

**FISH AND WILDLIFE SERVICE
AVIATION**

Aviation

Part 330 Aviation Management

Chapter 5 Aviation Safety Program and Mishap Prevention and Reporting

330 FW 5

5.1 What is the purpose of this chapter? This chapter describes the U.S. Fish and Wildlife Service (Service) Aviation Safety Program, including:

- A. Aircraft Mishap Prevention Plan,
- B. Accident reporting and investigation procedures,
- C. Aviation life support equipment (ALSE), and
- D. Aviation safety awards.

5.2 What is the scope of the chapter? This chapter applies to all Service employees, volunteers, Youth Conservation Corps members and students, and seasonal workers who use, operate, or maintain Service aviation resources.

5.3 What are the authorities for this chapter?

- A. Federal Aviation Regulations (14 CFR Part 91).
- B. Departmental Manual (DM) Part 352, Aviation Safety.
- C. Operational Procedures Memoranda (OPM) Series, Department of the Interior National Business Center (NBC) Aviation Management (AM).

5.4 What terms do you need to know to understand this chapter?

A. Aircraft accident. An accident is when someone is seriously injured or killed, or an aircraft is substantially damaged as a result of aircraft operations. Aircraft operations begin when any person boards the aircraft with the intention of flight and end when all people have left the aircraft.

B. Aviation mishap. Aviation mishaps may include:

- (1) Aircraft accidents,
- (2) Incidents that narrowly escape becoming accidents,
- (3) Incidents that affect or could affect the safety of operations,
- (4) Aviation hazards, and
- (5) Aviation maintenance deficiencies.

C. Hazard. A hazard is any actual or potential condition that may cause injury, illness, or death of people; damage to or loss of equipment or property; or degrade the mission.

D. Incident. An incident is something that happens that is not an accident, but could affect the safety of operations.

E. Risk. Risk is the **probability** of loss, or a negative impact to mission completion from a hazard.

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F. Risk assessment. Risk assessment is the identification of hazards and the assessment of possible loss. Personnel assessing risk must identify hazards, analyze the degree of risk with each hazard, and place hazards in perspective relative to safe completion of the mission.

G. Risk decision. Risk decision is the decision to accept or not accept the risks associated with an action.

H. Risk management / mitigation. Risk management and mitigation is the process of identifying, assessing, and controlling risks rising from operational factors and making decisions that balance risk cost with mission benefits.

I. Substantial damage. We consider damage to be substantial when it adversely affects the structural strength, performance, or flight characteristics of the aircraft, **and** would normally require major repair or replacement of the affected component. We do **not** consider the following to be substantial damage:

- (1) For multiple engine aircraft, engine failure or damage limited to only one engine;
- (2) Bent fairings or cowling;
- (3) Dented skin,
- (4) Small puncture holes in the skin or fabric;
- (5) Ground damage to rotor or propeller blades; and
- (6) Damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips when the damage does not compromise the safe operation of the aircraft.

5.5 Who is responsible for aviation safety?

A. The Director, Deputy Directors, Regional Directors, and all Project Leaders/Supervisors ensure that we manage Service aviation support functions safely and effectively to accomplish Service goals.

B. The Assistant Director – Migratory Birds, as the Aviation Executive ensures:

- (1) The Director is aware of Departmental aviation safety matters.
- (2) We develop, implement, and maintain an effective Service aviation safety program.
- (3) All employees involved in aviation operations receive required safety training (see 330 FW 3 for more information on training requirements).

C. The Chief – Law Enforcement ensures aviation management for the Law Enforcement program meets Service and Departmental requirements.

D. The Service Aviation Manager:

- (1) Serves as the Service Aviation Safety Manager.
- (2) Is the primary Service contact and coordinator with the Department for all aviation activities, including aviation safety. He/she is responsible for advising the Director and providing technical assistance in the areas of aviation safety, training, management, acquisition, and policy.

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- (3) Revises and updates this chapter, as necessary.
- (4) Interprets aviation safety requirements and serves as a consultant to resolve Servicewide questions or issues.
- (5) Conducts aviation program evaluations of the Regions in coordination with the NBC AM Aviation Program Evaluation Manager.
- (6) Participates in accident investigations and serves as a member or president of Departmental Aircraft Accident Investigation Boards, as required.
- (7) Serves as a member of the Department's Aviation Management Evaluation Team on evaluations of other bureaus' aviation safety programs.
- (8) Develops policy proposals involving all aspects of aviation safety.

