

Department of the Interior Departmental Manual

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Part 352: Aviation Safety
Chapter 1: Aviation Safety Program

Originating Office: National Business Center

352 DM 1

1.1 **Purpose.** This chapter establishes policy for implementation of the aviation safety program within the Department of the Interior (DOI). The primary objective is the elimination of unnecessary or unacceptable risks associated with the use of aircraft in support of Interior programs.

1.2 **Authority.** Federal law requires the head of each agency to develop and support activities designed to reduce employee injuries and damage to property, encourage safe practices, and eliminate hazards in the workplace. (See 5 U.S.C. 7902; Sections 6 and 19 of Public Law 91-596, Occupational Safety and Health Act of 1970, as amended; 29 U.S.C. 651, et seq.; 29 CFR 1960; and Executive Order 12196.) This program is established by the National Business Center (NBC), Aviation Management Directorate (AMD) Associate Director, in accordance with provisions of Departmental Manual 112 DM 10, 485 DM 1, and 350 DM 1.

1.3 **Aviation Safety Program Structure.**

A. **Philosophy.** Aviation safety and aircraft mishap prevention in DOI is based on the philosophy that all aircraft mishaps can be prevented and that mishap prevention is an inherent function of management. Aircraft mishaps represent a cost to DOI that is unprogrammed, unpredictable, and unproductive to the accomplishment of bureau missions.

B. **Policy.** Bureau Directors are ultimately responsible for the management of aviation resources and the implementation of an effective aircraft mishap prevention program. Supervisors and managers at all levels are responsible for the safety of aviation operations under their control. Within this policy are the practical requirements to provide safe working conditions, prevent injuries to employees, and protect property from damage. Application of approved practices is a fundamental responsibility of managers and supervisors and represents an area in which performance and accountability must be emphasized. Each DOI organization involved in aviation operations shall establish an aviation safety program. Policy directives issued by each bureau shall be consistent with the provisions of 350-354 DM series manuals, NBC AMD Operational Procedures Memoranda (OPM), and Handbooks.

1.4 **Program Elements.** The following six elements are minimally essential to all bureau aviation safety programs.

- A. Aviation Safety Program Responsibilities.
- B. Aircraft Mishap Prevention Program.
- C. Aviation Program Evaluation.
- D. Aviation Safety Awards Program.
- E. Aircraft Mishap Investigation.
- F. Aviation Safety Education and Training.

1.5 Staffing and Training.

A. Staffing.

(1) Bureau directors shall provide adequate staffing and training of personnel necessary to ensure an effective aircraft mishap prevention program. These positions may be classified as full-time equivalent or collateral duty based on a bureau management assessment of needs.

(2) The following minimum standards apply in the development of a bureau aviation safety program:

(a) An Aviation Manager shall be designated to administer the bureau aviation program at the national level. This individual will be thoroughly knowledgeable regarding bureau aviation activities and will meet minimum training requirements specified in the Aviation User Training Program.

(b) An Aviation Safety Manager shall be designated to administer the bureau aviation safety program at the national level. While it is desirable that this individual hold a Federal Aviation Administration (FAA) Commercial Pilot Certificate, it is not mandatory. However, the individual shall be trained in the aviation safety management subjects listed below. If not trained in these subjects, the individual shall attend formal course(s) of instruction in concepts and methods necessary to establish and maintain a national level aviation safety program within 12 months of appointment. Minimum training includes professional institution instruction in:

- (i) Aircraft mishap prevention concepts and methods.
- (ii) Aviation safety program structure and organization.
- (iii) Management skills.
- (iv) Aviation psychology/human factors.

- (v) Biomedical aspects of aviation safety.
- (vi) Aviation safety program evaluations.
- (vii) Motivating management.
- (viii) Managing a part-time safety office.
- (ix) Legal aspects of aviation safety.
- (x) Risk analysis and risk management.

(3) The education and training requirements specified for the positions identified above are minimums, regardless of classification of the position as full-time or collateral duty.

(4) Bureaus with an aviation program exceeding 20,000 flying hours annually are strongly encouraged to establish a full-time position for the Aviation Safety Manager.

B. Education and Training. The education and training of Interior personnel at all organizational levels is the responsibility of management. The minimum level of education and training specified in the 350-354 DM series and 485 DM series shall be provided to appropriate bureau personnel.

