

Department of Natural Resources
Division of Forestry
Policy and Procedures Manual

Chapter 2600 Aviation

Contents

2605	Introduction.....	2
2610	State Piloted and Maintained Aircraft.....	2
	Flight Operations Policy:.....	2
	Aircraft Flight & Maintenance Record:.....	3
	Aircraft Maintenance Program Standards:	3
2611	Vendor Aircraft.....	4
	Minimum Vender Requirements:	4
	Contract Aircraft:.....	4
	Rental Offer Aircraft:	5
	General Operations All Vendor Aircraft:	5
	Additional Operational Policy and Procedures:.....	5
2612	Military and Government Cooperator Aircraft	5
	Military Aircraft	5
	Canadian Government Aircraft:	6
	US Federal Government Aircraft:	6
	Other Alaska State Aircraft:	6
	State Aircraft- Other than State of Alaska:.....	6
2613	General Aviation Operations – All Aircraft.....	6
	Flight Plans:.....	6
	Flight Following Policy:.....	7
	Flight Following Procedure when Agency oversight is not available:	7
	Flight Locating:	8
	Aircraft Accident or Missing Aircraft:	8
	NTSB Notification of Aircraft Accident:	8
	Aviation Hazard or Mishap Reporting (Safecom):.....	8
	Pilot (Flight Crew) Alert Standards.....	8
	Pilot (Flight Crew) and Mechanic (Engineer) Flight and Duty Time Limitations	9
	Aviation Fuel & Aircraft Fueling:	9
	Helicopter Operations:.....	10
	Aviation Transport of Hazardous Materials:	10
	Early Season Helicopter Proficiency Training	10
	Signatures.....	11

2605 Introduction

Authority:

Title 41.15.010 through 41.15.170 of the Alaska statutes establishes the authority of the State as the responsible party for fire protection of forested lands.

Goal:

Establish policies and procedures governing aviation operations conducted by and for the State of Alaska, Department of Natural Resources, Division of Forestry (DOF) that ensures safe, efficient and effective use of aircraft.

The contents of this manual will be amended as conditions warrant and shall bear an effective date for each amendment. All changes will be within the scope of applicable Federal Aviation Regulations and/or Alaska State Regulations.

Objective:

The primary objective of the aviation program is to support the fire suppression and fire management mission. Aviation operations help protect private citizens; private property and high value natural resources through the utilization of airplanes and helicopters.

Mission:

Conduct safe, efficient, and effective aviation operations for the State of Alaska, Department of Natural Resources, Division of Forestry with either commercially operated or state operated aircraft for the purposes of wildland fire suppression.

2610 State Piloted and Maintained Aircraft

This chapter identifies operational and maintenance standards for State piloted and maintained aircraft.

Flight Operations Policy:

Title 14 Part 91, and Division of Forestry Exemption No. 4063, shall be the governing regulations for all State operated aircraft with the following exceptions:

Department of Natural Resources
Division of Forestry
Policy and Procedures Manual

- a. Flight Plans & Flight Following: Shall be conducted to DOF Flight Plans & Flight Following Policy, Chapter 2613, General Aviation Operations- All Aircraft.
- b. Flight Crew Flight & Duty Time: Shall be regulated by Flight Crew, Flight & Duty Time Policy, Chapter 2613, General Aviation Operations- All Aircraft.
- c. Flight Crew Training & Qualifications: Shall be regulated by policy contained in the DOF Airman Training & Checks Manual.
- d. Special Use Missions: Shall be conducted to specific Special Use Mission standards and procedures published in the special use mission specific guide:
 - Interagency Aerial Supervision Guide
 - Interagency Aviation Transport of Hazardous Materials Handbook
 - Department of Interior- Aviation Life Support Handbook
 - State of Alaska Fixed-Wing Aerial Ignition Guide
- e. Smoking is prohibited in State operated aircraft.
- f. Passenger Manifesting: Shall be regulated by DOF flight plan policy, Chapter 2613, General Aviation Operations- All Aircraft.
- g. Interagency Pilot Qualification Requirements: Pilots shall meet minimum interagency pilot qualification requirements. USDI-AMD, USDA- Forest Service or DOF authorized pilot inspectors may issue interagency Pilot Qualification Cards for special use missions. (Except point-to-point, requires pilot flight check).
- h. Personnel Protective Equipment: Flight crew and passengers shall wear appropriate personnel protective equipment per the USDI Aviation Life Support Handbook during all special use missions.

Aircraft Flight & Maintenance Record:

Each aircraft is issued a triplicate, serial numbered Aircraft Flight and Maintenance Record. This record is used for four essential purposes:

- Pilot flight/duty time tracking
- Aircraft maintenance tracking
- Engine trend monitoring
- Billing

State personnel utilizing the Aircraft Flight & Maintenance Record shall be responsible for completing the form accurately and correctly per their duty assignment and responsibility.