E. Regional Aviation Managers (RAM):

- (1) Serve as the Regions' primary contacts with the NBC AM.
- (2) Assist in implementing the Service Aircraft Accident Mishap Prevention Plan.
- (3) Participate in aircraft accident investigations with the NBC AM.
- (4) Develop an annual training program that ensures Regional pilots and aircrews are mission flight proficient and know Service aviation safety policies.
- (5) Coordinate or provide safety training for managers, Project Leaders, field staff, and pilots to make sure they are familiar with current aviation policies, procedures, and regulations. The training must emphasize the importance of knowing field mission requirements and the elements of flight safety.
- (6) Encourage Project Leaders to develop and use hazard maps and aviation operational plans when they are involved in special use activities. Promote periodic review of hazard maps for accuracy and to update when necessary.

F. Project Leaders:

- (1) Coordinate closely with the RAM for support.
- (2) Review proposed flight operations under their direction and conduct a risk analysis to manage associated risks by minimizing hazard probability/severity.
- (3) Review mission profiles to ensure that pilots and observers have adequately addressed/mitigated risks associated with the assigned tasks.
- (4) Provide resources for all employees under their supervision to get required aviation safety training.

5.6 What are the essential elements of the Service's Aviation Safety Program?

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A. Aircraft Mishap Prevention Plan. We hold all managers and employees accountable for reducing or eliminating hazards associated with aviation operations, for proper planning of aviation missions, and for following the rules of our Service Aviation Management Program.

B. Risk Management. Employees must assess risk related to aviation operations. The principles of the risk management process are in Exhibit 1. Exhibit 2 is a set of questions that you should answer to analyze risk before each project.

C. Accident/Incident Reporting and Investigation. The National Transportation Safety Board (NTSB) is responsible for investigating Service aviation mishaps.

(1) The NTSB usually designates NBC AM safety personnel as lead investigators on Service accidents. NBC AM accident investigators send their facts and findings to the NTSB and provide the Service with a final accident report. Service employees may participate on the aviation accident investigation team, depending on the complexity of the mishap. See section 5.8 for more information about reporting accidents.

(2) You may be asked to assist the investigation team in securing the accident site or in searching the area if you are near the mishap site. The Service Aviation Manager may designate you as the on-site liaison to coordinate with and assist the Department's Investigator-in-Charge.

D. Safety Awards. The Department has an award program to recognize pilots who operate aircraft without mishap over an extended period of time. The Service's awards program recognizes those air crew members/observers who have played a significant role in the safe conduct of aviation missions.

(1) 352 DM 7 describes the Department's Aviation Safety Awards Program.

(2) The Service Aviation Safety Awards Program for Air Crew Members parallels the Department's award program to recognize safe pilots.

(a) Criteria: We award air crew members who have:

- (i) Provided valuable assistance in the overall accomplishment of the mission, and
- (ii) Promoted flight safety.

(b) Nominations: Pilots nominate air crew members for the award.

(i) Pilots should send nominations to the Service Aviation Operations and Safety Specialist.

(i) The nomination should include:

- The years of service as an air crew member (e.g., 1992 - present).
- Name and mailing address where you want the award sent (i.e., Regional Director, nominee's supervisor, the crew member, etc.).

(c) Levels of Award: There are five levels of award based on years of service:

(i) **Award of Merit:** 5 consecutive years or seasons as an active air crew member.

(ii) **Award of Distinction:** 10 consecutive years or seasons as an active air crew member.

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(iii) Award of Excellence: 15 consecutive years or seasons as an active air crew member.

(iv) Award of Honor: 20 consecutive years or seasons as an active air crew member.

(v) Director's Award of Honor: 25 consecutive years or seasons as an active air crew member.

E. Aviation Life Support Equipment (ALSE). Employees involved in flight operations must wear personal protective equipment (PPE) as required in the Department's [ALSE Handbook](#). The handbook is on the NBC AM Web site.

F. Aviation Safety Education and Training. Education and training are key to an effective aviation safety management plan. We require all aviation users, including flight and air crew members and managers, to complete the training requirements found in 330 FW 3, Flight Authority and Aviation Training.

G. Aviation Evaluation Program. The NBC AM Safety Office directs the Department's Aviation Evaluation Program (see OPM 06-33).