1.6 **Aviation Safety Program Responsibilities.**

A. NBC AMD Associate Director. The NBC AMD Associate Director is responsible for:

(1) Developing and implementing a Department-wide aviation safety and aircraft mishap prevention program to include an aircraft mishap and hazard reporting system and evaluation of bureau aviation programs.

(2) Investigating select aircraft mishaps involving Departmental aviation operations in cooperation with the National Transportation Safety Board (NTSB), where DOI was exercising “operational control,” or for other organizations through Interagency Agreements or Service Level Agreements. The Director is also responsible for representing the Department on all aircraft mishap investigations and/or Mishap Review Boards where DOI has involvement.

(3) Development of Department-level aviation policy for aviation safety and all manner of aviation services in support of DOI missions, including Interior owned fleet, cooperator, and commercially acquired services.

(4) Keeping the Assistant Secretary - Policy, Management and Budget (A/S-PMB), and the NBC Director apprised of the status of the Interior Aviation Safety and Aircraft Mishap Prevention Programs.

(5) Develop Departmental policy statements regarding aviation management for documentation in the Departmental Manual by the A/S-PMB which include:

(a) Standards for pilots and aircraft utilized in conducting DOI aviation activities.

(b) Aviation safety and aircraft mishap prevention functions.

(c) Maintenance standards and inspection procedures.

(d) Identification of operational considerations for mishap prevention efforts.

(6) Assist bureaus in developing and implementing aviation safety and aircraft mishap prevention programs.

(7) Establish and maintain a positive Departmental aviation safety program.

(8) Advise and support bureau aviation safety personnel.

(9) Administer the DOI Aviation Safety Awards Program.

(10) Review Departmental and bureau aviation operational publications when requested.

(11) Identify, develop, coordinate, and conduct essential aviation safety, aviation management, and aircraft mishap prevention education training.

(12) Provide technical assistance to DOI AM Aviation Safety Management personnel in conducting evaluations.

(13) Monitor DOI airspace needs and coordinate Departmental responses to proposed airspace actions, which would affect bureau programs and functions.

(14) Facilitate the Interior Aircraft Mishap Review Board process and forward all Board recommendations to appropriate action offices.

(15) Establish evaluation criteria for and provide leadership in the conduct of aviation program management and aviation safety program management evaluations within the Department.

(16) Other responsibilities as specified in 112 DM 10, the 350-354 DM series and OPMs.

B. NBC AMD Aviation Safety Manager. The Manager shall establish, maintain, and oversee the Department-wide Aviation Safety and Aircraft Mishap Prevention Programs. The manager's duties shall include, as a minimum, the following:

- (1) Responsibility for the investigation of all NTSB reportable aircraft mishaps occurring within DOI aviation operations.
- (2) Providing aviation safety related training.
- (3) Providing technical advice on aviation safety issues.
- (4) Disseminating aviation safety information.
- (5) Maintaining liaison with Department and bureau national aviation management personnel regarding the Department's Aviation Safety Program.
- (6) Managing the Aviation Mishap Information System (AMIS).
- (7) Assessing compliance with established Departmental aviation management and aviation safety policies, concepts, and objectives.
- (8) Managing the Department's Aviation Program Evaluations.
- (9) Managing the Department's Aviation Safety Awards Program.

C. Bureau Directors. Bureau Directors are responsible for the implementation of an Aviation Safety Program within their organizations. They shall:

- (1) Publish an Aviation Management Plan to implement Departmental aviation policies established in Parts 350-354 of the Departmental Manual, appropriate NBC AMD Operational Procedures Memoranda (OPM), and other guidelines. An aviation management plan shall:
 - (a) Identify roles and responsibilities for aviation personnel at the national, regional, and local unit level.
 - (b) Regional and unit Aviation Management Plans should also identify safety procedures for all aviation operations. These procedures should include documented procedures for project planning when involved in special use activities.
- (2) Furnish a current bureau Aviation Management Plan and aviation manuals, standards, policy statements, and directives regarding their aviation program, including aviation safety information, to the NBC AMD Associate Director.

