Aircraft and Pilot Requirements
Chapter 3.0	ROLES and RESPONSIBILITIES	Chapter 6.0	OPERATIONAL POLICY
3.1	AVIATION MANAGEMENT DIRECTORATE (AMD)	6.1	Flight Plans OPM 06-2
3.2	BLM National Aviation Office (NAO)	6.2	Flight Following
3.3	State Director	6.3	Overdue Aircraft
3.4	State Aviation Manager (SAM)	6.4	Operational Guides and Handbooks
3.5	Field Office Managers	6.5	Aviation References
3.6	Zone Air Service Officer (ASO)	6.6	Aviation Documentation
3.7	Field office Aviation Officer (Collateral Duty)	6.7	AVIATION MANAGEMENT DIRECTORATE (AMD) Handbooks
3.8	Aircraft Dispatcher	6.8	Interagency Operational Guides
3.9	Pilot	Chapter 7.0	SAFETY
3.10	Aircraft Manager	7.1	Safety Standards
3.11	Flight Manager (Fixed wing and helicopter)	7.2	Personal Protective Equipment (PPE)
3.12	Air Crew	7.3	Aviation Life Support Equipment (ALSE)
3.13	Passenger	7.4	PILOT QUALIFICATIONS
Chapter 4.0	ADMINISTRATION	7.5	Flight and Duty Limitations
4.1	General	7.6	Comfort/Rest
4.2	Exclusive Use Aircraft/On-call	7.7	Sterile Cockpit-(Take off and Landing controlled airspace)
4.3	Aircraft Rental Agreements and Charters	7.8	Transponder Code
4.4	Service/End Product Contracts	7.9	Aircraft Certification
4.5	Cooperator Aircraft	7.10	Interagency Aircraft
4.6	Flight Requests	7.11	ARA Point-to-Point/High Recon Flights
4.7	Special Use activities	7.12	Special Use Flights
4.8	Project Aviation Management	7.13	Mission Planning
4.9	Administrative Flights	7.13.1	All Flights
4.10	Cost Analysis	7.13.2	Special Use Flights (In addition to above)
4.11	Field Office and Zone Aviation Plans	7.14	Environmental Factors
4.12	Documentation Requirements	7.15	Aviation Incident/Accident Response Plans
4.13	Issue Resolution		

7.16	Overdue/Missing Aircraft	8.	Flight Following Worksheet
7.17	Mishap Reporting	9.	Risk Management Analysis
7.18	Aviation Training and Qualifications	10.	Aviation Documentation Matrix
7.19	Aviation Reviews	11.	Copies of existing Waivers
Chapter 8.0	FLIGHT OPERATIONS	12.	<b>SAFECOM</b> form
8.0	Flight Operations	13.	Aircraft Pre-Accident Plan
8.1	Airtanker Operations	14.	Aviation Watch Out situations
8.2	Aerial Supervision Module (ASM) Operations	15.	R-44 Helicopter Information
8.3	Air Tactical Operations		
8.4	Helicopter Operations		
8.5	Aerial Ignition Operations		
8.6	Transportation of Hazardous Materials		
8.7	Aircraft Transponder Code (Fire Fighting)		
8.8	Smokeyjumper Operations (Pilot)		
8.9	Law Enforcement Operations		
8.10	Aerial Photography		
8.11	Resource Helicopter Manager Program		
Chapter 9.0	RESOURCE PROJECT PLANNING		
9.1	Aviation Project Planning:		
Chapter 10.0	AVIATION FACILITIES		
10.1	Operational Bases		
10.1.1	Construction and Maintenance		
10.1.2	Safety		
10.2	Temporary Bases		
10.3	Zone/Field Office SOP'S		
Chapter 11.0	ATTACHMENTS		
1.	BLM Training Matrix		
2.	Position Description Matrix		
3.	Aviation Management Training & Qualifications		
4.	Flight Planning Decision Matrix		
5.	Flight Request Checklist		
6.	9400-1a Aircraft Flight Request Form		
7.	Project Aviation Safety Plan/Risk Assessment		

## 1.0 BUREAU OF LAND MANAGEMENT ALASKA AVIATION PLAN

### 1.1 PURPOSE

This plan sets forth policy, procedures and guidance to implement the Aviation Management Program for BLM Alaska. The purpose is to clarify and standardize aviation management procedures and operations for BLM employees in all Alaska Field Offices, Alaska State Office, Joint Pipeline Office, and Alaska Fire Service.

### 1.2 MISSION STATEMENT

The Office of the State Aviation Manager is responsible for providing safe, cost-effective aviation support to the BLM, Alaska and its interagency partners. We will be guided in accomplishing this mission by rigorous adherence to Departmental aviation policy and safe aviation practices, sound mission planning, risk management, ongoing safety training with technical and contractual support from Aviation Management Directorate (AMD). Continuous evaluation and critique of mission performance and customer satisfaction will be used to measure our success.

### 1.3 BLM ALASKA AVIATION PHILOSOPHY

The complex nature of the BLM aviation program, combined with the demanding flight environment of Alaska, requires the guidance of a philosophy reflecting the basic tenets of operation. Our goal is to provide safe and efficient aviation support for the BLM mission, while conducting our actions in accordance with this philosophical and regulatory guidance.

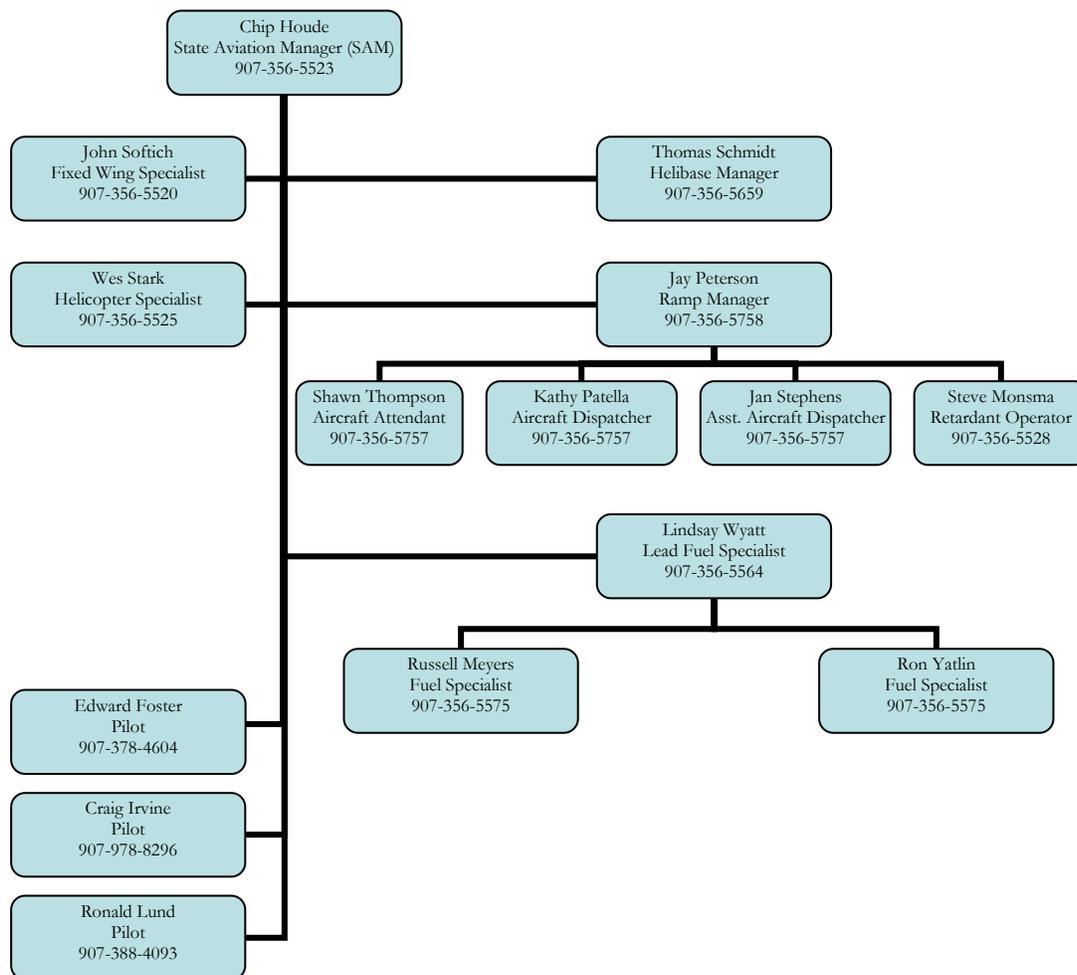
- An active and aggressive Accident Prevention Program intended to protect our most precious assets—the people utilizing our services.
- We must be proactive in Safety Management.
- Risk Management will remain incorporated into all aviation operations.
- Managers are responsible for all aircraft missions.
- Aviation provides a service for a customer.

- There must be planning for flight operations including: Safety, Risk Management, Supervision, Organization, and Evaluation.
- Aviation personnel will be qualified and appropriately trained to standards.
- Aviation personnel will be provided emphasis and consideration for individual development, employee wellness and workforce diversity.
- The aviation organization will be maintained at the most efficient level commensurate with the BLM mission.
- Management has the responsibility to maintain the commitment to aviation safety and efficiency.
- Field offices are empowered to accomplish their mission without undue restriction, regulation, or oversight.
- State and Field Office's local policy and procedure can not be less restrictive, different, or conflict with National Aviation Office (NAO) policy.

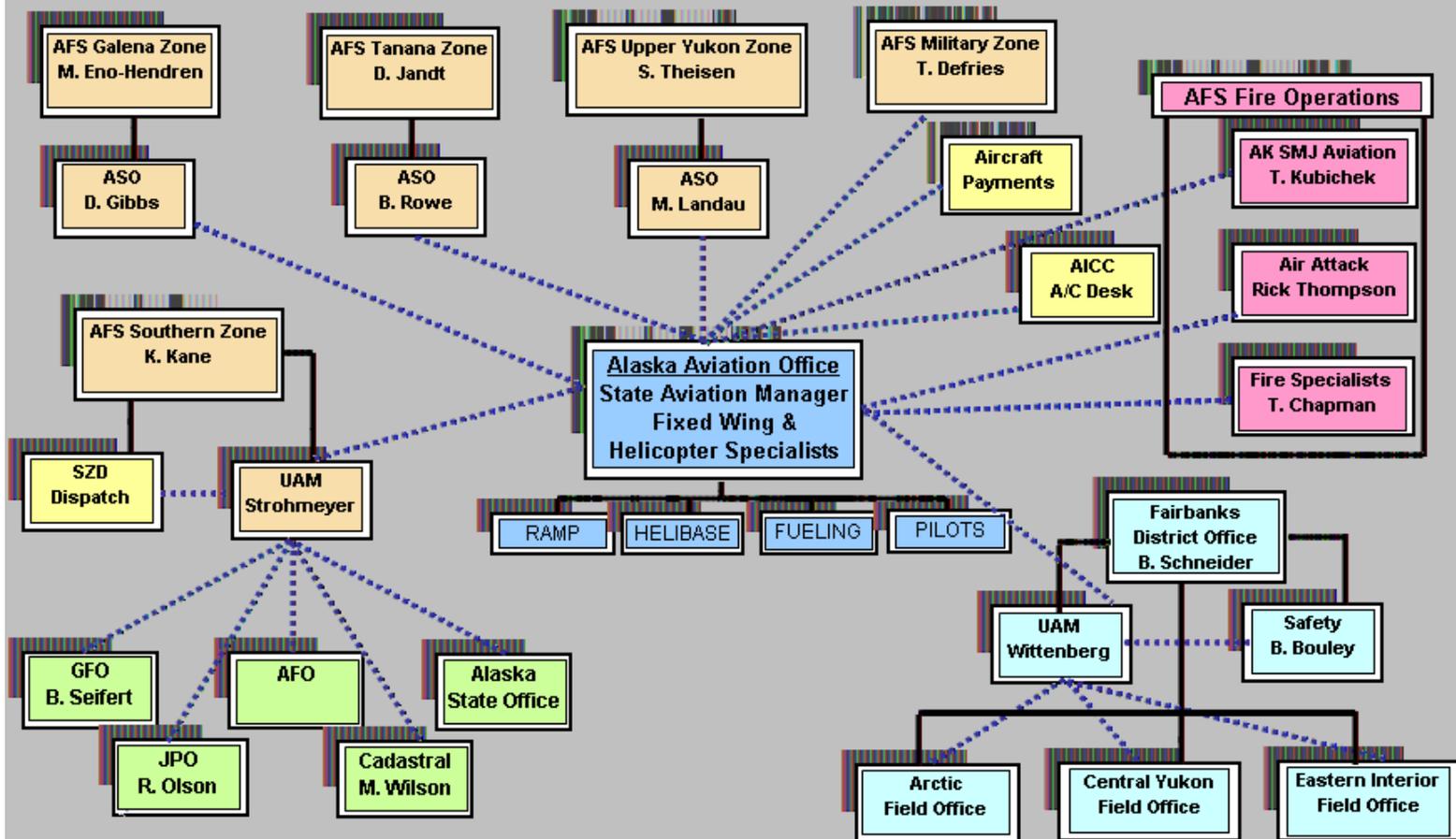
#### 1.4 REFERENCES

- A. Title 14 CFR
- B. Departmental Manual, Parts 112, 350-354
- C. OAS Operational Procedures Memoranda (OPMS)
- D. BLM Manual Sections 1112, 1221, 1243, 1244, 1525, 9111, 210, 9400-9470
- E. Office of Management and Budget (OMB) Circulars A-76, A-123, A-126
- F. GSA Federal Property Management Regulation (FPMR) 101-37
- G. Interagency Aviation Operational Guides

## 2.0 Organization AK- 360



# BLM Alaska State Aviation Communication Flow Chart



Blue connections indicate primary lines of communication, and black connections indicate lines of supervision. All Alaska BLM Employees have direct access to the State Aviation Office at any time. Aircraft/flight requests are routed as described in State Aviation Plan.

## 3.0 Roles and Responsibilities

### 3.1 AVIATION MANAGEMENT DIRECTORATE (AMD)

Formerly – Office of Aircraft Services (OAS)

Aviation Management Directorate (AMD) is responsible for all Department of Interior aviation policy and performs aircraft contracting, technical inspections, procurement, and payment administration. Provides Contracting Officers, Technical Specialists, Training Specialists, and financial reports and services to DOI agencies.

### 3.2 BLM NATIONAL AVIATION OFFICE (NAO)

The National Aviation Program Manager is responsible for BLM aviation policy and leadership of the BLM Aviation Program.

### 3.3 STATE DIRECTOR

The State Director has overall responsibility for the State Aviation Program, which is delegated to the State Aviation Manager through the manager of the Alaska Fire Service.

### 3.4 STATE AVIATION MANAGER (SAM)

Serves as the focal point for BLM aviation management matters in Alaska. The State Aviation Manager is responsible for providing staff support and expertise to the State Director on all aviation issues. The SAM provides expertise and oversight to all State and Field Office aviation operations, personnel and facilities. Develops and implements statewide Aviation Management Plan and aircraft safety and accident prevention measures. The SAM provides aviation training support to ASO, Field Offices, Alaska Fire Service, and other agencies. The SAM compiles Aviation Statistical Summary and other annual statewide year-end reports. Provides support to National Aviation Office projects and initiatives.

### 3.5 FIELD OFFICE MANAGERS

The Field Office Manager has overall responsibility for the Field Office Aviation Activities. This responsibility can be delegated to a subsequent position.

### 3.6 ZONE AIR SERVICE OFFICER (ASO)

The Zone Air Service Officer serves as the focal point for the Zone Aviation Program by providing technical and management direction of aviation resources to support Resource and Fire programs. He/She has functional responsibilities in the following areas:

- Assures Zone flight compliance with USDI/BLM/State and Zone

- policies and regulations.
- Develops and implements the Zone Aviation Operation Plan, as well as specific plans for other aviation programs. (Helicopter Operations, Resource Management, Air Tactical, etc...)
- Assures that appropriate training is provided to users and managers.
- **Designates an Alternate Zone Air Service Officer.** In the absence of the ASO these duties will default to the designated acting or assistant.
- Assures that visiting personnel have received flight crew briefing/orientation guides.
- Confirms DOI/BLM/OMB requirements are met, completes the cost analysis requirements, and ensures flights are scheduled with the appropriate Dispatch Office.
- Briefs users on flight-following requirements.
- Ensures the accuracy of the Aircraft Use Report, processes it, and maintains copies, and records documenting the flight as required by the Departmental Manual.
- Confirms a qualified Chief of Party or appropriate Aircraft Manager is assigned to all project/resource and fire flights.
- Will perform as Project Inspector on Exclusive Use and Rental Contracts.

### 3.7 **DISTRICT OFFICE/AREA UNIT AVIATION MANAGER**

The Fairbanks District Office and Southern Area Unit Aviation Managers serve as the focal point for aviation activities and information by providing support to Resource and Cadastral programs within their respective units and specific projects. They have functional responsibilities in the following areas:

- Assures Unit compliance with USDI/BLM/State and Unit Policies and regulations.
- Develops and implements the Unit Aviation Operation Plan, as well as specific plans for other aviation programs and projects. (Helicopter Operations, Resource Management, etc...)
- Assures that appropriate training is provided to users and managers.
- Assures that visiting personnel have received flight crew briefing/orientation guides.
- Confirms DOI/BLM/OMB requirements are met and ensures flights are scheduled with the appropriate Dispatch Office.
- Briefs users on flight-following requirements.
- Assures the accuracy of the Aircraft Use Report, processes it, and maintains copies and records documenting the flight as required by the Departmental Manual.
- Confirms a qualified Aircraft Manager is assigned to all project/resource flights.
- May perform as Project Inspector on Exclusive Use and Rental Contracts.