(1) The program establishes a mechanism to analyze and report information about our Aviation Management Program.

(2) The Service Director receives an independent appraisal of how well we are managing our aviation resources.

(3) NBC AM forms an evaluation team that formally evaluates each Region every 3 years. The evaluation team gives the Regional Director a written report of their findings and recommendations.

(4) The NBC AM Evaluation Manager coordinates with the Service Aviation Manager to make sure we institute corrective actions in a timely manner.

(5) The Service Aviation Manager evaluates Regional Aviation Management Programs in a less formal manner on a random schedule.

5.7 What is an Aviation Mishap Response Plan and who must develop it? An Aviation Mishap Response Plan tells you what actions you must take and who you must notify if an aviation mishap occurs in your area.

A. Every Region, Refuge, and program that uses aviation must develop an Aviation Mishap Response Plan.

B. You can get a generic mishap response plan from the National Interagency Fire Center (NIFC), Great Basin Cache Supply Office; Boise, ID 83705. You can also get the Interagency Aviation Mishap Response Plan on the NBC AM Web site.

5.8 What actions should Service employees take immediately after an aircraft accident? You should take the actions below in this order:

A. Protect people. Provide on-scene assistance to accident victims.

B. Protect property. Prevent further damage to equipment and property.

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C. Preserve evidence. Treat the entire accident area as if it were a crime scene. Secure the area until the investigation team arrives.

(1) Do **not** allow anyone other than rescue, firefighters, or law enforcement officers into the area.

(2) Do **not** move any wreckage unless it is necessary to protect people. The aircraft and all its parts must remain secure, and should **not** be moved until the NBC AM or the NTSB Investigator-in-Charge arrives at the scene.

D. Notify. Report the mishap as soon as possible to the NBC AM Safety Office at their toll free telephone number (1-888-4MISHAP)/ (1-888-464-7427). Inform your Regional line managers and the Service Aviation Manager by whatever means you have available.

5.9 How can Service employees report something that might cause an aircraft mishap? You can report any condition, act, maintenance problem, or circumstance that may cause an accident using the Department's [SAFECOM form \(Form OAS-34\)](#). You may also submit a SAFECOM electronically on the NBC AM Web site.

A. SAFECOM is an excellent way to share information and report problems, but it is **not** a substitute for on-the-spot corrections.

B. Send the information to NBC AM to share Departmentwide as an accident prevention tool.

5.10 What is the Department's Aviation Mishap Information System (AMIS)? AMIS is a database that includes all reported Department aviation mishap information. Categories include aircraft mishaps, aviation hazards, aircraft maintenance deficiencies, and airspace intrusions.

5.11 How can Service employees get Aviation Safety and Aircraft Mishap Information? We have many ways of sharing aviation safety information, including:

A. We discuss accident findings and corrective actions at local employee meetings.

B. Information from SAFECOMs are available on the NBC AM Web site.

C. We send out safety-related publications to all aviation organizations. Examples include:

(1) **Safety Alert.** A safety alert is a bulletin with significant information about aviation operations, maintenance, or new publications. We publish them as necessary and give them a red border.

(2) **Aircraft Mishap Prevention Bulletin.** A prevention bulletin is general information about aircraft mishap prevention concepts, methods, procedures, etc. We publish them as necessary and give them a green border.

(3) **Aviation Safety Review.** This publication summarizes the Department's aircraft mishaps and related statistical data and provides a trend analysis. The Department publishes these at the end of the mishap reporting (calendar) year.

(4) **Aviation Mishap Video.** The Department develops this video every year. It reviews the previous year's aircraft mishaps, including cause factors and corrective actions necessary to prevent future accidents.

5.12 Can anyone get a copy of an aircraft mishap investigation file? As a general rule, no. We use

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year's aircraft mishaps, including cause factors and corrective actions necessary to prevent future accidents.

5.12 Can anyone get a copy of an aircraft mishap investigation file? As a general rule, no. We use mishap information **only** to help prevent mishaps in the future. The NBC AM Aviation Safety Office is the Custodian of Record for all Department aircraft mishap information. Release of the information is subject to the provisions of the Freedom of Information Act and the Privacy Act of 1974. You should contact the Service Aviation Manager or NBC AM for assistance in getting aircraft mishap information.



DEPUTY DIRECTOR

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