Aircraft Maintenance Program Standards:

- a. DOF aircraft maintenance and maintenance record keeping shall be conducted in accordance with 14 CFR 91, including compliance with all mandatory service bulletins.

Department of Natural Resources
Division of Forestry
Policy and Procedures Manual

- b. A detailed maintenance program for each aircraft shall be developed and managed by the Aircraft Maintenance Inspector and may exceed the minimum requirements of this chapter.
- c. All DOF aircraft shall be issued an Interagency Data Card prior to flight operations. (Maintenance flights excluded). The USDI-AMD, USDA- Forest Service or other interagency authorized maintenance inspector may issue Interagency Aircraft Data Cards (requires aircraft inspection).

2611 Vendor Aircraft

This chapter identifies operational and maintenance standards for vendor-operated aircraft used by the division.

Minimum Vendor Requirements:

- a. Vendor Certification: Vendors providing commercial services with pilot shall be certificated under 14 CFR 121, 125, 127, 133, 135, or 137, or Transport Canada as appropriate.
- b. Vendor Operations Specifications: Notwithstanding paragraph (b) of 14 CFR 135.1, aircraft will be operated and maintained under provisions of 14 CFR 91, 121, 125, 127, 133, 135 or 137, or Transport Canada as appropriate, including those portions applicable to civil aircraft, unless otherwise authorized by the State Aviation Manager. All operations conducted for the State shall be compliant to the Vendor Operations Specifications issued to the vendor by the FAA or Transport Canada.
- c. All vendor pilots shall possess an agency issued pilot qualification card that documents they are qualified for the assigned mission prior to utilization by the State. The USDI-AMD, USDA- Forest Service and/or DOF authorized pilot inspector may issue the agency Pilot Qualification Cards. (Except point-to-point, requires pilot flight check).
- d. All vendor aircraft shall have been issued and have on board an agency Interagency Data Card prior to utilization by the State. The USDI-AMD, USDA- Forest Service and/or DOF authorized maintenance inspector may issue agency Aircraft Data Cards. (All aircraft except those used for point-to-point flights only, require aircraft inspection prior to carding)

Contract Aircraft:

Vendors shall be required to meet all provisions of the aircraft contract throughout the period of the contract. Operational, personnel, and equipment requirements in addition to the minimum vendor requirements of this section shall be stated in the contract and become an extension of this document during the period of contract performance and during aircraft and pilot carding.

Rental Offer Aircraft:

- a. Aircraft procured utilizing the rental offer shall be limited in use to suppression, fire fighting support or other emergency related missions.
- b. Each region shall be responsible for maintaining current rental offers with commercial vendors for aircraft within their geographical boundaries.

General Operations All Vendor Aircraft:

- a. DOF Flight Record: The Pilot-In_Charge (PIC) shall be responsible for accurately completing the DOF Flight Record (Form 10-3133) for each flight conducted for the DOF. Complete directions for form use by the PIC are located on the back of the form. Note: Form 10-3133 shall be submitted with the vendor billing invoice to receive payment for services.
- b. Logging of Aircraft Flight Time:
 - Airplanes. Flight time shall be measured from the time the aircraft commences its takeoff roll until it returns to the blocks and shall be computed in hours and tenths/hundredths.
 - Helicopters. Flight time shall be measured from lift-off to touchdown and recorded in hours and tenths. A flight-recording meter reading in hours and tenths and activated by an engine or transmission oil pressure switch wired in series with a collective switch, or equivalent system, shall be required for recording flight time in helicopters.
- c. Flight Plans & Flight Following: Shall be conducted to DOF Flight Plans & Flight Following Policy, Chapter 2613, General Aviation Operations- All Aircraft.
- d. Flight Crew and Airtanker Crew Flight & Duty Time: Shall be regulated by Chapter 2613, General Aviation Operations- All Aircraft.

Additional Operational Policy and Procedures:

See: Chapter 2613, General Aviation Operations- All Aircraft

2612 Military and Government Cooperator Aircraft

This chapter identifies standards for DOF use of Military and Other Government Cooperator Aircraft.

Military Aircraft

- a. Point-to-Point Missions: The DOF may utilize military aircraft to transport State personnel for point-to-point operations without further agency aircraft and pilot approval.
- b. Special Use Missions: The DOF may utilize military aircraft for special use missions provided the military pilot has been agency approved for that special use mission (carded or authorization through a letter).

Department of Natural Resources
Division of Forestry
Policy and Procedures Manual

See: DOF – Alaska Army National Guard Operating Plan to utilize Alaska Army Air Guard Resources.

Canadian Government Aircraft:

The DOF accepts Canadian firefighting Aircraft and Pilot Qualifications and may utilize Canadian aircraft for fire suppression operations at its discretion.