### 3.8 **AIRCRAFT DISPATCHER**

Local Dispatchers trained in aviation operations, policies, and procedures generally fulfill aircraft dispatching duties. Duties include:

- Confirms that BLM Flight Request Form 9400-1a is utilized and completed, and that any Special-Use flight has an attached plan approved by the appropriate authority. **Fire flights are the only ones exempt from the mission-by-mission approval requirement.**
- When operations cross jurisdictional boundaries, the Dispatcher coordinates with other involved agencies on flight following.
- Maintains a current Aviation Incident/Accident Response Guide and initiates

- emergency search-and-rescue procedures for overdue, missing, or crashed aircraft.
- When flights are incident related, follows the procedures and guidelines established by AICC and National Mobilization Guides.
- Responsible for procuring rental aircraft (ARA/CWN) for local administrative, fire, and resource flights; ensuring that DOI/BLM/OMB requirements are met.
- Dispatches aircraft, provides flight following, and initiates emergency/SAR procedures when necessary. Maintains documentation files on each flight, local aviation vendors, training and qualifications records, pilot flight/duty records, and radio logs, etc;

### 3.9 PILOT

The Pilot is in command of the aircraft and has ultimate responsibility under FAA and Departmental regulations and requirements specified in the contract for the safety of the aircraft and persons on board. Other responsibilities include the following:

- Operates the aircraft in accordance with applicable FARs and USDI/BLM policy and procedure.
- Develops, activates, and closes FAA or agency flight plans.
- Wears personal protective equipment when required.
- Does not deviate from the filed Flight Plan or mission profile unless prior authorization is received.
- Performs a thorough pre-flight inspection of the aircraft and briefs all passengers in accordance with 351 DM 1.5.
- Completes load calculations or weight and balance computations prior to flight.
- Completes flight invoices for services rendered.
- **The pilot may terminate a flight at any time for safety reasons.**

### 3.10 AIRCRAFT MANAGER

Aircraft Managers include Resource and Fire Helicopter Managers, Air Tanker Base Managers, Air Tactical Group Supervisors, Smoke Jumper Spotters, and Detection personnel. Each manager complies with his/her appropriate Interagency Operations Guide and is responsible for the following:

- Plans, coordinates, and supervises aircraft operations according to DOI/BLM policy.
- Serves as Project Inspector to administer Exclusive-Use, Call When Needed (CWN), On-Call, or Aircraft Rental Agreement (ARA) aviation contracts in the field.
- Directs pilots and crews and provides operational and safety briefings to aircrews, project leaders, and passengers.
- Conducts risk and hazard analysis, completes flight invoices, daily diaries, and all related documentation.
- Consults with Field Office/Zone or State Aviation Manager when in doubt over any aviation issue.

### 3.11 FLIGHT MANAGER (FIXED WING AND HELICOPTER)

The Flight Manager is the government representative who ensures compliance with contract or Aircraft Rental Agreement (ARA) requirements and is responsible for coordinating the given flight or project. He/She must have received Aviation Management Directorate (AMD) Flight Manager training within the last three years. (See BLM Aviation Training by Position Matrix Attachment 1 and 2) Other duties include:

- Briefs pilots on missions, frequencies, flight routes, hazards, flight following, passenger briefing requirements, and any other related information required.
- Checks the pilots' qualification cards and aircraft data cards for approval and currency. Distinguish the difference between Point to Point card versus Mission Specific Qualification Card.
- Ensures that flights are safely conducted and do not deviate from filed Flight Plans or Mission Profiles without prior authorization.
- Initials the flight invoices and routes them according to procedures specified in the contract.

**3.12 AIR CREW**

Authorized individuals other than the Flight Crew who are essential to the success of the mission; e.g. Loadmaster, Helitack, Observer. (See BLM Aviation Training By Position Matrix Attachment 1 and 2)

**3.13 PASSENGER**

A person aboard an aircraft who does not perform the function of a flight crewmember or air crewmember. Only essential and "official" passengers are authorized on DOI owned/procured aircraft; the government must derive some benefit from the transport of official passengers. (See BLM Aviation Training by Position Matrix Attachment 1 and 2)

**Official passengers include:**

- Employees of the Federal Government traveling on official business.
- Members of Congress and employees of Congressional Committee staffs whose work relates to DOI programs.
- Non-federal personnel engaged in missions which enhance accomplishment of a departmental program.

## 4.0 Administration

### 4.1 GENERAL

Except for ticketed commercial airline flights, all aircraft will be scheduled through the Alaska Interagency Coordination Center (AICC) at Alaska Fire Service in Fairbanks, or through the Southern Alaska BLM Dispatch Office at Campbell Tract. The State Aviation Manager, AICC and the Southern Alaska BLM Dispatch Office may authorize other offices to schedule directly with local vendors, but it remains their responsibility to ensure that flight-following and other aviation regulations are observed. Flights on scheduled commercial airlines are initiated through the local office administrative staff and/or travel agency.

### 4.2 EXCLUSIVE USE AIRCRAFT/ON-CALL

Aircraft services identified in the Annual Work Plan (AWP) to be accomplished within a specified timeframe and in excess of \$25,000 require a formal aviation contract. Requests for exclusive use contract services require the submission of form **AMD-13** and **AMD-13A** or **AMD-13H** and are made to the State Aviation Manager (SAM). Aviation Management Directorate (AMD) will solicit and award the contract and assign a Contracting Officer (CO) and Technical Representative (COTR). The Fixed Wing and Helicopter Specialists are the Contracting Officer's Representative (COR) and delegate field administration of the contract to one or more Alternate COR/Project Inspectors.

### 4.3 AIRCRAFT RENTAL AGREEMENTS AND CHARTERS

Procurement of aircraft for administrative and aviation projects less than \$25,000 is accomplished through the Aviation Management Directorate (AMD) Aircraft Rental Agreement (ARA). These agreements are used when airlines, contract aircraft, and ground transportation are unavailable, unfeasible, or not cost effective. Requests from Field Offices and the State Offices are made through the local Aviation Manager and or the local Dispatching Office. **No employee under any circumstances (other than noted in 4.1) may schedule or procure Aviation Services. This is facilitated by Aviation Managers or qualified dispatch office personnel. Any employee who is asked to accompany personnel from another agency on any type of flight must consult with their respective Aviation Officer.**

4.4 **SERVICE/END PRODUCT CONTRACTS**

All Service Contracts are full service contracts to acquire an end product established on a per-acre per-unit, or per-area basis. These contracts will be conducted in accordance OPM 04-35. **The Field Office Manager and/or State Aviation Manager should be consulted whenever a Service Contract that involves aircraft use is being contemplated or written.**

4.5 **COOPERATOR AIRCRAFT**

Use of state/local government, military, or other federal agency aircraft by BLM employees may require prior inspection and approval by Aviation Management Directorate (AMD). Proposed flights on these aircraft must be requested and **consultation with the local Air Services Officer or District Office aviation officer is mandatory.**

4.6 **FLIGHT REQUESTS**

For all flights, the user must assure that there is appropriate funding for the mission and that supervisory approval has been granted. **(See Flight Request Check list Attachment 5)** For Special Use Flights the project manager **must** complete the back of the 9400-1a. For Special Use Flights a **Project Aviation Safety Plan and Risk Assessment (Attachments 7 and 9)** **must** be completed and approved by appropriate superiors. The reverse side of the form 9400-1a may be used as a PASP for low complexity, one-time special use missions. The approved and completed **Project Aviation Plan and Risk Assessment** will be submitted to the appropriate dispatch center, Unit Aviation Manager, and the office of the State Aviation Manager **prior** to the flight. (Fire Missions are exempt from the 9400-1a Requirement.)

4.7 **SPECIAL USE ACTIVITIES**

Special Use flight operations are operations that involve the utilization of airplanes and helicopters which are not point-to-point flight activities and which require special control measures due to their inherently higher risk. This may require deviation from normal operating practices where authorized by Aviation Management Directorate (AMD). Special pilot qualifications and techniques, special aircraft equipment, and personal protective equipment are required to minimize risk to personnel and property. These activities include:

Low level flight (within 500' of the surface)	Smoke jumping/paracargo
Resource reconnaissance	Mountain flying
Air tactical group supervision	Fire reconnaissance
Cargo letdown	Toe-in, single-skid
External load - shortline ≤50' (helicopter)	Rappel
External load - longline >50' (helicopter)	Short-haul
Vessel landings -	Helicopter water landings - floats or hull
Wheel operations on unprepared landing areas	Animal darting, paint ball
Offshore platform landings	Animal gathering and capture
Animal eradication	Handheld net gun
Airframe mounted net gun (helicopter)	Night vision goggles
Aerial ignition	Water/retardant application

**Note:** Future flight activities may be developed which should also be identified as special use. If a question exists, the applicable BLM Aviation Staff or Zone Air Service officer should be consulted.

**4.8 PROJECT AVIATION MANAGEMENT (NON-FIRE MISSIONS)**

For those projects involving Special Use aviation, a **Project Aviation Safety Plan and Risk Assessment (Attachments 7 and 9)** **must** be completed (BLM National Aviation Plan). The reverse side of the form 9400-1a may be used as a PASP for low complexity, one-time special use missions. The appropriate Field Office Manager must approve the Project Aviation Safety Plan., and an approved copy must be on file with the State Aviation Managers Office **prior** to the flight.

**4.9 ADMINISTRATIVE FLIGHTS**

Aircraft may be used to transport personnel to meetings, administrative activities, or training sessions when it is the most cost effective mode of transportation. These flights are ordered through the Aviation Dispatcher or local Aviation Manager. Prior approval is required by the solicitors' office for employees above the GS/GM-15 level, members of their families, and all non-federal travelers on the flight. The requirements and procedures are outlined in OMB Circular A-126 and **OPM 06-07**. Requests for Senior Executive Service (SES) Flights will be submitted at least ten (10) working days prior to the flight. This will allow Aircraft Dispatchers and the Solicitors office enough time to perform cost analysis, review and Approval/Disapproval of the flight.

**4.10 COST ANALYSIS**

Each flight request for chartered or government-owned aircraft includes an approved cost analysis, which clearly demonstrates the cost effectiveness of the flight. The flight requestor or first-line supervisor coordinates with the Aviation Dispatcher to complete the cost analysis.

**4.11 DISTRICT OFFICE AND ZONE AVIATION PLANS**

State Office, District Offices, and Zones will prepare annual aviation operating plans that outline their specific needs. Operations adhere to and are not less restrictive than the national standard, unless exception has been granted in writing by the BLM National Aviation Office. District Office and Fire Zone Plans are updated prior to **May 15** annually. Copies of all annual updates should be sent to the State Aviation Manager for State Office filing.

**4.12 DOCUMENTATION REQUIREMENTS**

Documentation requirements for aviation activities are maintained in their respective field office for a period of three years, and documents are subject to review by the State Aviation Office.

**4.13 ISSUE RESOLUTION**

Issue resolution is accomplished through the chain of authority established by Alaska BLM. See Aviation Communication Flow Chart (Page 4)

**4.14 AVIATION PROGRAM REVIEWS**

Aviation program reviews occur at the Field Office/Fire Zone level every three (3) years and at the State level every four (4) years.

## 5.0 Aviation Use Standards

### 5.1 GENERAL-USE FLIGHT REQUIREMENTS

Typically a General-Use flight is a point-to-point flight that originates at one developed airport or helibase and flies direct to another developed airport or helibase. Requirements include:

- Designated Flight Manager
- Completed **Aircraft Flight Request checklist (Attachment 5)**
- Aviation Management Directorate (AMD) approved and carded pilot and aircraft.
- Flight Plan/Flight Following is filed with FAA and/or Aviation Dispatcher as needed.
- Mission briefing given to the pilot and safety briefing given to the passengers

### 5.2 SPECIAL-USE FLIGHT

Special-Use activities are the utilization of aircraft in support of programs that require special techniques, procedures, and considerations. These operations are listed in Operational Procedures Memorandum (OPM) 06-29 and meet the following requirements:

- Aircraft and pilots must be approved for Special-Use activity prior to use.
- All Special Use flights or missions except fire missions must have an approved 9400-1a or Project Aviation Safety Plan and Risk Assessment reviewed by the Line Manager and approved by the Field Office Manager, State Aviation Manger (High Risk or greater), or as delegated. The reverse side of the form 9400-1a may be used as a PASP for low complexity, one-time special use missions.
- Passengers on a Special-Use flight must be considered to be essential to the mission.
- Employees engaged in Special-Use activities must be qualified through required training (see OPM 06-04).

### 5.3 TRAINING

All Bureau personnel must meet training and experience requirements commensurate with their assigned aviation responsibilities as listed in **OPM 06-04, BLM Aviation Training By Position Matrix (Attachment 1, 2 and 3)** and **NWCG 310-1**.

**5.4 AIRCRAFT AND PILOT REQUIREMENTS**

The aircraft (351 DM 2) and pilot (351 DM 3) must be approved and current for the specific mission. For training requirements, see OPM 06-22.

## 6.0 Operational Policy

### 6.1 **FLIGHT PLANS OPM 06-2 – ALL FLIGHT OPERATIONS REQUIRE A FLIGHT PLAN**

Pilots shall file and operate:

- a) On a Federal Aviation Administration (FAA) flight plan or
- b) On an International Civil Aviation Organization (ICAO) flight plan; or
- c) In accordance with a bureau approved flight plan program; or
- d) In accordance with an AMD director approved vendor flight program specified in an AMD procurement document.

Flight plans shall be filed prior to takeoff.

Bureau flight plan programs may be used to accommodate specialized bureau missions and must be approved as delegated by the bureau Director. As a minimum, a bureau flight plan program must specify route of flight, estimated time of arrival (ETA), how an aircraft will be tracked during flight, and response procedures should the aircraft experience a mishap or fail to check in.

### 6.2 **FLIGHT FOLLOWING - ALL FLIGHTS REQUIRE FLIGHT FOLLOWING**

#### **DOCUMENTATION**

Flight following is a safety and operational requirement of the Department of the Interior; see DOI Manual 352 DM 1.9G, OPM 02, and the Bureau of Land Management National Aviation Plan. Manual 9400.45B

Flight following arrangements must be made clear to AICC or the Southern Zone BLM Dispatch Office at the time the aircraft order is placed. Flight Requests and Flight Following logs will be maintained and stored by the dispatch office responsible for the flight. These records will be kept on file for a period of three years.

For those aviation activities occurring at remote field camps, local flight following may be more appropriate. In these cases the flight following method will be documented in the project plan and flight following logs will be maintained daily and kept for three years.

**There are four (4) approved standard methods of flight-following; each method has specific requirements to allow flexibility in accommodating mission needs.**

The approved standard methods of flight-following are:

- An agency flight plan filed with a BLM dispatch office, with radio check-ins at least once every 30 minutes with a BLM or State of Alaska Division of Forestry (DOF) dispatch office. (the air-to-ground frequency for BLM is 127.45; the frequency for DOF is 132.45) This is BLM Alaska's default flight following procedure. Unless other arrangements are made at the time the flight is ordered, dispatch will assume that this is the chosen flight-following method and that the aircraft will be checking in at 30-minute intervals. Dispatch will consider the aircraft to be overdue if more than 30 minutes passes between check-ins, and will act accordingly.
- A flight plan filed with a BLM dispatch office, with radio check-ins with BLM or DOF at least once per hour.
- An IFR flight plan filed with FAA.
- A VFR flight plan filed with FAA, with radio check-ins with either FAA or an agency dispatch office at least once per hour. On non point-to-point flights (e.g. high recon) hourly position reports should be accompanied by a description of the next anticipated area of flight.

**Note: VFR and agency flight plans must be accompanied by a call to an agency dispatch office immediately prior to departure, and as soon as practical after landing for each leg.**

The chosen method of flight following must be documented on the Aircraft Flight Request Form (9400-1a, Project Aviation Safety Plan or the Agreement for non-standard Flight Following Worksheet.)

### **Non-Standard Flight Following**

In Alaska, many flights occur in remote areas where radio communications are limited or impossible. In these situations, the requirement for 30-minute or 60-minute check-ins may not be realistic. In such a case, non-standard flight-following may be approved, this approval will be from the State Aviation Manager and the Dispatch center will be consulted. The non-standard flight following will be described in a Flight Following Agreement. Pilots will follow their flight plans and make position reports in the time interval as agreed in the Flight Following Agreement. Any change in Flight Plan will be reported to the Dispatch Center. If the one-hour reporting time interval is exceeded, or anticipated to be exceeded, prior approval by the State Aviation Manager is required (351DM 14.C.2.B). **The Agreement for non-standard Flight Following Worksheet (Attachment 8) will be filled out by the Project Leader and signed by the appropriate field office manager or designee prior to the start of the project or whenever changes in the flight activities warrant a change to previously agreed upon check-in procedures.**

Some non-standard flight following alternatives that may be used are:

- Establish a time with dispatch when check-ins will occur.
- Establish a round robin (check in-check out) flight plan with Dispatch or FAA.
- When operating in remote field camp settings, a prearranged flight-following plan which may include check-ins or round-robin plans filed with the base camp. (The flight plan should still be specific regarding time frames and destinations.) The base camp, however, must have some means of communication with another office or entity within a reasonable amount of time in order to implement and facilitate emergency procedures should they become necessary. When planning a fixed wing

support flight to and from a camp it will be imperative that flight following of that aircraft be coordinated with the sending dispatch center. Use of satellite communications will allow the camps to check in with dispatch to acknowledge when the aircraft arrives and departs the camp.

**Note: The chosen method of flight following must be documented on either the 9400-1a, Project Aviation Safety Plan, or the Agreement for non-standard Flight Following Worksheet. These can be found on the AFS web site at the Statewide Aviation Office page.**

It is critical to understand that Bureau regulations regarding overdue aircraft require specific actions. A radio/communications search and documentation **will** begin when an aircraft is **overdue** from a scheduled check-in or an arrival time at a particular destination. Once an aircraft is overdue by one hour or fuel duration has been exceeded, the aircraft is declared **missing** and a physical search is to begin. The office responsible for the operation of the overdue aircraft **will** be billed for the costs of the search, including personnel overtime and any aircraft used.

