Foreword

The purpose of this guide is to promote aviation safety in the field. For detailed aviation policy or information, consult your aviation manager or specialist as well as agency manuals, handbooks, and guides.

This guide is reviewed annually and updated as necessary by the USDA Forest Service and USDI Office of Aircraft Services. Questions or suggestions to the guide should be directed to your agency Aviation Safety Manager.

Additional copies of this guide may be ordered from: National Interagency Fire Center, ATTN: Great Basin Cache Supply Office, 3833 South Development Avenue, Boise, ID 83705.

This information may be viewed online at: www.oas.gov

Order NFES 1373
Pilot and Aircraft Approval

- Aircraft and pilots must meet agency standards for the mission being flown.

- If the pilot and aircraft are approved for use, aircraft approval documents (cards or letters) are issued.

- Approval documents must be current.

- Documents must match pilot and aircraft (tail number).

- A valid method of agency procurement must exist.
Ordering/Coordinating Flights

Light aircraft may be used to transport personnel to meetings, administrative activities, or training when it is cost effective. These flights will be ordered according to agency policy, and should be made at least 24 hours in advance -- preferably several days ahead -- with the following information:

- Names and weights of passengers.
- Weight of cargo or baggage - any abnormally bulky items or weights over 35 lbs. should be noted.
- Itinerary.
- Management code for charges.
- Flight route - If a local flight - check unit hazard map for flight hazards.

You should arrive at the airport or helibase at least 30 minutes prior to departure time. If your plans change and the flight is to be cancelled, let your agency know right away. (If not cancelled at least one hour in advance, some contracts may require payment of a minimum amount.)

Single Engine Aircraft Restrictions

- Single engine passenger night flights are not allowed. (The flight can be initiated one-half hour before sunrise and the aircraft must be on the ground one-half hour after official sunset.)
- Single engine passenger instrument (IFR) flights (consult agency policy).

Chief of Party Responsibilities

A Chief of Party will normally be designated whenever a mission involves multiple personnel. The designee's duties and responsibilities are to:

- Explain to all personnel at the beginning of travel the transportation arrangements, route, stopping points, and estimated time of arrival.
- Have copies of passenger manifest available for charter aircraft and dispatching receiving units.
- Maintain the telephone numbers of the dispatching receiving offices in case of delays of more than 30 minutes.
- Assemble the passengers for boarding.
- Assist in the safety and welfare of each passenger.
- Check pilot and aircraft approval documents for currency and mission qualifications.
Passenger Responsibilities

You share responsibility for aviation safety and are expected to take timely action to prevent unsafe operations.

You are not authorized to ride in any aircraft or with pilots not properly approved and carded. You should not hesitate to request pilots to produce approval evidence.

You should discuss with the pilot, the mission, any concerns with agency policy, or anything that appears to be of issue. Remember, the pilot is in charge of the aircraft and responsible for the overall safety of the flight. Do not put pressure on your pilot to fly missions that may be unsafe.

If you feel that the pilot is operating the aircraft in an unsafe manner, or in violation of agency policy or procedures, you should terminate or cancel the flight. Immediately contact your agency's aviation representative.

Ground Safety

- Keep well clear of helicopter rotors and airplane props.

- Always get the approval of a flight crew member before approaching a starting or operating helicopter. Only approach and depart as directed, in a slightly crouched position, and in full view of a crewmember.

- Keep seat belt and shoulder harness fastened until instructed by the pilot to unbuckle.

- Wear eye protection when working around helicopters.

- Aircraft must be loaded by qualified personnel only.

- No smoking within 100 ft. of an aircraft.

- Do not throw objects to or from an aircraft.
Air Safety

- No smoking.
- Keep clear of controls.
- Hold loose objects securely while in flight.
- Keep alert for hazards, particularly towers, transmission lines, and other aircraft. Inform the pilot of their presence.
- Avoid unnecessary talk with the flight crew.
- Keep seat belt and shoulder harness fastened until instructed by the pilot to unbuckle.

Hazardous Materials (HazMat)

These are items which agencies use that have been classified by the DOT as "HazMat." Transportation of these materials by air is regulated by laws which require special containers, specific labeling, special handling, etc. Some of the more common hazardous materials are:

- Explosives
- Diesel Fuel
- Solvents
- Fusees
- Argon Bottles (Probeye)
- Propane
- Jet Fuel
- Blazo
- Kerosene
- Wet Cell Batteries
- Gasoline
- Aerosols
- Pressurized Containers
- Foam
- Concentrate

If you have items to transport that fall into this category and you're not sure of the handling specifications, refer to your agency's HazMat policy or contact your agency aviation representative. The pilot must be notified of hazardous material before it is loaded on the aircraft.
Personal Protective Equipment

Agencies have personal protective equipment (PPE) requirements for most flights. When in doubt, **wear it**.

- Above-the-ankle leather boots, and no metal against the skin.
- Nomex pants and shirt or flight suit buttoned or zipped to the top, collar turned up, sleeves rolled down. Pants covering the boot tops.
- Nomex or leather gloves.
- Non-synthetic (cotton, wool) outer and undergarments.
- Protective head gear (consult agency policy).

Five Steps to a Safe Flight

1. Pilot/aircraft data card - approved and current.
2. Flight plan/flight following initiated.
3. Personal protective equipment in use when required.
4. Pilot briefed on mission and flight hazards.
5. Crew and passenger briefing to include:
   - Aircraft hazards
   - Seat belt and harness
   - ELT & survival kit
   - First aid kit
   - Gear and cargo security - not under seats
   - Fire extinguisher
   - Oxygen equipment
   - Emergency egress
   - Smoking
   - Fuel & oxygen shut-offs
Helicopter Landing Area Selection

Choosing a landing area:
- Locate a reasonably flat area.
- Choose an area clear of people, vehicles, obstructions such as trees, poles, and especially overhead wires. The area must be free of stumps, brush, posts, large rocks, or anything over 18 inches high.
- Consider the wind direction. Helicopters land and takeoff into the wind. Choose an approach free of obstructions. Any obstruction should be relayed to the helicopter crew on initial radio contact.
- Remove or secure any loose items in and around the landing area such as trash, blankets, hats or equipment.
- Wet down the landing area if dusty conditions are present.