- (3) Identify and provide resources for the education and training of personnel as required in the Departmental OPM “Aviation User Training Program” and 485 DM.
- (4) Integrate the six program elements identified in paragraph 1.4 into all bureau aviation safety programs.
- (5) Ensure application of all Departmental and bureau aviation safety policies.
- (6) Designate a senior management official to serve as the bureau representative to the Interior Aviation Board of Directors.
- (7) Designate a Bureau Aviation Manager.
- (8) Designate a Bureau Aviation Safety Manager (refer to paragraph 1.5A(4)).
- (9) Assign a representative to serve as liaison with NBC AMD for all NTSB reportable mishaps.
- (10) Promote active participation in the Aviation Mishap Information System (AMIS).
- (11) Encourage attendance at aircraft mishap prevention seminars/training sessions.
- (12) Ensure bureau participation at Interior Aircraft Mishap Review Boards.
- (13) Establish and sustain a safety culture within their bureau that is founded on principles of operational risk management such as: to identify the hazards, assess the risks, analyze risk control measures, make control decisions, implement control decisions, and supervise and review at the appropriate management level.

D. Bureau Management. Bureau Managers are responsible for:

- (1) Developing bureau-specific procedures for implementing aviation management policy.
- (2) Providing guidance to bureau units in implementing Departmental aviation management and aviation safety management program requirements.
- (3) Identifying and providing appropriate resources for the education and training of staff, line managers, and field personnel as outlined in the OPM “Aviation User Training Program.”
- (4) Serving as a focal point for aviation matters within the bureau, to include aviation safety issues.

- (5) Coordinating bureau policy regarding procedures relating to aviation.
- (6) Developing bureau-specific aviation safety and aircraft mishap prevention programs that are in concert with Departmental philosophy, policy, and objectives.
- (7) Managing bureau responsibilities for the Interior Aviation Mishap Information System (AMIS).
- (8) Encouraging and tracking attendance of bureau personnel at aviation safety management education and training courses/workshops/seminars.
- (9) Disseminating aircraft mishap prevention information to the appropriate levels within their respective bureaus.
- (10) Supporting the Interior aircraft mishap prevention effort by maintaining liaison with the NBC AMD Aviation Safety Manager for aircraft mishap prevention purposes.
- (11) Developing and coordinating bureau aviation safety and aircraft mishap prevention meetings, conferences, workshops, or seminars.
- (12) Supporting the development and maintenance of a bureau safety culture that is founded on the principles of operational risk management.

1.7 **Program Promotion.** Resources shall be made available for education and training as specified in the Departmental OPM “Aviation User Training Program.” Attendance at aviation user, management, and aviation safety management training sessions, as well as aviation safety seminars and formal educational institutions, shall be encouraged.

1.8 **Aircraft Mishap Notification, Investigation, and Reporting.** The DOI notification, classification, investigation, and documentation of NTSB reportable aircraft mishaps involving DOI aviation activities will be accomplished in accordance with the procedures established in 352 DM 3, “Aircraft Mishap Notification, Investigation and Reporting, and Reporting Handbook.” Investigations are conducted for the purpose of aircraft mishap prevention only and do not satisfy the requirements of 451 DM 1 or 485 DM 5. Provisions and procedures for aircraft mishap investigations are established under the authority granted in 112 DM 10. These reports are not a substitute for other DOI safety management reports (see 485 DM 5).

1.9 **Aircraft Mishap Prevention Plan.** Each bureau is encouraged to have a formal written Aircraft Mishap Prevention Plan consistent with Departmental policy. It should outline personnel responsibilities and provide implementation guidelines, goals, and methods utilized to monitor the success of the program. Safety requirements set by the Department shall not be waived. Should a deviation of an established safety procedure or directive occur, the individual(s) involved shall furnish the Bureau Aviation Safety Manager with a complete report of the circumstances as soon as possible after the event. Bureau Directors are encouraged to have their Aviation Manager

develop policies and procedures to incorporate the critical elements listed below into all levels of bureau aviation activity.

A. Risk Assessment. Risk assessment is the subjective analysis of physical hazards and operational procedures to arrive at a GO/NO-GO decision. Risk assessments support informed GO/NO-GO decisions and are the responsibility of line management. The pilot retains final authority for a NO-GO decision when safe operation of the aircraft is a factor.

B. Education and Training. Bureau Directors are responsible for ensuring that all employees involved in the use or control of aviation resources receive an appropriate level of aviation safety education and training. The education and training listed is the minimum for promoting aircraft mishap prevention awareness and developing operational and aviation management skills. Identification, development, and presentation by bureaus of additional training needs unique to specific bureau programs shall be accomplished as required. To avoid duplication of effort, the NBC AMD Associate Director shall be informed of training program development of these specific programs.