BLM aircraft operations conducted under VFR flight plans will require a dispatcher or other qualified person to be on duty until the aircraft operations are concluded unless other arrangements have been identified in advance. For BLM point-to-point flights between two Alaska Fire Service stations, a dispatcher will be on duty at the departure point until the aircraft is en route and communications with the aircraft are handed off to an office en route or to the final destination point. A dispatcher will remain on duty at the destination point until the aircraft has arrived. An agency dispatcher is not required to be on duty if an IFR plan has been filed with FAA.

**Note:** Automated Flight Following (AFF) systems are now a requirement in all exclusive-use aircraft contracts and provide a useful tool to aid in flight following. However, due to lack of radio coverage in many parts of the state (immediate radio contact is the prescribed backup for loss of AFF satellite signal), AFF will not be used as the **primary** flight following method for Alaska aviation operations at this time. Dispatch centers and field camps may use it as a secondary means of flight following only.

Dispatcher and fueler overtime for extended BLM projects involving multiple flights and/or overtime hours will be funded by the benefiting BLM office. Overtime incurred for the flight following and fueling of non-BLM agency aircraft will be billed to that agency through the reimbursable process unless other arrangements have been agreed upon in advance.

### 6.3 OVERDUE AIRCRAFT

Any aircraft that has not checked in as scheduled according to its flight following plan is overdue. At that time the Aircraft Dispatcher or person responsible for flight following **will** initiate the actions listed in the **Aircraft Pre-Accident Plan**.

### 6.4 OPERATIONAL GUIDES AND HANDBOOKS

A multitude of guides and handbooks are available to assist the aviation user. The Departmental Manuals and DOI AVIATIONAL MANAGEMENT Operational

Procedures Memorandums (OPM) prevail when any other document conflicts or is less restrictive.

#### 6.5 AVIATION REFERENCES

Each Field Office and the State Office will maintain a current aviation reference library. At a minimum, each office should have:

- ◆ Departmental Manual, Parts 112, 350-354
- ◆ FARs/Aeronautical Information Manual
- ◆ Aviation Management Directorate (AMD), Bureau and Interagency Operational Guides
- ◆ BLM State Aviation Management Plan
- ◆ Aviation Training Materials
- ◆ Aircraft Identification/Performance Publications
- ◆ Unit Aviation Incident/Accident Response Plan
- ◆ FAA Sectional Charts
- ◆ Unit Aerial Hazard Maps

#### 6.6 AVIATION DOCUMENTATION

Aviation documentation requirements are described in **the Aviation Documentation Matrix. (Attachment 10)** The importance of accurate, comprehensive flight and administrative records cannot be overemphasized. All documentation should be retained locally for at three years. Typical files include:

- ◆ General Use Flight Plans & Documentation
- ◆ Flight Following Logs
- ◆ Special Use Flight Plans
- ◆ Contract/ARA Administration Files
- ◆ Individual Aviation Training and Qualification Records
- ◆ Yearly Aviation Statistical Summaries/Reports
- ◆ Local Aerial Hazard/Helispot/Airstrip Database
- ◆ Aviation Incident/Accident Files
- ◆ Aviation Memo/Bulletin/Alert File
- ◆ Aviation Forms (Aviation Management Directorate (AMD), BLM, etc.)

#### 6.7 AVIATION MANAGEMENT DIRECTORATE (AMD) HANDBOOKS

- ◆ Aviation Life Support Equipment (ALSE), 351 DM 1
- ◆ Aviation Mishap Notification/Investigation/Reporting, 352 DM
- ◆ Aviation Fuel Handling, 351 DM
- ◆ Aviation Transport of Hazardous Materials, 351 DM
- ◆ Heliport Installation, 351 DM 1
- ◆ Airfreight/Paracargo, 351 DM 1
- ◆ Animal Gathering and Capturing, 351 DM 1
- ◆ Animal Eradication and Tagging, 351 DM 1

#### 6.8 INTERAGENCY OPERATIONAL GUIDES

- ◆ Airtanker Base Operations Guide
- ◆ Aerial Ignition Guide
- ◆ Helicopter Rappel Guide
- ◆ Helicopter Operations Guide (IHOG)
- ◆ Air Tactical Group Supervisor Guide
- ◆ Aerial Supervision Modules Operations Guide
- ◆ Military Use Handbook (Chapter 70)

## 7.0 Safety

### 7.1 SAFETY STANDARDS

All aviation safety standards and requirements identified in the Federal Aviation Regulations, DM 350-354, Aviation Management Directorate (AMD) -OPMs, BLM Manual 9400, State and Field Office Aviation Operational Plans must be followed.

### 7.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

All crew members and passengers must wear the appropriate complement of PPE for Special-Use activities. Requirements are listed in 351 DM 1.7 (B) and outlined in the Aviation Life Support Equipment (ALSE) Handbook. Any questions concerning the requirements and procedures for obtaining PPE are directed to the local Aviation Manager or Aircraft Dispatcher.

### 7.3 AVIATION LIFE SUPPORT EQUIPMENT (ALSE)

Project leaders ensure that appropriate and adequate ALSE, including PPE, is aboard the aircraft or worn by the individual. Detailed information is contained in the ALSE Handbook.

### 7.4 PILOT QUALIFICATIONS

Only well trained, experienced and FAA certified pilots will be utilized in BLM Aviation activities. All pilots flying DOI owned, leased, contracted, rented (ARA) or Cooperator aircraft will meet requirements set forth in 351 DM 3. Prior to flight a current Aviation Management Directorate (AMD) or Interagency Pilot Qualification Card or Aviation Management Directorate (AMD) Letter of Approval (LOA) shall be displayed indicating that the pilot is certified to fly the particular aircraft and is qualified to perform the specific mission at hand. If the card is not current, pilot is not checked off for the mission or some other problem arises, **the flight *will not* commence until the local Aviation Manager is notified and the situation remedied.**

### 7.5 FLIGHT AND DUTY LIMITATIONS

Pilot flight time and duty time limitations are outlined in DM 351 3.5A. Daily and cumulative flight and duty hours will be monitored, tracked, and documented on all DOI fleet, contract and rental pilots. Aircraft Managers, Pilots and/or Dispatchers will maintain

flight and duty logs. SAFECOM reports will be completed and forwarded on all flight and duty infractions. During periods of prolonged heavy aircraft use (intense fire activity) flight and duty may be further limited at management discretion.

**7.6 COMFORT/REST**

Every effort will be made to ensure that pilots on extended standby or prolonged, extensive flying periods are provided comfortable areas to rest/take breaks/work. This includes adequate shade/air conditioning/heat, toilet facilities, food and water, and an atmosphere free of undue noise, activity, and stress.

**7.7 STERILE COCKPIT-(TAKE OFF AND LANDING CONTROLLED AIRSPACE)**

"Limiting communications and actions within the cockpit to only those required for safe maneuvering and traffic separation". This means communications with Dispatch, ground personnel and other aircraft concerning *mission* information is prohibited. Pilots will be afforded the opportunity to maneuver the aircraft safely at all times without undue physical or mental interference. This is especially important during approach/departure and take-off/landings. A sterile cockpit will be maintained within 5 miles radius of controlled and uncontrolled airports. A sterile cockpit will also be maintained during approach and departures at remote helispots and airstrips for a time period specified by the pilot.

**7.8 TRANSPONDER CODE**

To the extent possible, all aircraft engaged in tactical fire suppression operations will utilize transponder code 1255.

**7.9 AIRCRAFT CERTIFICATION**

Only aircraft properly equipped, well maintained, and FAA/DOI certified will be utilized for BLM aviation missions. All DOI owned, leased, contracted or rented aircraft will be inspected and certified for intended missions under the appropriate CFR/FAR as outlined in 350-354 DM (this includes flights on Cooperator Aircraft).

**7.10 INTERAGENCY AIRCRAFT**

Regardless of agency assigned aircraft, i.e. Forest Service or State of Alaska, both pilot and aircraft must be inspected and approved by either Aviation Management Directorate (AMD) or USFS. BLM employees will not ride on military aircraft without prior special approval.

**7.11 ARA POINT-TO-POINT/HIGH RECON FLIGHTS**

Vendor procured and operated aircraft (ARA) conducting only direct flights between airports carrying DOI passengers and/or cargo or conducting high-level reconnaissance (above 500' AGL). The FAA has primary responsibility for inspection of these aircraft and technical oversight of the vendor for compliance under CFR Part 135. A written notice issued by DOI AVIATION MANAGEMENT or the USFS will be carried aboard the aircraft indicating that the vendor has a current and approved procurement agreement (ARA) with the agency. Although DOI/USFS has not inspected the aircraft, the notice verifies that the vendor is certified under Part 135. Aircraft without a current Aviation Management Directorate (AMD)/USFS notice should not be utilized.

#### 7.12 SPECIAL USE FLIGHTS

DOI/USFS aircraft utilized for Special Use missions must have a current Aircraft Data Card onboard issued by Aviation Management Directorate (AMD) or USFS. This card certifies that the aircraft has been inspected and approved by either Aviation Management Directorate (AMD) or USFS and meet all FAA and agency equipment and maintenance requirements. Approvals for the specific intended mission must be indicated. If the aircraft doesn't have a card, the card has expired or is not approved for the intended mission, **no flight will occur. Consult local Aviation Manager.**

#### 7.13 MISSION PLANNING

All flights will receive a level of planning and risk management commensurate with the complexity and risks involved with the proposed mission. The goal is to reduce personal exposure, reduce/mitigate risks and prevent accidents/incidents. The following are required:

##### 7.13.1 ALL FLIGHTS

- ◆ Only essential flights and passengers approved (**Mgt.**)
- ◆ Approved pilots and aircraft (**Av. Mgr./Flight Mgr.**)
- ◆ Flight Plans/Flight Following (**Pilot/Flight Mgr./Dispatch**)
- ◆ Preflight Inspection/Weight & Balance/Load Calc completed (**Pilot**)
- ◆ Mission briefing to pilot and passengers (**Flight Manager**)
- ◆ Passengers manifested/briefed on aircraft safety (**Flight Mgr./Pilot**)
- ◆ Safety equipment available and utilized (**All**)

##### 7.13.2 SPECIAL USE FLIGHTS (IN ADDITION TO ABOVE)

- ◆ Project Aviation Safety Plan/Risk Assessment (**Proj. Mgr./Dispatch/Unit Aviation Manager**)
- ◆ PPE used by pilot and passengers (**Flight Mgr./Pilot**)
- ◆ Hazard analysis/mitigation performed (**Av. Mgr./Disp./Pilot**)
- ◆ Hazard map developed & referred to (**Av. Mgr./Disp./Pilot**)
- ◆ Airspace deconfliction performed (**Disp./Pilot**)

#### 7.14 ENVIRONMENTAL FACTORS

- **Daylight** - All DOI aircraft (except aircraft certified for IFR and with IFR rated pilots) are limited to flight during daylight hours. Refer to Civil Twilight charts for your specific area.
- **Weather/Visibility** - The pilot must evaluate known and predicted weather conditions prior to flight, avoid thunderstorms and cancel, postpone, or terminate flights when weather or visibility conditions warrant it
- **Wind** - Helicopter operations will cease whenever wind exceeds limitations in the aircraft Operators Flight Manual. If no limitations are prescribed in the Flight Manual the following limitations apply:
- **Low-Level** - (below 500' AGL)
  - ◆ Type III - 30 knots or max gust spread of 15 knots
  - ◆ Type I & II - 40 knots or max gust spread of 15 knots

- **High-Level (above 500' AGL):**
  - ◆ All types - 50 knot winds
- **Cold Weather**
  - ◆ Flight operations with single-engine aircraft shall not be conducted when the surface air temperature is -40°F or colder

**7.15 AVIATION INCIDENT/ACCIDENT RESPONSE PLANS**

All aircraft accidents, incidents, mishaps, aviation hazards, or maintenance deficiencies that occur during any BLM flight operation must be reported as soon as possible (see 352 DM 1.10A and 352 DM 6.5) to the BLM State Aviation Manager. All such incidents, mishaps, etc. must be reported on a **SAFECOM form (Attachment 12)** the completed form should be faxed or mailed to the BLM State Aviation Manager. In addition, any accident or incident involving property damage or personal injury must be reported as soon as possible by the quickest possible method. All offices and Dispatchers **will** develop and maintain current **Incident/Accident Response Plans** specific to their area of responsibility. An **Incident Accident Response Plan** specific to each project **will** be completed and attached to the Project Aviation Plan. Plans will include clear procedures to follow before and after aircraft accidents occur; listing of necessary local, state, and national emergency and agency aviation safety contacts. The **Interagency Aviation Mishap Response Guide and Checklist (Attachment 13)** may be used by filling in the unit/project specific emergency contact information.

**7.16 OVERDUE/MISSING AIRCRAFT**

Aggressive attempts to contact/track aircraft that are overdue for radio/telephone check-ins or arrivals will be made by Dispatch offices 30 minutes after the last positive check-in, if the aircraft has not been contacted or located, Dispatch will initiate search and rescue actions. Procedures will be outlined in the unit Incident/Accident Response Plan. A current **Incident/Accident Response Plan** must be at each dispatch center or Resource Project base where flight following occurs.

**7.17 MISHAP REPORTING**

All aviation mishaps, hazards, maintenance deficiency, incidents, or accidents will be reported according to 352 DM 1 & 6 and the Aviation Management Directorate (AMD) Aviation Mishap Notification, Investigation, Reporting Handbook.

- **Aircraft Accident/Incidents With Serious Potential**  
Reported immediately to National Transportation and Safety Board (NTSB) and Aviation Management Directorate (AMD). **Call 1-888-4MISHAP (1-888-464-7427)**. Make required agency notifications outlined in unit Incident/Accident Response Plan. NTSB/DOI-AVIATION MANAGEMENT will conduct investigation.
- **Aircraft Incidents**  
All mishaps/hazards other than described above document on a **"SAFECOM"**. Send copies to Aviation Management Directorate (AMD) Safety and the State Aviation Manager. Follow-up investigation by Air Services Officer or Field Office Aviation Manger, collateral duty, is discretionary. Follow-up by State Aviation Manager may be requested.

7.18 **AVIATION TRAINING AND QUALIFICATIONS**

All Bureau personnel will meet training, currency and experience requirements commensurate with their assigned aviation responsibilities. (see OPM 04; NWCG 310-1; or BLM Aviation Training & Qualifications Matrix, Attachment 1 and 2)

➤ **Instruction**

Aviation training will be conducted by personnel approved as Interagency Aviation Trainers; Aviation Management Directorate (AMD) Training Specialists or other approved aviation instructors. Basic and 200 Level aviation courses may be coordinated and presented at the field level. Higher level aviation training will be requested through the State Aviation Office, Aviation Management Directorate (AMD) or NIFC.

➤ **Documentation**

All aviation training sessions presented at the local level will be documented on Aviation Management Directorate (AMD)-106 or similar form and retained in local files. Individual employee training, qualification and experience records will be updated annually and copies will be maintained by the employee and their supervisor.

7.19 **AVIATION REVIEWS**

Each District Office/Zone/Area Aviation Program will be reviewed/inspected at least once every three (3) years by the State Aviation Manager or national/regional review teams. Facilities, staffing, aircraft dispatching, administrative, and operational procedures will be analyzed for compliance with regulations and safety enhancement. Findings and recommendations will be reported to the Field Office Manager and State Director within three months of the review.

## 8.0 FLIGHT OPERATIONS

### 8.0 FLIGHT OPERATIONS

Except where exempted, all aircraft operations will be carried out in accordance with Department, Bureau and FAA regulations. All employees involved in aircraft operations will be trained and fully qualified in their assigned position. The appropriate handbooks, guides, preferred technical and operational procedures should be reviewed and utilized prior to a specific aviation operation or project.

### 8.1 AIRTANKER OPERATIONS

Airtanker dispatch, ordering, and operations are conducted according to AICC and National Mobilization Guides. The Airtanker Base Manager supervises ground operations in accordance with the Interagency Airtanker Base Operations Guide.

### 8.2 AERIAL SUPERVISION MODULE (ASM) OPERATIONS

ASM dispatch and ordering is accomplished in accordance with AICC and National Mobilization Guides. ASM operations are performed according to the BLM Aerial Supervision Module Operations Guide, and the policies and procedures prescribed in the Interagency Standards for Fire Operations Handbook.

### 8.3 AIR TACTICAL OPERATIONS

Air Tactical operations are performed in compliance with the Interagency Air Tactical Group Supervisor's Guide, BLM Aerial Supervision Module Operations Guide, and the policies and procedures prescribed in the Interagency Standard for Fire Operations Handbook.

### 8.4 HELICOPTER OPERATIONS

Helicopter operations, both fire and resource, are performed in compliance with the Interagency Helicopter Operations Guide.

Any proposed utilization of the Robinson R-44 helicopter must be approved by the BLM State Aviation Manager or delegate. See **Attachment 15**.