See: Northwest Compact Cooperative Operating Plan for utilization of Canadian Aircraft:

US Federal Government Aircraft:

The DOF requires interagency (USDI-AMD and/or USDA-Forest Service) aircraft and pilot carding of all federally operated aircraft utilized by the DOF.

See: Alaska Statewide Master Agreement

Other Alaska State Aircraft:

Department of Public Safety, Alaska State Trooper Aircraft piloted by non-incident trooper pilots whom possess a commercial pilots license issued by the FAA, may be used by the DOF when authorized by the Statewide Aviation Supervisor.

Department of Fish and Game aircraft with pilots whom possess a commercial pilots license issued by the FAA may be used by DOF when authorized by the Statewide Aviation Supervisor.

State Aircraft- Other than State of Alaska:

The DOF requires agency aircraft and pilot carding of all State operated aircraft utilized by the DOF.

2613 General Aviation Operations – All Aircraft

This chapter identifies operational policy and procedure for all aircraft operations conducted by and/or for the Division of Forestry.

Flight Plans:

Flight plans are required for all flights except;

- Those conducted within a 25-mile radius of the base of operations, which involve local flight training.
- Flight evaluations and maintenance test flights.

Department of Natural Resources
Division of Forestry
Policy and Procedures Manual

- These exempt flights must be able to maintain continuous radio contact with the base of operations.

IFR Flight Plans shall be filled with the FAA.

VFR Flight Plans shall be filled through DOF dispatch or interagency dispatch office. During periods of the year when either DOF or Interagency Flight Following is not available (late fall, winter, early spring) than a flight plan should be filed with the FAA.

Pilots or DOF Helicopter Managers shall be responsible for providing the following information to dispatch prior to departure (excluding tactical operation).

Aircraft Identification (N # or Call Sign)
Type Aircraft
Departure Location
Destination
Route of Flight
Estimated Time En route
Hours of Fuel On Board
Name & Number of Soles On Board
Pilots Name

Dispatch personnel shall list flight plan information on the DOF Aircraft Request Form (ARF).

Flight Following Policy:

Flight following is required for all flights. The pilot and scheduling dispatcher will concur on the appropriate flight following method. Automated flight following with Agency oversight shall be the standard when available; with Agency Flight Following (30 minute call in) will be secondary as back up to the Automated Flight Following.

Flight Following Procedure when Agency oversight is not available:

a. FAA VFR Flight Plans:

When Agency Flight Following is not available VFR flight plans shall be filed with an appropriate FAA facility. DOF requires that a radio check-in every 60 minutes or less is made to an FAA facility (i.e., an ARTCC or FSS). FAA Flight Service will provide relay position reports on a workload-permitting basis to Area and Region dispatch office provided they are given a toll free number and person to contact when the flight plan is filed. Pilots shall update DOF/Agency dispatch of flight progress when possible.

b. FAA IFR Flight Plans:

Department of Natural Resources
Division of Forestry
Policy and Procedures Manual

IFR flight plans shall be filed with an appropriate FAA facility. An FAA Instrument Flight Rules (IFR) flight plan is required when flying into known or forecasted Instrument Meteorological Conditions (IMC). An IFR flight plan may be filed at pilot discretion in other cases. Pilots shall update DOF/Agency dispatch of flight progress when possible.

See: Automatic Flight Following Procedures.

Flight Locating:

When aircraft become overdue on their flight plan the dispatchers responsible for flight following the aircraft shall initiate flight-locating procedures.

See: Aviation Incident / Accident Response Guide

Aircraft Accident or Missing Aircraft:

When aircraft are involved in an accident or are missing the dispatchers responsible for flight following the aircraft shall initiate aircraft accident or missing aircraft emergency procedures.

See: Aviation Incident / Accident Response Guide

NTSB Notification of Aircraft Accident:

The Division shall adhere to the requirements of NTSB 830 for all aircraft accidents and incidents. The Statewide Aviation Supervisor (Steve Elwell 761-6271) shall be notified immediately following an aircraft accident.

See: Aviation Incident / Accident Response Guide

Aviation Hazard or Mishap Reporting (Safecom):

Safecom reports should be used to report any condition, observance, act, maintenance problem, or circumstances, which have potential to cause an aviation related mishap.

Pilot (Flight Crew) Alert Standards

Alert Standards represent the minimum required time for departure from the airbase. Flight crews will be advised at approximately 18:00 each day for the beginning Alert for the following day. Alerts may be up-graded or down-graded throughout the day.

Red: Personnel must be located at the airbase and available for immediate departure.

Yellow: Personnel must be available for departure from the airbase within 30 minutes

Department of Natural Resources
Division of Forestry
Policy and Procedures Manual

Blue: Personnel must be available for departure from the airbase within 1.1 hours.

Green: The Flight crew is off-duty and can be away from base, with no possibility of recall.