Helicopter Landing Area Safety

- Keep bystanders well clear of the helicopter and supervise the safety of personnel working around the helicopter.
Helicopter Landing Area Safety

- Always get the approval of a flight crew member or the pilot before approaching a starting or operating helicopter. Only approach and depart as directed, in a slightly crouched position, and in full view of a crewmember.

- When approaching or departing, do not hold equipment overhead.

Aircraft Mishap Response Actions

Time is an extremely critical factor in responding to an emergency situation. Immediate positive action is necessary, delay may effect someone's survival.

Rescue Operations
- Preserve life.
- Secure the area (deny access except to credentialed officials and escorted media).
- Do whatever is necessary to extricate injured occupants and to extinguish fires, keeping in mind the necessity of protecting and preserving evidence.
- Document and/or photograph the location of any debris which must be disturbed in order to carry out rescues and/or fire suppression activities.

Site Safety Precautions. Aircraft wreckage sites can be hazardous for many reasons other than adverse terrain or climatic conditions. Personnel involved in the recovery, examination, and documentation of wreckage may be exposed to physical hazards posed by such things as hazardous cargo, flammable and toxic fluids, sharp or heavy objects, and disease. It's important to exercise good judgement, utilize available protective devices and clothing, and use extreme caution when working in the wreckage. Do not exceed your physical limitations.
Aircraft Mishap Response Actions

**Wreckage Security.** Treat the area like a crime scene. Arrange for security at the accident scene. Determine if HazMats are on the aircraft and request special assistance if necessary. Wreckage and cargo should not be disturbed or moved except to the extent necessary:

- To remove persons injured or trapped.
- To protect the wreckage from further damage.
- To protect the public from injury.

Deactivate the emergency locator transmitter (ELT) if installed. Where it is necessary to move aircraft wreckage, mail or cargo, sketches, descriptive notes, and photographs should be made. Monitor accident site security. Permit only authorized persons on site.

**News Releases.** Contacts with news media regarding the accident should be made by the National Transportation Safety Board (NTSB).

**Evidence.** Perishable evidence, e.g. human factors data and witness information must be quickly documented.

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**Flight Following**

The time required to rescue a survivor is directly related to how accurately your position can be determined. If you have filed a flight plan, stayed on course, and updated your progress with frequent position reports, your chance of rescue is greatly enhanced.

**Identification of Flight Following Requirements.** At the time the flight is planned, flight following requirements should be clearly identified. Requirements should identify check-in procedures, including time and locations, dispatch office(s) or other flight following facilities involved, individuals responsible for flight following, frequencies to be used, and any special circumstances requiring check-ins (for example, to military facilities within Special Use Airspace).

**Check-In Requirements.** Check-in intervals or times must be specified in the agency's flight following procedures. Check-ins must be documented and provide enough information so that the aircraft can be easily located if it is overdue or missing.

**Failure to Meet Check-In Requirements.** The dispatch or other flight following facility shall implement response procedures for overdue or missing aircraft.
Overdue or Missing Aircraft

- An aircraft is considered "Overdue" when the pilot fails to check-in within the time frame specified in the agency's flight following request, or when an aircraft operating on an FAA (VFR) Flight Plan, fails to arrive within 30 minutes past ETA, and its location cannot be established.

- An aircraft is considered "Missing" when it has been reported to a Flight Service Station (FSS) as being "Overdue" and FSS has completed its administrative search for the aircraft.

FAA Flight Service Station
Dial 1-800-992-7433 or 1-800-WXBRIEF

The FSS may require the following information:
Reported by ________ Agency ________
Phone ____________ Flight Plan (type) ________
Operator ____________ Pilot's Name ________
Aircraft # ____________ Type ________
Aircraft Color ________ Number Aboard ________
Departure Point ________ Date/Time ________
Route ____________ Destination ________
ETA ____________ Fuel on Board ________
Last Contact (time, location and radio frequency) ________

Emergency Contact List

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<th>Position/Name</th>
<th>Agency</th>
<th>Phone /Radio Freq</th>
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<td>24-hr. Reporting</td>
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<td>Other</td>
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Reportable Safety Concerns

If things happen that make you uneasy or appear to be unsafe, you're encouraged to discuss your concern with the pilot, or immediately contact your dispatcher or agency aviation representative for assistance. Any safety concern should be documented on a SafeCom and forwarded through agency channels. This type of follow-up will help improve overall aviation safety.

A SafeCom (Form OAS-34 or FS5700-14) is used to report any condition, observance, act, maintenance problem, or circumstance which has potential to cause an aviation related mishap.

If the mishap involves damage or injury notify the Agency's Aviation Safety Office (ASO) immediately by the most expeditious means available.

USDA-FS/USDI-OAS
24-Hour Accident Reporting Hot Line
Dial 1-888-464-7427 or 1-888-4MISHAP
Notes
The United States Departments of Agriculture and Interior are diverse organizations committed to equal opportunity in employment and program delivery. USDA and USDI prohibit discrimination on the basis of race, color, national origin, sex, religion, age, disability, political affiliation and familial status. Persons believing they have been discriminated against should contact the Secretary, U.S. Department of Agriculture or Interior.