- 8.5 AERIAL IGNITION OPERATIONS**  
Aerial ignition operations and projects are conducted in compliance with the Interagency Aerial Ignition Guide.
- 8.6 TRANSPORTATION OF HAZARDOUS MATERIALS**  
Any transportation of hazardous material must meet the requirements of the Aviation Transport of Hazardous Materials Handbook (351 DM 1).
- 8.7 AIRCRAFT TRANSPONDER CODE (FIRE FIGHTING)**  
As directed by Aviation Management Directorate (AMD) Information Bulletin NO.97-5, transponder code 1255 must be utilized by aircraft responding to and operating over fire suppression operations. It is not to be used for repositioning or during cross-country flights.
- 8.8 SMOKEJUMPER OPERATIONS (PILOT)**  
Smokejumper dispatch and ordering are accomplished in accordance with the National Mobilization Guide. Operations are performed according to the DOI Smokejumper Pilot Operations Guide and policies and procedures prescribed in the Interagency Standards for Fire Operations Handbook.
- 8.9 LAW ENFORCEMENT OPERATIONS**  
BLM Law Enforcement personnel often cooperate with other law enforcement agencies in their mission. This sometimes involves the use of State, local, military, and other federal aircraft. Use of Cooperator Aircraft for law enforcement missions is authorized only when specific Memorandum of Understanding (MOU) and/or Letters of Approval (LOA) between the cooperating agencies and Aviation Management Directorate (AMD) are in place. Check with local aviation management to ensure that planned activities are covered by existing MOU's/LOA's.
- 8.10 AERIAL PHOTOGRAPHY**  
The Bureau of Land Management in Alaska manages an aerial photography program to support BLM programs, such as, Cadastral boundary survey, the Alaska Land Transfer Program, renewable resource management, scientific studies, minerals management, and law enforcement. For photogrammetric mapping, BLM has the ability to acquire aerial photography with a calibrated aerial camera, Track Air flight management system, with a U-21 contract aircraft fitted with a camera port. All Flights will comply with appropriate policy, guides, and SOP's. No Flights are authorized over 18,000 feet MSL without special operations, equipment, and approval by the Office of the State Aviation Manager, Aviation Directorate Management (AMD), and National Aviation Office (NAO).
- 8.11 RESOURCE HELICOPTER MANAGER PROGRAM**  
A Project Helicopter Manager position is established within Alaska Fire Service Sothern Zone to strengthen the resource aviation program. Potential catastrophic events indicate a continuing need for education and on site supervision by experienced helicopter managers. It is not the intent of the aviation program to "take up a seat" during the mission. The employees assigned to this position will work toward accomplishing the tasks listed below.

The list is not intended to be all inclusive, but a starting point for managers and resource specialists to consider as they accomplish their mission.

- Assist managers in the planning, development and completion of the Project Aviation Plan and Risk Assessment per the BLM Alaska State Aviation Plan
- Assist via on the job field safety and awareness training to employees that use aviation resources in accomplishing the BLM mission in Alaska.
- Train field personnel in setting up flight following procedures, external load work, transport of Hazmat material, helispot management, & load calculations.
- Assist in developing the field skills of employees whom have completed the Project Helicopter Manager class.
- Ensure that field aviation operations are being conducted in a safe manner and correcting unsafe practices on the spot. This will be done in a professional manner that assists field personnel, with the intent of not hindering the progress of their project.
- Work with Project Managers to ensure that OAS-23s are completed properly and routed to the appropriate office as a completed and correct document.
- Perform the duties of Project Helicopter Manager whenever there is an identified need.
- Perform the duties of Helicopter Manager for VIP/SES flights.

In the Southern part of the state, the Resource Helicopter Manager will be working as part of Zone Fire Staff (AK-315). Their time and assistance can be scheduled through the dispatch office in Anchorage (907-267-1360).

If you have any questions or any suggestions to improve the aviation safety program, please contact any of the aviation staff.

#### 8.12 UNMANNED AIRCRAFT SYSTEMS (UAS)

Interest and possible use of Unmanned Aerial Systems (UAS), formerly Unmanned Aerial Vehicles (UAV), are increasing. The FAA is in the process of final rule making regarding UAS operations. Operations of UAS under FAA Advisory Circular AC 91-57 (Radio Controlled Aircraft) are intended for **hobbyists** and not government or commercial operators. Certificate of Authorizations (COA) for all UAS operations are required.

The FAA has requested that there be one representative from each agency (i.e. DOI, USFS, US NAVY etc) in the Unmanned Aircraft System Group. The FAA has designated the Aviation Management Directorate as the representative for the DOI in the COA process [http://www.faa.gov/ats/ata/coa\\_poc.htm](http://www.faa.gov/ats/ata/coa_poc.htm). Currently the NBC-AMD Alaska Regional Director, Harry Kieling, (907) 271 5626, is the representative for UAS within the DOI. The Certificate of Authorization (COA) process is lengthy and few have been approved, taking months to process.

All requests to utilize UAS must be routed through the respective State Aviation Managers to the National Aviation Office.

## 9.0 Project Planning

### 9.1 AVIATION PROJECT PLANNING:

When planning individual aviation projects every effort should be made to employ “best practices” that ensure the safety of each person and the equipment associated with each flight. Flights may deviate neither from plans nor from Department policy and procedures, except for safety of flight considerations.

Project planning includes, as a minimum, the following:

#### Point to Point Flights

- Review and complete **Flight Request Checklist (Attachment 5)**.
- Provide Aviation Dispatcher the 9400-1a **Aircraft Flight Request (Attachment 6)** filled out with information from the **Flight Request Checklist**. Flight Request should be submitted at least 3 days prior to the planned flight.
- Contact dispatch office to confirm aircraft requests and requirements.

#### Special Use Flights (Fire Missions are Exempt)

- Review and complete **Flight Request Checklist (Attachment 5)**.
- Provide Aviation Dispatcher the 9400-1a **Aircraft Flight Request (Attachment 6)** filled out with information from the **Flight Request Checklist**.
- Completion of **Project Aviation Safety Plan and Project Risk Assessment (Attachments 7 and 9)** This worksheet should be completed by the Project Manager. **(Coordination with Unit or State Level Aviation Management is encouraged.)** The worksheet should then be reviewed by the Field Office Manager or delegate, who can make appropriate Project Plan and Risk Management approval decisions based on the available information. The reverse side of the form 9400-1a may be used as a PASP for low complexity, one-time special use missions.
- Copies of the approved **Project Aviation Safety Plan and Project Risk Assessment shall** be forwarded to the appropriate Dispatch Office and State Aviation Office **prior** to the flight. This should be done at least 3 days prior to commencement of project flights.
- Passengers on a Special-Use flight must be crewmembers considered to be essential to the mission and must be qualified through required training (see OPM 06-04) and experience.
- Contact Dispatch office to confirm aircraft requests and requirements.

## 10.0 AVIATION FACILITIES

### 10.1 OPERATIONAL BASES

Operational bases are facilities that are permanent installations and are used on a continuous or seasonal basis for aviation operations, including heliports, retardant bases, and airport facilities. These include aviation facilities on BLM property and facilities on non-BLM land where BLM has primary responsibility for operations, maintenance, and oversight.

#### 10.1.1 CONSTRUCTION AND MAINTENANCE

The size and extent of aviation installations are commensurate with the expected aircraft use at any given site. Design criteria provide for operational safety as well as adequate work/rest environment for aircrew and personnel assigned. Facilities are constructed and maintained according to BLM Manual 9400 and 9111. Field Offices are responsible for the **safety** and **security** of personnel and equipment, purchase/lease, construction, maintenance, and utilities relating to aviation facilities.

#### 10.1.2 SAFETY

State Office Divisions, Field Offices, and Fire Management Zones **shall** ensure that Aviation facilities comply with safety regulations outlined in Departmental manuals, guides, handbooks, and the Occupational Safety and Health Act (OSHA). Building, equipment, and landing surfaces will be inspected by local Aviation Managers annually to identify maintenance or safety deficiencies. Modifications and repairs are made prior to the operational season. The State Aviation Manager inspects aviation facilities at least once every two years.

### 10.2 TEMPORARY BASES

Temporary bases are sites used on a temporary or intermittent basis. (i.e., helispot and remote airstrips) Sites not located on BLM land must be pre-approved by the land owner and appropriate BLM management. Each site should be cataloged as to location, description, local hazards, use procedures, agreements, and contacts. Inspections and maintenance are completed as necessary to meet agency safety standards.

**10.3 ZONE/FIELD OFFICE SOP'S**

Each Fire Management Zone and Field Office with management responsibility for an Aviation facility will produce a SOP that addresses the day-to-day operational procedures, security, and safety practices. This document should be updated each year and kept on site and be clearly accessible to all personnel and contractors.

## 11.0 Attachments

1. BLM Training Matrix
2. Position Description Matrix
3. Aviation Management Training & Qualifications.
4. Flight Planning Decision Matrix
5. Flight Request Checklist
6. 9400-1a Aircraft Flight Request Form
7. Project Aviation Safety Plan/Risk Assessment
8. Flight Following Worksheet
9. Risk Management Analysis
10. Aviation Documentation Matrix
11. Copies of existing Waivers
12. **SAFECOM** form
13. Aircraft Pre-Accident Plan.
14. Aviation Watch Out Situations
15. R-44 Helicopter Information

## IAT Requirements Matrix January 2006

No.	Positions Modules (Bold = available online.)	Passenger*	Aircrew Member	Fixed-Wing Flight Manager	Fixed-Wing Flight Manager Special Use	Helicopter Flight Manager	Helicopter Manager - Resource	Aviation Dispatcher	Project Aviation Manager	Aviation Manager	Supervisor	COR/PI	Aviation Technical Specialist
<b>A-101</b>	<b>Aviation Safety (all aircraft)</b>	AS	3	3	3	3	3	3	X	X	X		AS
A-103	FAA NOTAM System							X		X			
<b>A-104</b>	<b>Overview of Aircraft Capabilities &amp; Limitations</b>		AS	AS	AS	AS		X	AS				
<b>A-105</b>	<b>Aviation Life Support Equipment</b>	AS	3	3	3	3	3	3	X	X	X		AS
<b>A-106</b>	<b>Aviation Mishap Reporting</b>	AS	3	3	3	3	3	3	X	X	X	X	
<b>A-107</b>	<b>Aviation Policy &amp; Regulations-I</b>		AS	AS	AS	AS	X	X	X	X	3		
<b>A-108</b>	<b>Preflight Checklist &amp; Briefing/Debriefing</b>	AS	3	3	3	3	3	3	X	X	X		
<b>A-109</b>	<b>Aviation Radio Use</b>		AS		AS	AS	AS	X	AS				
<b>A-110</b>	<b>Aviation Transportation of HAZMAT (if involved)</b>		3	3	3	3	3	3	3	3			AS
<b>A-111</b>	<b>Flight Payment Document</b>			3	3	X	X	X	X	X		X	
<b>A-112</b>	<b>Mission Planning &amp; Flight Request Process</b>			3	3	X	X	X	X	X			
<b>A-113</b>	<b>Crash Survival</b>	AS	3	3	3	3	3	3	X	X	X		AS
A-115	Automated Flight Following			AS	X	X	X	X	AS	X	AS		AS
<b>A-116</b>	<b>General Awareness Security Training</b>		X	X	X	X	X		X	X			AS
<b>A-200</b>	<b>Annual Mishap Review</b>	AS	1	1	1	1	1	1	1	1	1	1	AS
<b>A-201</b>	<b>Overview of Safety &amp; Accident Prevention Program</b>								X		3		AS
<b>A-202</b>	<b>Interagency Aviation Organizations</b>						AS	X	AS	X			AS
A-203	Basic Airspace				AS	AS	AS	X	AS	X			
<b>A-204</b>	<b>Aircraft Capabilities &amp; Limitations</b>			AS	X	X	X	X	X	X			
A-205	Risk Management-I	AS	AS	X	X	X	X	X	X	X	3		AS
A-206	Aviation Acquisition and Procurement				AS		X	X	X	X		X	
<b>A-207</b>	<b>Aircraft Flight Scheduling</b>						AS	X	AS	AS			
A-208	Aircraft and Pilot Approval								AS	X			AS
A-209	Helicopter Operations (+helo aircrew only)	AS+				X	X						
A-210	Helicopter Field Exercise (+helo aircrew only)	AS+				AS	AS						
A-211	Project Aviation Plans						R3		X	X	AS		
A-212	Aircraft Rental Agreement/Blanket Purchase Agreement				X	X	X	X	X	X		X	AS
<b>A-216</b>	<b>Aviation Operations Security</b>					X			X				
A-218	Aircraft Pre-Use Inspection				X		X	AS	AS	X		X	
A-219	Helicopter Transport of External Cargo	AS					AS		AS				
A-220	Train-The-Trainer												
A-221	Advanced Trainer Competency												
A-222	Interagency Aviation Trainer Competency												
A-223	Water Ditching and Survival Train-The-Trainer												
A-300	Aviation Lessons Learned							R3			3		
A-301	Implementing Aviation Safety & Accident Prevention				AS				X	X			
A-302	Personal Responsibility & Liability	AS			X		R3	AS	X	X	3	X	AS
A-303	Human Factors in Aviation	AS			X		R3	X	AS	X	3		
A-304	Aircraft Maintenance						X					X	
A-305	Risk Management-II				AS	AS	X	X	X	X	3		
A-306	Aviation Contract Administration Parts I & II						3			X		3	
A-307	Aviation Policy and Regulations-II				AS		R3	X	X	X	3		
A-308	Aviation Policy and Regulations-III								AS	X			
A-309	Helicopter Flight Manuals						R3						
A-310	Overview of Crew Resource Management	AS			X	AS	R3	AS	X	AS			
A-311	Unit Aviation Planning									X			
A-312	Water Ditching and Survival** (beyond power-off gliding)	AS			AS	AS	AS						AS
A-314	Aviation Program Overview/FS Agency Administrators												
<b>A-316</b>	<b>Aviation Facility Security Training</b>									X	X		X
A-401	Management of Aviation Safety Programs							AS	AS	AS			
A-403	Human Factors for Aviation Managers				AS		AS	AS	AS	AS			
A-410	Crew Resource Management (needs description)				AS		AS		AS	AS			
	Mission-Specific Training as Required by Agency	AS			AS		AS		AS	AS			

\*Interagency Aviation User Pocket Guide (NFES 1373--Preflight briefing required by pilot).  
 \*\*For those who fly beyond power-off gliding distance from shore.  
 AS=When specified by DOI bureaus or U.S. Forest Service.  
 R3=Required refresher triennial training.

X=requires completion once.  
 1=Requires completion every year.  
 2=Requires completion every 2 years.  
 3=Requires completion every 3 years.

# Attachment 2

## POSTION DESCRIPTION MATRIX

Passenger	A person being transported, by aircraft, on a flight and is briefed by a pilot or Flight Manager or on a flight with a Flight Manager.
Aircrew Member	A person working in or around aircraft and is essential to ensure the safety and successful outcome of the mission.
Fixed-wing Flight Manager	A BLM representative who works jointly with the Fixed-wing pilot-in-command to ensure a safe, efficient flight for BLM employees.
Helicopter Flight Manager	A BLM representative who works jointly with the helicopter pilot-in-command to ensure a safe, efficient flight for BLM employees. (Short term – less than two (2) days)
Project & Fire Helicopter Manager	A person assigned to a project (non-fire) helicopter responsible for coordinating, scheduling, managing and supervising helicopter operations. See IHOG, Chapter 2 for incident and non-fire qualification and training standards.
Project Manager	A person, who plans, organizes, and manages the aviation operations of the project using one or more aircraft simultaneously.
Aviation Dispatcher	A dispatcher who receives, process and places orders for aircraft, provides flight following and other aviation support services.
Zone/Unit Aviation Manager	Individual with aviation management responsibilities for a local unit and serves as the focal point for aviation management.
State & National Managers	Individual responsible for aviation operations within a geographical area defined by the agency.
Flight Crew – Pilot	A pilot or flight crew person assigned to duty in an aircraft during a flight and who holds a valid FAA Airman's Certificate and Airman's Medical Certificate.
Supervisor & Managers	Those who supervise employees who use aircraft to accomplish agency programs, first and second line supervisors.
Contracting Officer's Representative	A person responsible for compliance with aircraft contract provisions and specifications with authority to initiate and sign correspondence.
Agency Administrator	A line officer responsible and accountable for using aviation resources to accomplish agency program objectives.