State Employees: Color Alert Standards do not affect daily work schedule. The designated employee's Supervisor sets the daily work schedule.

Pilot (Flight Crew) and Mechanic (Engineer) Flight and Duty Time Limitations

These flight and duty limitations are designed to manage the fatigue of flight crews and mechanics. The standards identified below are the minimum requirements for flight and duty time limitations. Crewmembers will follow these standards or the Operator's Operations Certificate or Specifications, DOF contracts, or interagency agreements whichever is more stringent.

- All crewmembers shall have a minimum of 3 periods of 24 hours free from duty in any 30 day period and 13 periods of 24 hours free from duty within any 90 day period.
- If crewmembers have had 5 consecutive 24 hour periods free from duty, they can work 42 consecutive days as long as that is followed by another 5 consecutive 24 hour periods free from duty.
- All crewmembers shall have a minimum of 10 consecutive hours of rest (off duty) not to include any pre-flight or post-flight activity prior to any assigned duty period.
- Time spent by a crewmember traveling to or from a duty assignment, and not local in character (greater than a 30 minute commute), shall not be considered part of a crew rest period.
- A maximum of 8 hours flight time during any duty period and a maximum of 14 consecutive duty hours during any duty period.
- A maximum of 60 hours flight time in and 7 day consecutive period and a maximum of 150 hours flight time in any 30 day consecutive period.

Crewmembers may be considered as being on a day-off if the crewmembers are on Blue Alert and were notified 12-hours prior, are not called to report to the airbase, and the aircraft does not fly.

Aviation Fuel & Aircraft Fueling:

Aviation fueling standards & procedures outlined in the DOF Aviation Fueling Handbook shall be the standard for all aviation fueling operations conducted by and for the DOF.

See: [DOF Aviation Fueling Handbook](#)

Helicopter Operations:

The Division of Forestry adopts the Interagency Helicopter Operations Guide (IHOG) as a guideline for all helicopter operations conducted by and for the DOF. The DOF may deviate from IHOG guidelines when necessary.

The DOF publishes an IHOG supplement specific to DOF operations. When policy conflicts between the IHOG and the DOF IHOG Supplement exist the DOF IHOG Supplement shall be governing.

Aviation Transport of Hazardous Materials:

a. The Division of Forestry accepts and incorporates the Interagency Aviation Transport of Hazardous Materials Handbook as policy for all transportation of HAZMAT by air conducted by or for the DOF.

b. The PIC Hazmat Notification Form has been designed to meet the pilot notification requirements for HAZMAT transportation by air as defined in the Interagency Aviation Transport of Hazardous Materials Handbook and is required to be accurately completed and given to the PIC prior to aviation transport of HAZMAT.

See: Interagency Aviation Transport of Hazardous Materials.

Early Season Helicopter Proficiency Training

Each Area Office that is assigned a helicopter is required to conduct early season proficiency training with DOF helicopter crewmembers and pilot. Each Area will be funded for a maximum of two hours of helicopter flight time. It is up to each Area Office to develop training curricula that are applicable to their helicopter operations. At a minimum the annual early season helicopter proficiency training will include the following subject areas:

a. Ground Training:

- Contract & DOF Aviation PPMs Review
- Aircraft preflight inspection to be conducted with pilot
- Crew safety briefing
- Radio and GPS operations and use
- Load calculations for specific helicopter
- Bucket attachment procedures
- Sling load operations
- Fueling procedures
- Safety briefings

Department of Natural Resources
Division of Forestry
Policy and Procedures Manual

b. Flight Training:

- Bucket drops to ensure accuracy and crew coordination
- Actual radio & GPS operations
- Evaluations of unimproved helispots
- Pilot & crew coordination
- Area familiarization for pilot
- Sling load and long line operations

c. Crash Fire Rescue Training:

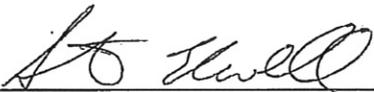
- Fire Extinguisher Operation Training
- Crash Fire Rescue Kit Familiarization

Aerial Supervision Requirements:

The Division of Forestry adopts the Interagency Aerial Supervision Guide as policy. In addition to the requirements of IASG, low level aerial supervision (ASM or Lead) shall be ordered, via the AICC Initial Attack dispatch system, whenever an airtanker and/or retardant is ordered for a fire.

Signatures

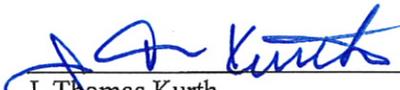
Prepared by:



Steve Elwell
Aviation Supervisor
State of Alaska, DNR
Division of Forestry

6-25-10
Date

Approved by:



J. Thomas Kurth
Chief of Fire and Aviation
State of Alaska, DNR
Division of Forestry

6/28/2010
Date