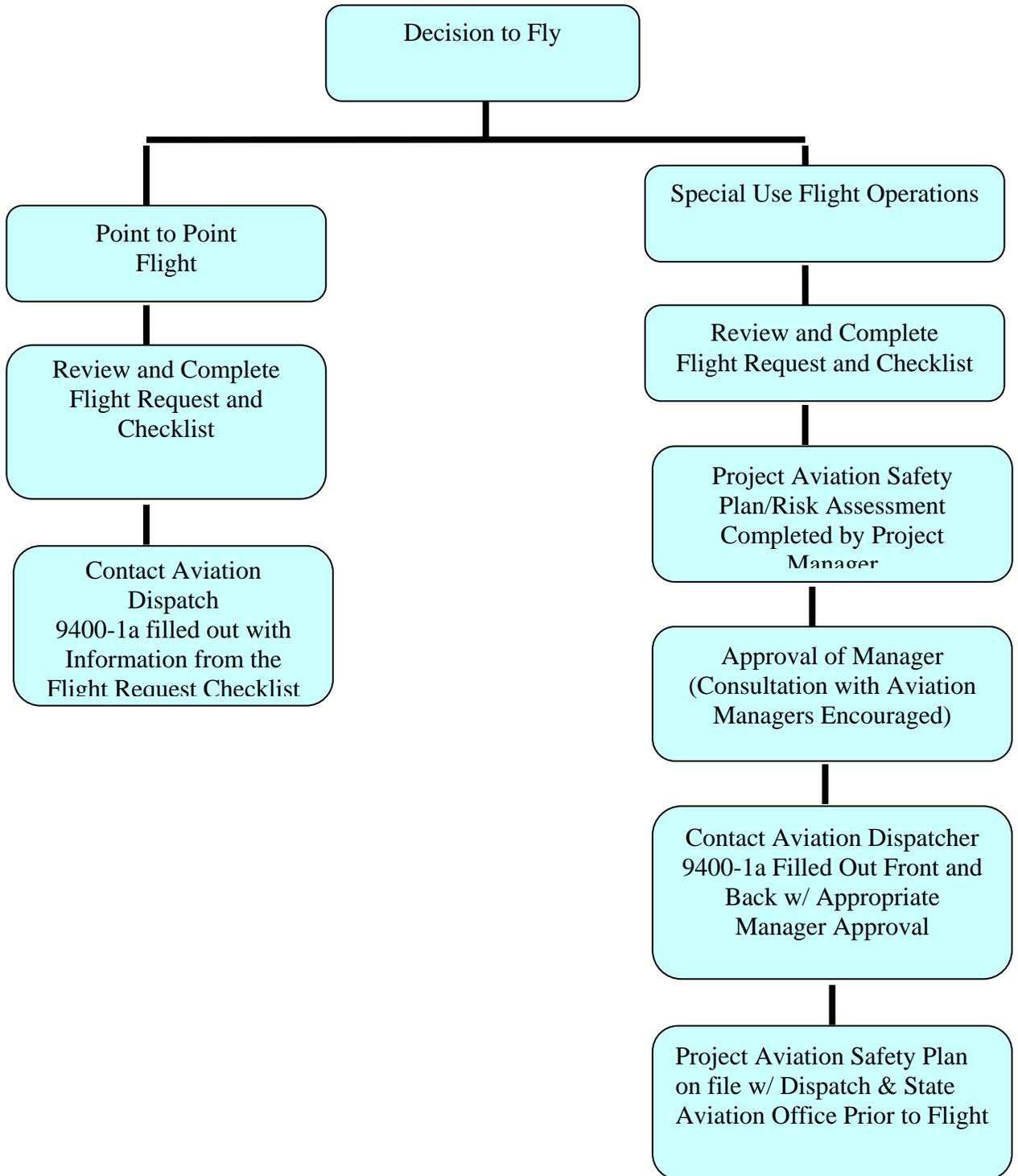
# Attachment 3

## AVIATION MANAGEMENT TRAINING & QUALIFICATIONS

POSITION	MINIMUM TRAINING REQUIRED	CURRENCY	REMARKS
Aircrew	Safety Briefing B-3	Every Flight Every 3 years	Briefing to be specific to airplane or helicopter as needed. B3 will satisfy for both categories of aircraft.
Passenger	Aircraft Preflight Safety Briefing (B1, B2 or B3 is recommended)	Every Flight	
Government Pilots	Aviation Management Seminar (M1) or Interagency Aviation Mgt & Safety plus Accident Prevention Seminar (M7) and DOI Flightcrew Workshop (M8)	None None Every 2 years	
Supervisors (Supervise programs engaged in recurring aviation activity)	Aviation Training for Supervisors (M3) or Interagency Aviation Mgt & Safety	Every 3 years	Aviation Management Seminar (M1) is also recommended
Line Managers (Manage programs utilizing aviation)	Aviation Overview for Managers (M2) or Aviation Management Seminar (M1)	Every 3 years	Accident Prevention Seminar (M7) is also recommended
COR/COTR	Aircraft Contract Administration (M4)	Every 3 years	
Field Aviation Managers	Aviation Management Seminar (M1) or Interagency Aviation Mgt & Safety	Every 3 years	Accident Prevention Seminar (M7) is also recommended
State Aviation Manager	Aviation Management Seminar (M1) or Interagency Aviation Mgt & Safety PLUS: Accident Prevention Seminar (M7)	Every 3 years	Senior Level Aviation Management is also recommended
Interagency Aviation Trainer (Basic)	Train The Trainer (M5) and Aviation Trainer Currency	None Every 3 years	Aviation Management Seminar (M1) is also recommended
Interagency Aviation Trainer (Supervisory)	Above PLUS: Aviation Management Seminar (M1)	Every 3 years	Accident Prevention Seminar (M7) is also recommended

# Attachment 4

## Flight Planning Decision Matrix



# Attachment 5

## **AIRCRAFT REQUEST CHECKLIST**

There are a number of pieces of information you need to relay to the vendor or the appropriate dispatch office at this time. These include:

1. The date and time of the flight.
2. The itinerary (routing) of the flight.
3. The number of insured passenger seats needed.
4. The weight and bulk of any cargo to be hauled. Describe any cargo with unusual dimensions and any hazmat.
5. Any unusual flying activities (e. g. gravel bar landings) or special-use requirements. If the flight will be special-use, ensure that the special-use plan has been approved.
6. Any need for a copilot or a second flight crew.
7. The BLM charge code and the OAS billee code for the flight.
8. The type of charter needed: whether wet or dry and whether point-to-point or guarantee.
9. Whether BLM or the vendor is providing the pilot's subsistence (for guarantee-rate flights only).
10. Where to report for duty at the start of the mission.
11. The procedures you plan to use for flight-following.
12. The name of the Flight Manager.
13. Any need for special fuel caches along the flight route.
14. If the aircraft is a helicopter being hired for fire work, it must be equipped with a 9600 radio (and usually should be wired for a water bucket).

The phone number for the AICC Aircraft desk ([907-356-5681](tel:907-356-5681), [907-356-5682](tel:907-356-5682) or [800-237-3646](tel:800-237-3646))

The phone number South Zone Dispatch ([907-267-1360](tel:907-267-1360), [907-267-1378](tel:907-267-1378) or [800-478-1263](tel:800-478-1263))

# Attachment 6

**AIRCRAFT FLIGHT REQUEST FORM 9400-1a (Next Page)**



HAZARD ANALYSIS AND DISPATCH/AVIATION MANAGER CHECKLIST

<p>1. MISSION FLIGHT HAZARD ANALYSIS (Fire flights exempt provided a pre-approved plan is in place). The following potential hazards in the area of operations have been checked, have been identified on flight itinerary map, and will be reviewed with Pilot and Chief-of-Party prior to flight:</p>		
<input type="checkbox"/> Military Training Routes (MTRs) or Special-Use Airspace (MOAs, Restricted Areas, etc.)  <input type="checkbox"/> Areas of high-density air traffic (airports); Commercial or other aircraft  <input type="checkbox"/> Wires/transmission lines; wires along rivers or streams or across canyons  <input type="checkbox"/> Weather factor: wind, thunderstorms, etc.	<input type="checkbox"/> Towers and bridges  <input type="checkbox"/> Other aerial obstructions:  <input type="checkbox"/> Pilot flight time/duty day limitations and daylight/darkness factors  SUNRISE _____  SUNSET _____  <input type="checkbox"/> Limited flight following communications	<input type="checkbox"/> High elevations, temperatures, and weights:  MAX LANDING ELEV (MSL) _____  MIN FLIGHT ALTITUDE AGL _____  <input type="checkbox"/> Transport of hazardous materials  <input type="checkbox"/> Other: Employee working in wet conditions. Rubber boots approved per waiver 9400 (FA-140) dated 5/23/97.
<p>II. DISPATCHER/AVIATION MANAGEMENT CHECKLIST</p>		<p>III. APPROVALS</p>
<input type="checkbox"/> Pilot and aircraft carding checked with source list and vendor, carding meets requirements  <input type="checkbox"/> <b>OR</b> Necessary approvals have been obtained for use of uncarded cooperator, military, or other-government agency aircraft and pilots  <input type="checkbox"/> Check with vendor that an aircraft with sufficient capability to perform mission safely has been scheduled  <input type="checkbox"/> Qualified Aircraft Chief-of-Party has been assigned to the flight (noted on reverse)  <input type="checkbox"/> All DOI passengers have received required aircraft safety training  <input type="checkbox"/> <b>OR</b> Aviation manager will present detailed safety briefing prior to departure  <input type="checkbox"/> Bureau Aircraft Chief-of-Party will be furnished with Chief-of Party/Pilot checklist and is aware of its use	<input type="checkbox"/> Means of flight following and resource tracking requirements have been identified  <input type="checkbox"/> Flight following has been arranged with another unit if flight crosses jurisdictional boundaries and communications cannot be maintained  <input type="checkbox"/> Flight hazard maps have been supplied to Chief-of-Party for non-fire low-level missions  <input type="checkbox"/> Procedures for deconfliction of Military Training Routes and Special-Use Airspace have been taken  <input type="checkbox"/> Chief-of-Party is aware of PPE requirements  <input type="checkbox"/> Cost analysis has been completed and is attached  <input type="checkbox"/> Other/Remarks:	<p><b>NOTE:</b> Reference Handbook 9420 for approval(s) required.</p> <p>A. MISSION FLIGHT: Hazard Analysis Performed By:                   _____                  (Chief-of-Party Signature)</p> <p>B. MISSION FLIGHTS: Hazard Analysis Reviewed By:                   _____                  (Dispatcher or Aviation Manager Signature Required)</p> <p>C. IF Non-Fire, One-Time (Non-Recurring), Special-Use Mission, Signature of Line Manager is Required**:                   _____ (Line Manager Signature)      _____ (Date)</p> <p>D. This Flight is Approved By:                   _____ (Authorized Signature)      _____ (Date)</p> <p>**For recurring Special-Use Mission, signature is required on Special-Use Air Safety Plan, and not required here.</p>

# Attachment 7

## PROJECT AVIATION SAFETY PLAN INSTRUCTIONS

**PROJECT NAME AND OBJECTIVES:** A Brief description of the project and its objectives.

**JUSTIFICATION:** Indicate why the project will require the use of aircraft in Special Use Flight conditions/environments and list the most practical alternatives for completion of the project.

**PROJECT DATE(S):** Dates project will begin and end. These may be approximate, since exact dates of flights may not be known at the beginning of the year.

**LOCATION:** Enter descriptive location and include a map clearly showing areas where flights will be made; aerial hazards must be clearly indicated.

**PROJECTED COST OF AVIATION RESOURCES:** Enter cost coding, projected flight hours with cost, projected misc. expenses (overnight charges, service truck mileage, etc.), and total cost of project.

**AIRCRAFT:** If known, identify vendors that own aircraft anticipated to be used, registration number, aircraft type, date of aircraft data card expiration, and missions for which aircraft is approved.

**PILOT:** If known, identify pilot(s), type of aircraft qualified in, type of missions qualified for, and pilot card expiration date. Also, list specific experience or skills desired. (ex. – experience w/N. Slope operations, carded for low level flight)

**PARTICIPANTS:** List individuals involved in flights, their respective qualifications (Helicopter Manager, Project Flight Manager if deemed non-complex, Passenger, etc.), dates of last aviation training, and include individuals' project responsibilities. Attach organizational chart if applicable.

**FLIGHT FOLLOWING:** Identify the procedures to be used. Identify authority if additional local on-scene project flight following can be instituted. Attach communications plan with assigned frequencies if applicable.

**AERIAL HAZARD ANALYSIS:** The project Aviation Manager develops an aerial hazard analysis with attached map. Flights made in confined areas (e.g. deep, narrow canyons) required that a prior ground and/or aerial survey of hazards be made. A copy of the hazard map shall be provided to the pilot prior to any project flights.

**PROTECTIVE CLOTHING/EQUIPMENT:** Identify the protective equipment and clothing necessary for the particular operation. Survival equipment (extra water, floatation devices, sleeping bags, etc.) beyond the normal PPE complement that may be require.

**LOAD CALCULATIONS AND WEIGHT AND BALANCE:** The pilot is responsible for the accurate completion of load calculations. Trained aviation personnel shall ensure that aircraft scheduled are capable of performing the mission(s) safely and within the capabilities of the aircraft selected. The helicopter Manager shall ensure that manifests and load calculation/weight and balance calculations are completed properly.

**RISK ASSESSMENT:** Enter overall risk level. Project Manager **will** complete the “**Risk Analysis Worksheet**” and attach to the **Special Use Flight Safety Plan**.

**AIRSPACE COORDINATION:** Identify if projected flight paths/project area involves military Special Use Airspace and/or Military Training Routes (MTR's), or Low Altitude Tactical Navigational Areas (LATN). Current DOD Area Planning AP/1B charts, NOAA Aeronautical Sectional, and any DOD/BLM LOA's/MOU's are requisite ingredients of this planning process. Timely advance notice is required for the Military to plan/schedule their activities around BLM “Special Use” activities. If advance planning cannot be accomplished then “Special Use” operations will be scheduled when military routes are not hot. This will require close coordination between the Project Aviation Manager, Field Office Manager, and respective Dispatch Center. Mission planning involving Military Airspace shall include “Risk Management Considerations.”

**UNIMPROVED LANDING SITES:** If mission profile includes landing at unspecified, unimproved landing sites a fully qualified Helicopter Manager, Project Flight Manager (if mission deemed non-complex in nature ref: IHOG Chapter 2, Chart 2-3) shall supervise the loading/unloading of passengers if applicable.

**STANDARD OPERATION PROCEDURES:** Shall be in accordance with 350 – 354 Departmental Manual, 9400 BLM Aviation Policy (presently in draft format), and Interagency Helicopter Operations Guide(IHOG).

**PREWORK MEETING/PRE-OPERATIONAL SAFETY BRIEFING:** Identify participants, location and time(s) if deemed required.

**SIGNATURES:**

I reviewed the contents of this Special Use Flight Plan and Risk Analysis and find that it conforms to existing BLM policies and identifies the necessary precautions that flights of this nature must address. No Hazard for this project is greater than **a Medium Risk as Identified** in the Risk Analysis.

Prepared By: \_\_\_\_\_  
Project Leader Date

Reviewed By: \_\_\_\_\_  
Line Supervisor Date

The Risk Analysis has identified that there is a **High Risk to Employees** involved in this Project. I reviewed the contents of this Special Use Flight Plan and Risk Analysis and find that it conforms to existing BLM policies and identifies the necessary precautions that flights of this nature must address.

Reviewed By: \_\_\_\_\_  
Field Office Manager Date

Reviewed By: \_\_\_\_\_  
State Aviation Manager Date

The Risk Analysis has identified that there is an **Extremely High Risk to Employees** involved in this Project. I reviewed the contents of this Special Use Flight Plan and Risk Analysis and find that it conforms to existing BLM policies and identifies the necessary precautions that flights of this nature must address

Reviewed By: \_\_\_\_\_  
State Director/Associate State Director Date

# PROJECT AVIATION SAFETY PLAN **TEMPLATE**

(To be completed by Project Manager)

**PROJECT NAME & OBJECTIVES:**

**JUSTIFICATION:**

**PROJECT DATE(S):**

**LOCATION:**

**PROJECTED COST OF AVIATION RESOURCES:**

Cost Code: \_\_\_\_\_

**Desired AIRCRAFT:**

**DESIRED PILOT QUALIFICATIONS:**

**PARTICIPANTS:**

**METHOD OF FLIGHT FOLLOWING:**

<b>Radio Frequencies</b>			
Simplex FM	Receive:	Transmit:	Tone:
Repeat FM	Receive:	Transmit:	Tone:
Air-to-Ground – FM	Receive:	Transmit:	Tone:
Air-to-Ground – (Secondary) – FM	Receive:	Transmit:	Tone:
Long Distance Flight Following – FM	Receive:	Transmit:	Tone:
Local Flight Following – AM	Receive:	Transmit:	Tone:
Air-to-Air – AM	Receive:	Transmit:	Tone:
Flight Following and Tracking	By Phone	Radio:	Request #
FAA VFR with 60 Minute Check In	FAA IFR:	Agency:	Flight#
<b>Scheduling Dispatch Phone:</b>	<b>Contact::</b>		
	<b>Notes:</b>		
<b>Destination Dispatch Phone:</b>	<b>Contact:</b>		
	<b>Notes:</b>		
<b>Aircraft Home Base Location:</b>			
<b>Ferry Start Time:</b>		<b>Ferry Ending Time:</b>	
<b>Ferry Flight Following:</b>		<b>Agency:</b>	<b>FAA:</b>

**AERIAL HAZARD ANALYSIS:**

PROTECTIVE CLOTHING/ EQUIPMENT:

LOAD CALCULATIONS AND WEIGHT AND BALANCE:

RISK ANALYSIS:

AIRSPACE COORDINATION:

UNIMPROVED LANDING SITES:

STANDARD OPERATING PROCEDURES:

PREWORK MEETING/PRE-OPERATIONAL SAFETY BRIEFING:

SIGNATURES:

I reviewed the contents of this Special Use Flight Plan and Risk Analysis and find that it conforms to existing BLM policies and identifies the necessary precautions that flights of this nature must address. No Hazard for this project is greater than a **Medium Risk as Identified** in the Risk Analysis.

Prepared By: \_\_\_\_\_  
Project Leader Date

Reviewed By: \_\_\_\_\_  
Line Supervisor Date

The Risk Analysis has identified that there is a **High Risk to Employees** involved in this Project. I reviewed the contents of this Special Use Flight Plan and Risk Analysis and find that it conforms to existing BLM policies and identifies the necessary precautions that flights of this nature must address

Reviewed By: \_\_\_\_\_  
Field Office Manager Date

Reviewed By: \_\_\_\_\_  
State Aviation Manager Date

The Risk Analysis has identified that there is an **Extremely High Risk to Employees** involved in this Project. I reviewed the contents of this Special Use Flight Plan and Risk Analysis and find that it conforms to existing BLM policies and identifies the necessary precautions that flights of this nature must address

Reviewed By: \_\_\_\_\_  
State Director/Associate State Director Date

# Attachment 8

## FLIGHT FOLLOWING WORKSHEET/AGREEMENT AGREEMENT FOR FLIGHT FOLLOWING

### Flight Information

Aircraft User/Flight Manager/Chief of Party \_\_\_\_\_

Aircraft N# - make and model \_\_\_\_\_

Type of mission \_\_\_\_\_

Date of flight \_\_\_\_\_

**Check off whichever applies and write in any further info. In space provided:**

Check in method:  Landline  Iridium (list number): \_\_\_\_\_  radio

Call before departure

Call upon arrival

File with FAA

Flight follows with Appropriate Dispatch (907 \_\_\_ - \_\_\_)

Flight follows locally

Flight follow other (please list): \_\_\_\_\_

Check-ins during flight/project operations (please list times/info):  
\_\_\_\_\_  
\_\_\_\_\_

Describe route of flight and provide map if not direct \_\_\_\_\_  
\_\_\_\_\_

Special instructions and/or any further information, please list:  
\_\_\_\_\_  
\_\_\_\_\_

This document constitutes an exception to required flight following reporting each hour as described in 351 DM 1.4C(b). The signature below signifies an agreement for flight following between the aircraft user and a dispatch office. If one of the agreed upon check-in times are missed, an aircraft will be dispatched one hour after said time for search and rescue. The office of the aircraft user will bear the costs of the search and rescue aircraft.

### **Signed and agreed to by:**

Aircraft User/Flight Manager/Chief of Party \_\_\_\_\_

Dispatch center with flight following responsibility \_\_\_\_\_

# Attachment 9

## RISK MANAGEMENT ANALYSIS

			HAZARD PROBABILITY				
			Frequent	Likely	Occasional	Seldom	Unlikely
			A	B	C	D	E
SEVERITY	Catastrophic	I	Extremely				
	Critical	II	High	HIGH			
	Marginal	III		Medium		Low	
	Negligible	IV					
Severity		Effect					
I. CATASTROPHIC		Death or permanent disability, system loss, major property damage					
II. CRITICAL		Permanent partial disability, temporary total disability in excess of 3 months major system damage, significant property damage					
III. MARGINAL		Minor injury, lost workday accident, compensable injury/illness, minor system damage, minor property damage					
IV. NEGLIGIBLE		First aid or minor medical treatment, minor system damage					
Hazard Probability							
<b>A. FREQUENT</b>		Individual worker/Item		--Occurs often in career/equipment service life			
		All employees exposed or item inventory		--Continuously experienced			
<b>B. LIKELY</b>		Individual worker/Item		--Occurs several times in career/equipment service life			
		All employees exposed or item inventory		--Occurs frequently			
<b>C. OCCASIONAL</b>		Individual worker/Item		--Occurs several times in career/equipment service life			
		All employees exposed or item inventory		--Occurs sporadically; expect to occur several times in inventory service life			
<b>D. SELDOM</b>		Individual worker/Item		--Possibility of occurrence in career/equipment service life			
		All employees exposed or item inventory		--Remote chance of occurrence; expect to occur sometime in inventory service life			
<b>E. UNLIKELY</b>		Individual worker/Item		--Can assume will not occur in career/equipment service life			
		All employees exposed or item inventor		--Possible, but not probable; expect to occur only very rarely			
<b>NOTE:</b> Experience and exposure affects probability of occurrence							
Management Acceptance of Risk Levels							
<b>EXTREMELY HIGH RISK</b>				State Director/Associate State Director			
<b>HIGH RISK</b>				Field Office Manager			
<b>MEDIUM RISK</b>				Branch Chief			
<b>LOW RISK</b>				Line Supervisor			

### Risk Management Work Sheet

A. Mission or Task:		B. Date/Time Group Begin: End:			C. Date Prepared:	
D. Prepared By: (Rank, Last Name, Duty Position)						
E. Identify Hazard	F. Initial Risk	G. Develop Controls	H. Residual Risk	I. How To Implement Controls	J. How To Supervise	
<p>K. Determine overall mission/task risk level after controls are implemented (Circle One)</p> <p style="text-align: center;"> <span style="margin-right: 100px;">LOW (L)</span> <span style="margin-right: 100px;">MODERATE (M)</span> <span style="margin-right: 100px;">HIGH (H)</span> <span>EXTREMELY HIGH (E)</span> </p> <p style="text-align: center;"> <span style="margin-right: 100px;">Crew Leader:</span> <span style="margin-right: 100px;">Crew Leader:</span> <span style="margin-right: 100px;">Incident Commander:</span> <span>Reduce Risks</span> </p>						

# Attachment 10

## Aviation Documentation Matrix

### AVIATION DOCUMENTATION MATRIX

DOCUMENT	PURPOSE	RESPONSIBLE	FREQ	ACTION/REMARKS
9400-1a Flight Request/Schedule (May use on-line Alaska Flight Request System. See Chapter 9 of Alaska State Aviation Plan.)	-Initiates all flights  -Documents aircraft, pilot and vendor info, itinerary, charge code, passengers and weights, etc.	-Requesting individual initiates form  -Supervisor of requestor approves flight with signature  -Aviation Mgr or Dispatcher completes form; procures aircraft	-At least 3 days prior to any flight -Dispatch may be able to process in less than three days depending on work load and availability of aircraft -Aircraft Resource Order may be used for Fire flights	-Copy given to Flight Manager and/or receiving or en route dispatch  -Retain copy in local file for three years
Project Aviation Safety Plan (PASP)	-Identify aviation hazards for Special Use flights  -Perform risk assessment and analysis; pre-plan Special Use flights to mitigate risks  -Approve essential passengers	-Project Manger completes  -FO Line Manager and State Aviation Manager approves with signature	-At least 3 days prior to Special Use flight	-Plan reviewed with pilot, passengers and ground crew  -Reverse of 9400-1a may be used on simple, one-time Special Use flights.  -Retain copy in local file for three years
OAS-110 Travel Cost Analysis	-Determine most cost effective mode of transportation for administrative/resource flights  -Required for SES flights to satisfy OMB Circular A-126	-Local Aviation Mgr or Dispatcher	-At least 10 days prior to flight  -Every SES flight (except "required use" or "mission" flights with SES pax)	-Fax to DOI Solicitor Office for SES flight approval  -Retain copy in local files for three years
GSA 3641 Senior Federal Travel Report	-Report all Senior Federal employee (SES) travel in Government aircraft  -Required by OMB A-126	-Local Aviation Mgr or Dispatcher	-Every SES flight -Consolidate and report every 6 months for semi-annual periods:	-Field Office Aviation Mgr submit to State Aviation Manager -SAM consolidates, submits to NAO -Retain copies at local level
OAS-106 Aviation Course Presentation Record	-Document each Aviation training session presented; date, time, location, instructors and trainees	-Local Aviation Manager or Course Coordinator	-Course completion	-Send to OAS if IAT instructed  -Retain copy in files

DOCUMENT	PURPOSE	RESPONSIBLE	FREQ	ACTION/REMARKS
Aviation Training and Qualification Record	-Document individual employee aviation training completed and aviation position qualifications  -Used for review/approval and employee development	-Employee and Supervisors.	-Update as necessary  -End of fiscal year or prior to field season	-Local mgr or supervisor reviews with employee; approves with signature  -Must be supported with training and experience records  -Retain copies locally
OAS-34 "SAFECOM" Aviation Incident Report	-Document any aviation hazard, maintenance deficiency, incident or unsafe act  -Identify trends, areas of concern, training needs, etc. to management	-Pilots, aircraft managers, passengers, ground personnel, dispatchers, etc.  -Anyone who observes aviation hazards, incidents or unsafe practices	-ASAP or within 48 hours of each occurrence	-Local Aviation Managers should follow-up immediately  -Submit to OAS Safety by fax or electronic  -Submit copy to State Aviation Manager  -Retain copy locally
Aviation Management Plan	-Provides a reference for BLM employees, aviation managers and other agency personnel  -Outlines State and Field Office aviation organization, procedures, accident prevention measures, etc.	-Field Office Aviation Manager prepares for jurisdictional area  -State Aviation Manager prepares statewide plan	-Update annually	-Serves as supplement to BLM 9400 manual; should not be more restrictive  -Content, length and level of detail will be commensurate with local aviation activity  -Keep as reference
Plan Incident/Accident Response	-Pre-plan emergency procedures and contacts in the event of aircraft mishap, accident or overdue aircraft	-Field Office Aviation Manager and Dispatch prepare for their area of responsibility	-Update as necessary <u>and</u> annually	-Post in Dispatch, front desk and airbase offices
Aerial Hazard Map	-Visually display aerial hazards for flights or aviation projects  -MTRs, MOAs, towers, powerlines, cables, airstrips, heliports, etc.	-Field Office Aviation Manager and Dispatch prepare for their jurisdictional area -Use information from NOAA Sectionals, AP1B, etc.	-Update as needed and annually	-Display in Dispatch and airbase offices  -Review with pilots and aircrews prior to flight  -Attach "site specific" aerial hazard maps to Special Use Plans

DOCUMENT	PURPOSE	RESPONSIBLE	FREQ	ACTION/REMARKS
Airbase & Hazard Database	-Document location and info database on the following: Airports, airstrips Heliports, helispots Dipsites Refueling sites Aerial Hazards Etc. -In digitized form may be used with GIS to generate hazard maps, etc.	-Developed at Field Office level by Aviation Manager, Dispatchers, Aircraft Managers for their jurisdictional area  -State Aviation Manager to consolidate into statewide database	-Update continuously and annually	-Locations of all full-time and temporary operational sites by Lat/Long coordinates -Info on each site:  Size, layout, access Elevation Capabilities & limitations Local Hazards Ownership, facilities, etc.
Aviation Statistical Report	-Provide management with operational and cost summary of aviation activity  -Categorize activity by:  Subactivity Contract/ARA/Cooperator Rotor vs. Fixed Wing	-Field Office Aviation Manager and Dispatch prepare for jurisdictional area -State Aviation Manager prepares State Office report and consolidates with FO reports to compile statewide summary	-Prepare at end of fiscal year for period:  Oct 1 - Sept 30  -FO submit to SAM by mid-Nov	-Should include Incident/Accident Summary, Aviation Training Summary and other aviation accomplishments in the FY  -SAM compiles statewide report  -Retain in historical files
OAS-20 Request for Rental Services	-To request a specific vendor/aircraft to be secured and approved on an OAS Aircraft Rental Agreement (ARA). For recurring needs where cost of each use will be less than \$25K	-Local Aviation Manager identifies a bona fide need. Completes form; sends to State Aviation Manager -SAM reviews; sends to NAO	-When a need is identified and local vendor is available but not secured by current ARA	-National Aviation Office reviews; if approved, sends to OAS for action  -OAS inspection/carding may take weeks  -Retain copies in local files
OAS-13 Request for Contract Services	-Initiates exclusive use or on-call contracting process when aircraft are needed for a specific period and cost is expected to exceed \$25K. Identifies number of days, designated base, estimated cost, etc. Verifies funding.	-State Aviation Manager prepares with requestor input  -OAS uses to develop contract specifications and solicitation	-Submit at least six months prior to time services are needed	-SAM submits to NAO; NAO submits to OAS  -Must be accompanied by OAS-13A or 13H
OAS-13A & OAS-13H Request for Contract Services Supplement (Airplane or Helicopter)	-Supplements the OAS-13. Describes aircraft requirements, specifications, equipment and services needed  -OAS utilizes to prepare contract specifications and solicitation	-Completed by local Aviation Manager  -Reviewed by State Aviation Manager	-Submit at least six months prior to time services are needed	-Field Office prepares and submits to State Aviation Manager. SAM reviews and sends to OAS.  -Fire Aircraft requests are sent to NAO/OAS.  -Retain copies in local files

DOCUMENT	PURPOSE	RESPONSIBLE	FREQ	ACTION/REMARKS
Contract Daily Diary	<p>-Document daily activities and facts concerning contracted aircraft:</p> <p>Vendor &amp; agency personnel assigned Flight activities &amp; equipment use Maintenance or non-compliance Significant events</p>	-Contract Project Inspectors (PI)/Aircraft Managers	<p>-Complete daily during contract period</p> <p>-Submit copies to SAM/COR every two weeks</p>	<p>-May be used if contract disputes or litigation occurs</p> <p>-May be used for ARA or on-call aircraft for duration of project</p> <p>-Retain copies in local contract files</p>
OAS-23 Aircraft Use Report	<p>-Serves as flight invoice; documents aircraft use, pay items, charge codes and authorization</p> <p>-Used for ARA, CWN, Contract and some cooperator flights</p> <p>-Aircraft vendors are paid from this form</p>	<p>-Pilots, Flight Managers and/or Aircraft Managers complete this form together</p> <p>-Reviewed and signed by local Aviation Manager</p> <p>-OAS reviews and processes; makes payment to vendors</p>	<p>-Complete daily</p> <p>-Submit at time of release or every two weeks for ARA and CWN</p> <p>-Submit every two weeks for Exclusive Use Contract</p>	<p>-Blue copy to pilot/vendor</p> <p>-Yellow copy retained at local office</p> <p>-White copy (original) sent to OAS</p>
Daily Cost/Use Summary	-Summarizes cost and use statistics for a specific aircraft for one operational period (day). Used by Incident or local management or users to track costs and analyze use.	-Aircraft Managers/Project Inspectors	-Complete daily	<p>-Aircraft Managers/PI submit to Incident Airbase Mgr/Air Ops personnel or to local FMO.</p> <p>-Retain copies in local contract, project or flight files</p>
OAS-72 Evaluation Report on Contract Performance	<p>-Comprehensive evaluation of contractor personnel, aircraft and equipment for the exclusive use period</p> <p>-Evaluation should be supported by Daily Diaries, OAS-23s and other documentation</p> <p>-May be used in awarding future contracts</p>	-Aircraft Managers, Project Inspectors (PI) at the field level; State Aviation Manager (COR) provides input	-At the end of each exclusive use period (yearly)	<p>-PI sends evaluation to State Aviation Manager (COR); COR submits to Contracting Officer (CO; OAS)</p> <p>-Retain copies in local contract files</p>

# Attachment 11

## List of Existing Waivers

- Waiver for Exemption from 351 DM1 – Use of Rubber Boots on Special Use Flights. (05/1997)
- Use of Volunteers on Special-Use Flights (06/2005)
- Flight Helmets Requirements (Leadplane and Smokejumper Operations) (05/1998)

# Attachment 12

## SAFECOM Form

## Safety Communiqué Form



### REPORTED BY: (optional)

Name:  
E-Mail:  
Phone:  
Cell Phone:  
Pager:  
Organization:  
Organization Other:  
Date Submitted:

### EVENT

Date: mm/dd/yyyy

Local Time: hhmm

Injuries: Y/N

Damage: Y/N

State:

Location:  
(Airport, City, Lat/Long or Fire Name)

### Operational Control:

Agency:

Region:

Unit:

### MISSION (\*see look-up tables)

Type: \*

Other:

Procurement: \*

Other:

Persons Onboard:

Special-Use: Y/N

Hazardous Materials: Y/N

Departure Point:

Destination

### AIRCRAFT (\*see look-up tables)

Type: \*

Tail #

Manufacturer: \*

Model:

Owner/Operator:

Pilot:

**NARRATIVE: (A brief explanation of the event)**

**CORRECTIVE ACTION: (What was done to correct the problem)**

## SAFECOM FORM INSTRUCTIONS

The **Aviation Safety Communique (SAFECOM) database** fulfills the Aviation Mishap Information System (AMIS) requirements for aviation mishap reporting for the Department of Interior agencies and the US Forest Service. Categories of reports include incidents, hazards, maintenance, and airspace. The system uses the SAFECOM Form OAS-34/FS-5700-14 to report any condition, observation, act, maintenance problem, or circumstance with personnel or aircraft that has the potential to cause an aviation-related mishap. The SAFECOM system is **not** intended for initiating punitive actions. Submitting a SAFECOM is **not** a substitute for "on-the-spot" correction(s) to a safety concern. It is a tool used to identify, document, track and correct safety related issues. A SAFECOM **does not** replace the requirement for initiating an accident or incident report.

These instructions and helpful hints are intended to make the process of submitting a SAFECOM as easy as possible. If you need assistance, please don't hesitate to call the Forest Service at (208) 387-5285 or the Aviation Management Directorate, Aviation Safety (formerly OAS) at (208) 433-5070. After the completion and submission of your SAFECOM, your data will be stored in a central database that is shared on an interagency basis. Therefore, you only have to submit one SAFECOM per event.

The **REPORTED BY** section is associated with the person submitting the SAFECOM. All of these fields are optional. However, this contact information is extremely helpful if it becomes necessary to follow-up with the submitter on a particular issue. This section asks for the name of the person reporting the event, their contact information and the organization they work for. If you choose to submit your name or any other information in this section, it will not appear on the SAFECOM that is available to the general public.

The **EVENT** section asks for the "when" and "where" in addition to damage or injuries. Enter the **Date** in the **mm/dd/yyyy** format, and then enter the **Time** using the 24-hour time format **hhmm**. Note that the date is a required field and both the date and time fields will only accept numeric characters. Were there any **Injuries**? **Yes** or **No**. If you select **Yes**, please explain in the narrative. Was there any **Damage**? **Yes** or **No**. If you select **Yes**, please explain in the narrative. The next field in this section is the **State**, which applies to the state where the event occurred. Note that the **State** field is a required entry. In the **Location** field enter the airport, name of the fire or lat and long. The next three selections identify the Agency, Region or State for USDI and the Unit that had operational control of the mission at the time of the event. These selections determine which organization(s) will receive initial notification that a SAFECOM has been entered into the database. From the look-up table select the **Agency**. From the next look-up table select the **Region** for USFS or **State** for USDI. Next, select the **Unit** from the look-up table if it applies. See examples below:

**Agency:** Bureau of Land Mgt   **Region:** Alaska State Office   **Unit:** Glenallen FO  
**Agency:** Forest Service   **Region:** Region 2   **Unit:** San Juan NF

The **MISSION** section asks for information that describes the mission at the time of the event. In the **Type** field, use the look-up table to make a selection that **best** describes the mission that was being performed. Use the **Other** field if you need to further identify the mission or if nothing is available from the look-up table that actually describes the mission. In the **Procurement** Field, enter how the aircraft you were utilizing was procured from the look-up table. Use the **Other** field to further identify procurement if necessary. Under **Persons Onboard**, enter the total number of people on the aircraft, which includes the pilot(s), all flight crew personnel and passengers. Was the mission **Special Use**, **Yes** or **No**? Many of our missions are special use. In fact, almost all fire missions are considered special use as well as animal counting, herding, eradication, etc. Were there **Hazardous Materials** onboard, **Yes** or **No**? In **Departure Point**, enter where you departed from, an airport or helibase for example and under **Destination**, enter the intended destination, which could be an airport, fire name or helispot.

The **AIRCRAFT** Section generally applies to the aircraft you are utilizing. However, in the event of an airspace intrusion, conflict or near mid-air, enter as much information as possible about the other aircraft. If there are multiple aircraft involved, list the other aircraft in the narrative section. In the **Type** field, enter the aircraft type from the look-up table. In the **Tail #** field enter the tail number of the aircraft beginning with **N** for US Registered and **C** for Canadian Registered aircraft. Please do not enter the Tanker, Jumper or Helicopter number unless that is all you have. In the **Manufacturer** field, select the manufacturer from the look-up table. In the **Model** field, enter the model number without any spaces or hyphens for example, 206L3, DC6, PB4Y2. In the **Owner/Operator** field, enter the name of the agency if the aircraft is an agency fleet aircraft (ie USFS, USDI, etc) or the name of the vendor operating the aircraft if it is contracted. In the **Pilot** field enter the pilot's name, first name then last name.

In the **NARRATIVE** section give a brief description of the event with the facts and outcome of the event. Elaborate on any previous blocks above as necessary.

In the **CORRECTIVE ACTION** section give a brief description of the corrective action that was taken in an effort to prevent the event from reoccurring. Remember, submitting a SAFECOM is not a substitute for resolving the problem and taking on the spot corrective action. SAFECOMS are for tracking and trending purposes.

Accidents and Incidents-With-Potential (IWP) must be reported immediately via the most expeditious method in accordance with the Interagency Aviation Mishap Response Plan. A SAFECOM should be completed later, but it is not to be used as an initial notification method.

The SAFECOM should be routed through the local unit aviation officer or can be faxed to Aviation Management Directorate, Aviation Safety at (208) 433-5007 or USFS at (208) 387-5735 ATTN: SAFETY or entered directly on the internet at [www.safecom.gov](http://www.safecom.gov)

# Attachment 13

## Aircraft Pre-Accident Plan



### **BUREAU OF LAND MANAGEMENT**

### **ALASKA FIRE SERVICE**

### **ALASKA INTERAGENCY COORDINATION CENTER**

### **AIRCRAFT PRE-ACCIDENT PLAN**

Reviewed by:

State Aviation Manager

Alaska Interagency Coordinator Center (AICC) Manager

AICCIA Coordinator

AICC Aircraft Coordinator

AICC Logistics Coordinator

## AIRCRAFT PRE-ACCIDENT PLAN

**Note: This plan is based in part upon the INTERAGENCY AVIATION MISHAP RESPONSE GUIDE AND CHECKLIST which is available online at <http://amd.nbc.gov>. This plan is specifically designed to meet the needs of AICC and is reflective of AFS/BLM policy. As specific procedures and points of contact will vary by locale, this plan should not be relied upon to meet the specific needs of any other agency, department, or office.**

This plan shall be maintained at the AICCIA console and AICC Aircraft desk, for use by AICC dispatchers, and shall be reviewed annually and updated as appropriate. The current update was completed April 2008.

This Plan outlines actions required in the event of an overdue or missing aircraft, aircraft accident, Search and Rescue request, or PLB alert. This guide outlines the basic procedures necessary to activate emergency crash, search/rescue, and associated support services as rapidly and orderly as possible. Each section lists priorities and required actions.

Sections are identified by tabs:

SAR Policy

Overdue Aircraft

Missing Aircraft

Aircraft Accidents

PLB Incident

Ambulance Information

Accident Investigation

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

**SEARCH AND RESCUE  
EMERGENCY PROCEDURES**

**SEARCH AND RESCUE (SAR) POLICIES:**

- A. AICC is the primary point of contact for all SAR operations involving overdue, missing, or downed BLM aircraft in Alaska. SAR efforts will be coordinated by AICC in close communication with the DOI Aviation Management Directorate (AMD) Flight Coordination Center. In the event AICC is unable to provide coordination of a SAR operation, responsibility will pass to the AMD Flight Coordination Center.
- B. The role of the BLM in Alaska will be supportive to the Alaska Air Command and State agencies with statutory SAR responsibilities. However, the BLM may assist individuals requiring immediate emergency assistance when the BLM is the closest force and has in-place capability. Requests for routine assistance from the public will be relayed to the responsible SAR office.
- C. Statutory authority and coordination responsibility for SAR in Alaska is broken down as follows:

<u>Type of Incident</u>	<u>Statutory Authority</u>	<u>Responsibility</u>
Aircraft SAR (land)	Alaska State Troopers	U.S. Air Force Alaska Air Command Rescue Coordination Center (RCC)
Ground SAR (land)	Alaska State Troopers	Alaska State Troopers
Aircraft SAR (sea)	Alaska State Troopers	U.S. Coast Guard
Large scale rescue operations (natural disasters, large scale evacuations, etc.)	Alaska Division of Emergency Services	Alaska Division of Emergency Services

## GENERAL PROCEDURES:

- A. For aircraft owned by, working for, or carrying BLM personnel, the normal notification channel for SAR actions depends on the location of the event and the unit involved:

For events occurring in the AFS Fire Protection Area, (including AFS Zones and Fairbanks District Office operations) the notification will be from the field to Zone Dispatch or District/Field Office to AICC Initial Attack section (AICCIA). AICCIA will assist as appropriate and coordinate with the Aviation Management Directorate (AMD) Flight Coordination Center. In the event Alaska Air Command Rescue Coordination Center (RCC) participation is required, AICC will make the request through AMD. AICC will make necessary Agency notifications.

For events occurring in the State of Alaska Fire Protection Area, the notification will be from the field to DOF Area Dispatch Office to DOF Statewide Logistics Center (SLC) in Fairbanks. SLC will respond as appropriate and notify AICCIA. AICC will assist as appropriate, and make notifications as outlined above.

Requests for large-scale or village evacuations will be routed through AICC to State of Alaska Division of Emergency Services.

- B. Every effort will be made to follow this procedure. When an emergency exists and immediate contact cannot be made to the next level of authority or above, notification of actions taken must be made as soon as possible.
- C. Commensurate with its role as a supportive organization, AFS may respond to requests from those agencies having statutory authority for SAR. The level of the BLM response will be based on personnel and aircraft availability, impact on BLM programs and the urgency of the situation.
- D. Requests for SAR assistance from other agencies shall be adjudicated with the following in mind:
1. Does BLM have resources in place to provide assistance?
  2. Urgency of SAR mission; life and death vs. participating in grid search.
  3. What delay would occur if BLM does not respond?
4. Time commitment involved in responding to request; hours vs. days.
5. Impact of BLM response on BLM programs.
6. BLM will not respond if doing so would endanger the lives of BLM employees or the lives of others.

## AIRCRAFT PROCEDURES:

### A. Overdue Flights:

1. BLM aircraft are considered overdue when they fail to communicate at any pre-established check-in or communication time. This includes any established takeoff time, enroute check-in time, or arrival time. When an aircraft becomes overdue, a thorough communications search shall be immediately initiated by the responsible dispatcher. This shall include searching by radio, telephone, and any other available appropriate means. A communications search shall include contacting the intended destination, point of departure, possible stops along the planned route, the aircraft's base of operations and other aircraft in the target area. If repeated communications searches are unsuccessful, Zones/Areas shall notify AICCIA within one hour of the original time of failed communications, and advise the Coordinator of the ongoing situation and actions being taken. The AICCIA Coordinator will make subsequent required notifications.
2. If contact is not made with the aircraft within one hour, the AICCIA Coordinator will contact AMD Flight Coordination Center, the BLM State Aviation Manager, and the AFS Manager. AICC or AMD will then coordinate actions and make other appropriate notifications. Any request for RCC involvement shall be placed by AICC through AMD.

### B. "Mayday" Transmissions:

1. The distress signal "Mayday" has absolute priority over all other transmissions. All stations will immediately cease transmissions that could potentially interfere with the distress transmission. The pilot will transmit as much of the following as possible (listed in order of priority).
  - a. Mayday, Mayday, Mayday.
  - b. Aircraft ID repeated three times.
  - c. Type of aircraft.
  - d. Position or estimated position (stating which).
  - e. Heading (stating true or magnetic).
  - f. Nature of distress.
  - g. Pilot's intentions.
  - h. Assistance desired.
  - i. True or indicated air speed.
  - j. Altitude.
  - k. Fuel remaining.
2. Acknowledgment of receipt shall be given following *conclusion* of (do not interrupt) the message and consist of the aircraft call sign three times. The words, "this is," the call sign of the receiving station three times, and the words, "received Mayday."
3. Receiving station will immediately relay any Mayday message from a non-BLM aircraft to the nearest FAA office who will initiate rescue operations. When Mayday involves BLM aircraft, follow established agency SAR procedures.
4. If the pilot alerts a dispatch office of possible problems, the dispatcher will closely monitor the aircraft's progress. If practical, the aircraft should be routed to an airport with crash rescue capabilities. The pilot will normally communicate directly with the airport. If the pilot is unable to do so, the dispatcher may act as a relay.

### C. Aircraft Accidents:

An accident is any unplanned event that results in either serious injury to one or more people or substantial damage to property, or both. The responding dispatch office will first verify that an aircraft accident has occurred. If an aircraft is only overdue and presumed down, initiate search procedures. If an actual aircraft accident is known to have occurred, priorities will be:

1. Rescue injured personnel.
2. Protect the public from injury.
3. Secure the site and protect the wreckage from further damage.
4. Secure all BLM records pertaining to the operation, flight, maintenance, crewmembers, etc.
5. Gather data for the AIRCRAFT MISHAP REPORT. This data will be telephoned to the AMD Aviation Safety Manager for completion of the preliminary accident/serious incident report for DOI aircraft. This data will also provide the input for completing Form AMD-34 if the mishap is less than an accident or serious incident. Obtain as much information as possible and complete an AIRCRAFT MISHAP REPORT. Much of the information should be available from the aircraft flight request and the aircraft flight following log. Relay to AMD as soon as possible.
6. The BLM State Aviation Manager will notify the AMD National Aviation Safety Manager, the Chief of External Affairs, and the State Director.
7. The State Director will:
  - a. Depending on the severity of the accident, may request AMD to include a BLM member on the accident investigation team.
  - b. Notify next of kin if serious injury or fatality.
  - c. Notify BLM Director's Office.
  - d. Notify Director-NIFC.
8. The AMD Regional Director is responsible for investigating all Departmental aircraft accidents in Alaska. AMD is responsible for:
  - a. Submission of an Aircraft Accident Report.
  - b. Notifying the National Transportation Safety Board.
  - c. Establishing an Aircraft Accident Investigation team.  
See Departmental Manual Part 352, Aviation Safety, Chapter 6, for detailed information.

### D. Aircraft Incidents:

An incident is any unplanned event that could have, but did not result in serious injury or extensive damage.

A formal incident report form AMD-77 must be completed promptly after each incident and forwarded to the BLM State Aviation Manager, who will forward it to the State Safety Officer. In addition, Form AMD-34 (Safecom) will be completed by pilot and/or supervisor and forwarded within five days to the BLM State Aviation Manager.

**OVERDUE AIRCRAFT**

A Bureau aircraft normally will be considered "overdue" when it has not completed a required check-in by radio or telephone every thirty minutes, or within the time frame specified in the flight following agreement. Dispatchers or persons who flight follow aircraft are responsible for initiating and documenting all actions, contacts, conversations, and times on the Overdue Aircraft Information Sheet.

If an overdue aircraft is located, contact all parties previously notified, and request they cancel / stand down further response. If the overdue aircraft is not located before anticipated fuel exhaustion, declare the aircraft missing and proceed with the search and rescue (SAR) phase.

Time	Action	Contact	Time Log
Immediately at overdue time	Begin a communications search. Attempt contact via radio, direct or relay, or through telephone calls.		
10 minutes past due	Notify the AICC Coordinator. Begin documentation on "Overdue Aircraft" document sheets. Implement full communications search. Attempt contact on all radio frequencies, teletype to sending/receiving/enroute stations. Attempt radio relay through other in-flight aircraft.		
15 minutes past due	Contact vendor base for possible contact.		
20 minutes past due	Call FAA Flight Service Stations, giving flight information and requesting specific action desired (i.e ramp checks, ELT reports (from SARSAT and/or known aircraft in area). Specifically state whether SAR procedures <u>are</u> or <u>are not</u> requested at this time.	474-0452 FAI-ATC 474-4536 FAI 852-2521 BRW 778-2219 ORT 283-3466 ENA 443-2291 OME 442-3310 OTZ 269-1103 ANC-ATC 659-2401 SCC	
At 30 minutes after overdue check-in:	Update co-workers reference ongoing situation. Designate one dispatcher to continue search and associated documentation.		
At one hour after overdue for check-in, or fuel duration exceeded:	Declare aircraft "Missing"; refer to <u>Missing Aircraft</u> procedures		



**MISSING AIRCRAFT**

At one hour after overdue for check-in, the aircraft shall be declared “Missing” and the AICCIA Coordinator may initiate SAR procedures. The Search and Rescue will generally be aerial in nature. All actions will be documented on a Missing Aircraft Information Sheet.

TIME	ACTION	CONTACT	TIME
One hour after overdue check-in or fuel duration exceeded; aircraft is declared missing	<u>Initial Attack Coordinator will:</u>		
	Dispatch aerial resource(s) to begin the search		
	Notify the State Aviation Manager		
	Notify the Alaska Fire Service Manager		
	Notify the BLM Field Office Manager (if Field Office flight)		
	Notify appropriate Agency Representative (if DOI agency flight)		
	Notify AMD Flight Coordination Center	907 271-3935 (24 hrs)	
	Contact Alaska State Troopers for case number	451-5100 ask for dispatch	
	Contact the FAA to pass missing aircraft data	907-474-4536	
	<u>AMD Flight Coordination Center will notify:</u>		
	Rescue Coordination Center (RCC) for assigned search number and assistance (as necessary)	907-428-7230	
	DOI Aviation Manager	1-208-433-5002	
	National Transportation Safety Board	1-202-314-6290	
	<u>State Aviation Manager will notify:</u>		
National Aviation Office	208-387-5448		

The Missing Aircraft designation requires that all the items on the Overdue Aircraft check list have been completed and are available for reference while conducting this phase. Documentation of all actions, contacts, conversations, and times is mandatory.

The Missing Aircraft phase cannot be conducted solely in-house by the agency. The FAA Flight Service Station (FSS) is the entry agency into the National SAR system. Pass all Missing Aircraft data to the FSS.

After initial coordination, and if Bureau aircraft are available, AMD may request an Air Force Rescue Coordination Center (AFRCC) assigned search number, search radio frequency, and approval to conduct a route search, or grid search. If Bureau aircraft are not available, AMD may request an aerial search by the responsible SAR agency. AMD will notify the RCC who, in turn, will coordinate with the proper state agency (Alaska State Troopers or Emergency Services) as appropriate under the National SAR Plan.

Continue coordination in-house and with other SAR agencies. Searches for missing aircraft may be short for local flights or may extend over a large area and continue for several days for an aircraft missing on a long cross country flight.

Aerial search missions are potentially hazardous. Search aircraft must stay within their assigned and coordinated search area. A common search radio frequency is mandatory. The search aircraft making the "find" is further exposed to hazards due to excitement and desire to help. When the find is announced on the search frequency, all search aircraft should clear the area unless specifically requested to participate in the rescue phase.



**AIRCRAFT ACCIDENT:**

**AIRCRAFT DOWN - WITHIN AIRPORT'S CRASH / FIRE / RESCUE RESPONSE AREA**

The planning for a mishap within the crash/fire/rescue (CFR) response area associated with a commercial services airport must include obtaining and posting the subject airport's (1) CFR plan, (2) emergency alarm/notification procedure and (3) the crash/rescue grid map of the response area. The CFR plan and response area map are obtained from FBK Base Operations and are located at the AFS Flight Operations Office. AFS Zone Dispatch offices will develop a checklist for their field station airports.

Individuals observing an aircraft mishap involving a downed aircraft within the crash/fire/rescue response area should immediately report the mishap as provided by the notification procedure, or notify the local agency dispatcher. The local CFR plan becomes primary in the initial rescue effort, with the bureau being secondary. Do not interfere with the established plan, or through lack of knowledge, duplicate efforts which could lead to confusion and delay of life saving efforts.

If Bureau aircraft; coordinate assumption of control of the mishap site (or removal of the mishap aircraft) with the CFR Agency, the FAA, and the local Base Operations Staff. Document all actions, activities, contacts, conversations, aircraft and personnel dispositions, and times on the Aircraft Mishap Report.

<b>ACTION</b>	<b>CONTACT</b>	<b>TIME LOG</b>
For airfield emergencies on Ladd Field, AFS Flight Operations will activate CFR plan and participate as requested by the CFR Plan agency.	911	
For Bureau aviation incidents on Fort Wainwright, but away from Ladd airfield, activate local CFR Plan.	911	
Dispatch Ground Ambulance, if necessary	911	
Fill out <u>Ground Ambulance Information Sheet</u>		
Make notifications - see Notification Checklist for accidents.		
Fill out <u>Safecom</u> and <u>Aircraft Mishap Report</u>		

**AIRCRAFT ACCIDENT:**

**MISHAP REPORT**

Gather as much of the following information as possible, and relay to AMD at 1 888-464-7427. Do not delay the report trying to fill in all the blanks! Much of the information should be available from the aircraft flight request and the aircraft flight following logs. Contact AMD as soon as possible.

*CAUTION: Names of individuals aboard the aircraft shall not be announced over the radio.*

**1. CONTACT INFORMATION**

- a. Name of individual reporting the mishap \_\_\_\_\_
- b. Radio Frequency / Phone Number(s) \_\_\_\_\_
- c. Address \_\_\_\_\_ Agency / Position \_\_\_\_\_

**2. MISHAP INFORMATION**

- a. Date of mishap \_\_\_\_\_ Time of mishap \_\_\_\_\_
- b. Location of mishap or last known location of aircraft (lat/long) \_\_\_\_\_
- c. Mishap site secured? \_\_\_\_\_ ELT deactivated? \_\_\_\_\_
- d. Airport / landing strip nearest to mishap site \_\_\_\_\_
- e. Total number of people involved \_\_\_\_\_ Number of injuries \_\_\_\_\_ Number of Fatalities \_\_\_\_\_
- f. Assistance on scene or enroute \_\_\_\_\_

Brief description of mishap (extent of damage, type of mission / cargo, haz-mat, weather, what happened?):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**3. AIRCRAFT / FLIGHT INFORMATION**

- a. Aircraft tail number \_\_\_\_\_ Type \_\_\_\_\_ Color \_\_\_\_\_
- b. Name of pilot(s) \_\_\_\_\_ Number of souls on board \_\_\_\_\_
- c. Aircraft vendor \_\_\_\_\_
- d. Point of last departure \_\_\_\_\_ Intended destination \_\_\_\_\_
- e. Last reported position \_\_\_\_\_ Heading \_\_\_\_\_
- f. Last reported fuel on board \_\_\_\_\_ Time reported \_\_\_\_\_ Location reported \_\_\_\_\_

AIRCRAFT ACCIDENT:

**AIRCRAFT DOWN - AWAY FROM CRASH/FIRE/RESCUE EQUIPPED AIRPORT**

The initial action of the observer(s) of the mishap should be to report the mishap location. The local dispatch office or other agency designated office then becomes the action office for response, rescue, and notification.

The action office needs all the information immediately obtainable as to injured and/or deceased persons to request adequate ambulance and life support equipment. The absences of this information should not delay initiating life saving actions. Early establishment of communications with the mishap site is critical.

Documentation of all actions, activities, contacts, conversations, aircraft and personnel dispositions, and times is accomplished on the Aircraft Mishap Report.

ACTION	CONTACT	TIME LOG
<b>Notification received by designated action office: For <u>NON-DOI Aircraft</u> contact the State Troopers and pass on all relevant information. Use the checklist below if requested by the State Troopers to assist in the SAR.</b>	451-5100	
<b>Notification received by designated action office: For <u>DOI Aircraft</u>: Complete the following checklist.</b>		
Initiate Search and Rescue procedures. Contact pre-designated rescue units or Zone Resources.		
Dispatch Agency helicopter with helitack or Emergency Medical Technicians	Aircraft Desk	
Dispatch Smokejumpers/ Emergency Medical Technicians		
Dispatch Commercial Air Ambulance	See Request Information Sheet	
Dispatch Ground Ambulance	459-6500 (Fairbanks 911 dispatch)	
Notify Hospital to receive victims		
Contact State Troopers if necessary	451-5100	
Dispatch MAST UNIT: Make a formal request through the Alaska State Troopers. Fill out <u>MAST Unit Checklist Form</u> and /or <u>Request Information-Helicopter Ambulance Form</u> .	451-5100	
Notify FAA Flight Service Station to preclude search and/or rescue missions by others (example: the ELT, if activated, will cause the National SAR Plan to be activated).	474-4536 (Fairbanks FSS)	
Request FAR 91.137 Temporary Flight Restriction, if needed.	Aircraft Desk	
Make notifications - see Notification Checklist for accidents		
Fill out <u>Safecom</u> and <u>Aircraft Mishap Report</u>		
Arrange for security at the mishap site. See "PREPARING FOR THE ARRIVAL OF THE INVESTIGATION TEAM."		

**AIRCRAFT ACCIDENT:**

**NOTIFICATION SEQUENCE**

Advise the Coordinator if there are injuries. Advise if there are fatalities, and establish the need for a coroner. ***Names of deceased and/or seriously injured individuals shall not be stated on the radio.*** Notifications shall be made as follows:

ACTION	CONTACT	TIME LOG
<p><u>The AICC Coordinator will notify:</u></p> <p>AICC Manager</p> <p>BLM State Aviation Manager</p> <p>AMD Flight Coordination Center</p> <p>Local Alaska State Troopers Office if non DOI aircraft. (Troopers will activate local search and rescue if needed).</p>	<p>907-271-3935 (24 hours)</p> <p>451-5100</p>	
<p><u>The AICC Manager will notify:</u></p> <p>Alaska Fire Service Manager</p> <p>BLM Field Office Manager (if District Employees)</p>		
<p><u>The State Aviation Manager will notify:</u></p> <p>AMD National Aviation Safety Manager</p> <p>National Aviation Office</p>		
<p><u>The AFS Manager will notify:</u></p> <p>State Director</p> <p>AFS Safety Officer</p> <p>Agency head if non-BLM employee</p> <p><u>If fatalities, AFS Manager will also notify:</u></p> <p>Alaska State Troopers to request the appropriate coroner</p> <p>External Affairs</p>		
<p><u>AMD will contact:</u></p> <p>Local FAA</p> <p>NTSB and initiate the accident investigation</p>		

ACTION	CONTACT	TIME LOG
RCC, if necessary		

### HELICOPTER AND FIXED-WING AMBULANCE RESOURCES

The AICC Medevac Guide contains an updated copy of contacts and numbers for commercial ambulance services. The Guide contains the steps to follow when an individual is being transported to Anchorage or Fairbanks. When transporting injured personnel by Agency helicopter, the dispatcher shall gather necessary information and telephone the appropriate destination, whether it be a hospital, local airfield or helibase. The Dispatcher shall confirm a ground contact frequency. This information will be passed on to the pilot and/or manager. The Agency helicopter should then establish direct communication with the receiving facility staff.

Below is a list of commercial vendors for 2008.

#### FIXED -WING AND HELICOPTER LIFE FLIGHT IN FAIRBANKS AND ANCHORAGE

<u>Base</u>	<u>Aircraft Type</u>	<u>Contractor</u>	<u>Telephone No.</u>	<u>Comments</u>
Anchorage	1 AS-350 at ANC 1 BK-117 at SXQ RN/RN or RN/EMT-P teams 1 King Air 200 (req 2000*) 2 Lear 35-A (req 5000*)	Providence Lifeguard Air Ambulance	1 800 478-5433 (907) 261-3070	
Anchorage	1 King Air 200 (req 2000*) RN/RN or RN/EMT-P teams	Alaska Regional Lifeflight Air Ambulance	1 800 478-9111 (907) 264-2388	
Fairbanks or EMT-P	1 King Air 200 (req 2000*) 1 Lear 35A (req 5000*) Critical care certified	Guardian Flight	1 888 997-3822 (907) 474-1746	RN
Fairbanks	Cheyenne II XL EMT-P	Warbelow's Ambulance	1 800 491-1247 (907) 374-6222	emergency non-emergency
MAST*	-----		(907) 353-6314/6315 or 7811	
Alaska State Troopers	Fairbanks -----		(907) 451-5100	ask for dispatch
Barrow Search and Rescue	----- dispatch 852-2822 direct commercial		(907) 852-6111	emergency (907)

\*Use of MAST is a last resort; all other options must be exhausted before the MAST Unit will accept a mission. AICC does not have the authority to mobilize MAST directly. The MAST Unit is mobilized by

placing a request with the Alaska State Troopers. The MAST unit will need certain information before departing on the mission. Have the following information available for the AST Dispatcher (complete Helicopter Ambulance Request Form on the following page):

- Location of pick-up site: lat/long, mile marker, etc.
- Ground contact name, call sign, frequency etc.
- Number of patients?
- Any available patient info: nature of injuries or illness, treatment already provided etc.
- Any special equipment required: hoist, Stokes litter?
- Method of marking pick-up site: panels, parachutes, flares, smoke, chemlights, vehicle lights, other?
- Terrain description
- Site hazards: trees, wires, loose debris, other aircraft operating in the area?

HELICOPTER AMBULANCE REQUEST INFORMATION SHEET

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, MOA, MTR, 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.

GROUND AMBULANCE REQUEST INFORMATION SHEET

Fairbanks 911 EMS / Fire Dispatch (off Post)	459-6500
Ft Wainwright EMS / Fire Dispatch (on Post)	911

1. State your name and phone number (in case you are cut off)
2. Incident location
3. Directions to scene
4. Number of patients
5. Medical personnel on the scene
6. Treatment being provided
7. On scene contact name and frequency
8. Get following from dispatcher:
  - Call sign of responding unit
  - Radio frequency
  - Estimated time of arrival

This page left blank

## 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.

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. State Troopers 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 PIO 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, State Troopers 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. If an AMD contract or Basic Ordering Agreement (BOA) aircraft, the AMD representative will obtain copies from AMD.
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. Provide AMD representative a copy of local bureau aviation policy documents.
15. Determine who 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, etc.)
  - (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

This page left blank

**PERSONAL LOCATOR BEACONS (PLB)**

Often, individuals from BLM Field Offices, Alaska Fire Service, and other DOI offices carry PLBs in the field as a means to summon rescue in the event of an emergency. Some personnel may choose to submit a PLB Trip Report (think of it as a flight plan) to AICCIA before going into the field. A trip report should provide the names of all parties in the group, dates of departure, dates of return, trip itinerary, method of travel, equipment lists, and emergency contact phone numbers. The reports shall be stored in the PLB Log at the AICCIA console. When travelers return from the field, they must contact AICC to close out the trip (just like a flight plan).

In the event a PLB is activated, its signal is received by satellite, and Alaska State Troopers are notified. The State Troopers may notify AICC that a PLB has been activated, and request information or assistance. At the request of DOI agency management, the Coordinator may initiate, or assist with a Search and Rescue mission. All actions shall be documented on a Documentation Sheet.

TIME	ACTION	CONTACT	TIME
When notified of PLB Activation:	<u>The AICC Coordinator will contact:</u> Designated Emergency Contact for PLB operator  AICC Manager  AMD Flight Coordination Center for possible assistance  State Aviation Manager	907 271-3935 (24 hours)	
	<u>AICC Manager will notify:</u>  AFS Manager if AFS employee(s)  Field Office Manager if BLM employee(s)		
	<u>State Aviation Manager will contact:</u>  National Aviation Office		
To initiate SAR:	<u>The AICC Coordinator will:</u>  Dispatch resources to begin the search.  Seek additional resources as needed.  Contact the State Troopers for Case Number and request SAR action and coordination if no DOI resources are available.	451-5100 ask for dispatch	
	<u>AMD Flight Coordination Center will notify:</u>  Rescue Coordination Center (RCC) for possible assistance.		

## Attachment 14

### AVIATION “WATCH OUT” SITUATIONS

**As part of risk management each aviation manager and employee should be asking questions.**

- Is the flight necessary?
- Who is in charge?
- Are all hazards identified and have you made them known?
- Should the operation or the flight be stopped due to a change in conditions? Consider the following:
  - Communications
  - Confusion
  - Personnel
  - Weather
  - Turbulence
  - Conflicting priorities
- Is there a better way to do it?
- Are you driven by the task and sense of urgency?
- Can you justify your actions?
- Are there other aircraft in the area?
- Will the pilot accept the mission?
- Are any guidelines being ignored or policies being broken?
- Are communications getting tense?
- Are you deviating from the assigned operation or flight?

# Attachment 15

**R-44 HELICOPTER INFORMATION (Next Page)**



# United States Department of the Interior

National Business Center

## Aviation Management

300 E. Mallard Dr., Ste 200  
Boise, Idaho 83706-3991



In reply refer to: 113A-4

March 4, 2005

### DOI AM INFORMATION BULLETIN NO. 05-02

To: All DOI Aviation Operations  
From: Robert H. Lewis, Acting Associate Director, Aviation Management  
Subject: R-44 Helicopters (Supersedes OAS IB No. 02-02)

The Robinson Helicopter Company has manufactured two R-44 models to date, the R-44 and R-44 II. This bulletin is to familiarize the user with the R-44 characteristics and operating limitations.

We have several R-44s in the procurement system and continue to have interest in this aircraft for resource work; however, the end user may expect the same or similar performance and payloads as a light turbine helicopter. The economics of the R-44 is an attractive alternative to the higher cost turbine-powered helicopters. Its lower hourly rates and high cruise speed make it cost effective for some natural resource flight requirements; it is well suited for missions such as passenger transport to prepared low altitude locations and low level visual reconnaissance. However, it is not suited for all DOI helicopter flight profiles requiring maximum power output, abrupt control inputs, and/or accelerated maneuvering. DOI bureaus choosing this aircraft must consider how it fits into their aviation programs. Aviation managers should provide written guidance to their users detailing the R-44's suitability in meeting aviation requirements.

#### R-44 and R-44 II Characteristics and Operating Limitations

1. The R-44 is powered by a six-cylinder piston engine, rated at 225 horsepower. The R-44 II engine is rated at 245 horsepower.
2. The R-44 has three passenger seats. Due to mission requirements and/or environmental conditions, the number of passengers may be less than seats available.
3. The average equipped weight per aircraft is approximately 1,490 lb for the R-44 and 1,510 lb for the R-44 II.
4. The maximum gross weight is 2,400 lb for the R-44 and 2,500 lb for the R-44 II.
5. The fuel consumption is approximately 15 gph of 100-octane low lead aviation gasoline (100LL Avgas).
6. The fixed weight reduction for load calculation purposes has been established at 75 lb.
7. Sample payload: Pilot (200 lb), fuel for 1 hour and 30 minutes and reserve (approximately 171 lb), *plus* survival kit (20 lb) *equals* 391 lb. Note: These figures are based on sea level performance. Increases in altitude and temperature will decrease the allowable payload and performance. Do not use these figures for actual flight. SAMPLE ONLY.

	<u>R-44</u>		<u>R-44 II</u>
Maximum gross weight	2,400	Maximum gross weight	2,500
Pilot, fuel, survival kit	-391	Pilot, fuel, survival kit	-391
Aircraft equipped weight	-1,491	Aircraft equipped weight	-1,510
<u>Fixed weight reduction</u>	<u>-75</u>	<u>Fixed weight reduction</u>	<u>-75</u>
Allowable payload	444	Allowable payload	524

#### Vigilance must be exercised when operating this aircraft in any of the following conditions:

1. At or near maximum gross weight (due to reduced aircraft performance).
2. More than two passengers (due to reduced aircraft performance, weight, and reduced fuel supply).
3. At pressure altitudes above 4,000 feet (due to reduced aircraft performance) (Safety Tip 13).
4. Any natural resource flights that involve landings at locations other than prepared sites due to fire danger (Safety Notice SN-17).
5. Flights that require abrupt control inputs or accelerated maneuvers (Safety Tip 17).
6. Single skid, toe-in, or step-out landings will not be approved due to the design of the landing gear and lateral center of gravity limitations (Safety Notice SN-13).

Due to the number of accidents in the history of this make and model, the Federal Aviation Administration issued a **Special Federal Aviation Regulation** (SFAR No. 73-1). This SFAR increases pilot flight time and currency requirements, in addition to the requirements of 14 CFR Part 61. No other aircraft has this restriction.

In addition to the SFAR, the Robinson Helicopter Company has published a number of Safety Tips and Safety Notices. These items directly affect the use of this aircraft in "natural resource" operations. The following are excerpts from those Tips and Notices:

**Safety Tip 13.** When operating at higher altitudes (above 3,000 or 4,000 feet), the throttle is frequently wide open and the RPM must be controlled with the collective.

**Safety Tip 15.** Never land in tall dry grass. The exhaust is low to the ground and very hot; a grass fire may be ignited.

**Safety Tip 17.** With hydraulic controls, use special caution to avoid abrupt control inputs or accelerated maneuvers. Frequent or prolonged high-load maneuvers could cause premature, catastrophic failure of critical components.

**Safety Notice SN-13. DO NOT ATTACH ITEMS TO THE SKIDS.** The landing gear strut elbows have cracked on several helicopters when the pilot attempted to carry an external load strapped to the landing gear skids. The landing gear is optimized to take high "up" loads. Consequently, it has a very low strength in the opposite or "down" direction.

**Safety Notice SN-17. NEVER LAND IN TALL GRASS.** The engine exhaust is very hot and can easily ignite tall grass or brush. One R22 was completely destroyed by fire after a normal landing in tall grass.

**Safety Notice SN-30. LOOSE OBJECTS CAN BE FATAL.** A recent fatal accident occurred when the pilot allowed her kneeboard to go out the left door and strike the tail rotor. Any loose object striking the tail rotor can cause failure of the tail rotor blade.

1. Walk completely around the aircraft checking fuel caps, tail rotor, and for anything which could catch a skid, such as a connected static line.
2. Stow or secure all loose objects in the cabin.
3. Firmly latch all doors.
4. And, never fly with a left door removed. (Remove only the right door for ventilation.)

**Safety Notice SN-37 EXCEEDING APPROVED LIMITATIONS CAN BE FATAL.** Many pilots do not understand metal fatigue. Each time a metal component is loaded to a stress level above its fatigue limit, hidden damage occurs within the metal. There is no inspection method which can detect this invisible fatigue damage. The first indication will be a tiny microscopic crack in the metal, often hidden from view. The crack will grow with each repetition of the critical stress until the part suddenly breaks. Crack growth will occur quite rapidly in drive system parts from the high frequency torsional loads. It will also occur rapidly in rotor system components due to the high centrifugal force on the blades and hub. Damaging fatigue cycles occur with every revolution of an overloaded drive shaft or rotor system.

If a pilot exceeds the power or airspeed limits on a few occasions without failure, he may be misled into believing he can safely operate at those high loads. Not true. Every second the limitations are exceeded, more stress cycles occur and additional fatigue damage can accumulate within the metal. Eventually, a fatigue crack will begin and grow until a sudden failure occurs. If the pilot is lucky, the part will have reached its approved service life and be replaced before failure. If not, there will likely be a serious or fatal accident.

#### **WARNING**

1. Always operate the aircraft well below its approved VNE (never exceed speed), especially in turbulent wind conditions.
2. Do not operate the engine above its placarded manifold pressure limits.
3. Do not load the aircraft above its approved gross weight limit.
4. **The most damaging conditions occur when flying or maneuvering at high airspeeds combined with high power settings.**

/s/Robert H. Lewis

Robert H. Lewis, Acting Associate Director