C. Project Planning. Aviation operations shall be planned with necessary consideration given to mishap prevention. Flights shall be conducted as planned and in accordance with Departmental policy and procedures. Deviations from the approved mission profile will not be conducted except for safety of flight considerations. Project planning shall include as a minimum:

- (1) Flight routes/areas and altitudes.
- (2) Risk assessment.
- (3) Hazard identification (e.g., weather, takeoff or landing weights, landing areas, wire hazard, etc.).
- (4) Management approval for special use activities.

D. Wire-Strike Prevention.

(1) Flight Environment Considerations. Bureau projects often dictate that flights be conducted in close proximity to the ground where wires are prevalent.

(2) Risk Assessments/Hazard Maps. To reduce wire strike potential, it is critical that a risk assessment be conducted prior to all low level flights. A low level flight hazard map shall be constructed for the local operational area. All preplanned low level flights require a thorough map reconnaissance of the route to be flown.

E. Operational Environment Considerations. Environmental conditions are those conditions over which there is no human control. Forecast or known environmental conditions are not mishap cause factors. For example, structural damage caused by flying into forecast severe turbulence is NOT a mishap causal factor. A pilot's decision to fly into forecast or known severe

turbulence is a causal factor. Cause factors are normally under human control and can be eliminated. Managers must be aware that their actions may encourage pilots to operate beyond existing capability. Pilots must be ever cognizant of environmental conditions in which they are expected to operate safely and are the final authority relative to a GO/NO-GO decision based upon environmental and safety considerations.

F. Aviation Life Support Equipment (ALSE). Project leaders shall ensure appropriate and adequate ALSE, including personal protective equipment (PPE), is aboard the aircraft or being worn by the individual, based upon Departmental requirements, guidelines, project needs, and individual state statute requirements. Detailed information is contained in the *ALSE Handbook* (www.nbc.gov/amd).

G. Flight Following. As a potential lifesaving condition, each bureau should include a flight following requirement in the aircraft mishap prevention plan. This plan should specify the method or procedure to be used that will accommodate communications from mission personnel (or the pilot) to the flight following facility at predetermined intervals. Additional information concerning flight following is contained in 351 DM 1.

H. Weight and Balance. It is imperative that proper consideration and planning be given to the aircraft weight and balance computation and subsequent loading. The actual weight of personnel and/or cargo must be considered relative to environmental and aircraft performance capabilities. This will be accomplished for each takeoff and landing for all aircraft. The bureau conducting the operations will determine the formality for the documentation of this effort.

I. Airspace Coordination. Airspace planning and coordination are becoming more important as limited airspace is becoming more congested. All users of the airspace system need to be aware of special use airspace and what restrictions apply to the use of that airspace. Coordination with other airspace users such as the military is an important safety issue. Airspace coordination is an important part of mission planning.

1.10 **Aviation Mishap Information System (AMIS)**.

A. AMIS Program. The Aviation Mishap Information System is an electronic data (files) storage based system encompassing all aspects of aviation mishap reporting within DOI. Categories of reports include aircraft mishaps, aviation hazards, aircraft maintenance deficiencies, and airspace intrusions. The system uses the SAFECOM (AMD-34, www.safecom.gov) to report any condition, observance, act, maintenance problem, or circumstance that has potential to cause an aviation-related mishap. Submitting a SAFECOM is not a substitute for "on-the-spot" correction(s) to a safety concern, rather it is a tool used in the documentation, tracking, and followup corrective action(s) related to a safety issue. Additional information is contained in the *Aviation Mishap Notification, Investigation, and Reporting Handbook* (www.nbc.gov/amd). The AMIS report does not replace the requirement for initiating a DI-134, "*Report of Accident/Incident*," as required in 485 DM 5.

B. Program Promotion. All levels of management shall promote the AMIS Program. The SAFECOM form, or electronic access to the SAFECOM system (www.safecom.gov), shall be

made readily available to pilots, passengers, dispatchers, Contracting Officer Representatives (CORs), maintenance personnel, project leaders, managers, and others in positions to affect aviation safety. Prompt replies to the originator (if a name and telephone number/address are provided), timely action to correct problems, and discussion of filed SAFECOMs at local level meetings encourage program participation and active reporting.

1.11 **Aviation Safety and Aircraft Mishap Information Dissemination.**

A. Responsibilities.

(1) DOI Aviation Management. The NBC AMD Aviation Safety Manager shall ensure all SAFECOMs are stored in the electronic database and access is provided to bureau aviation management personnel. Appropriate action shall be taken on identified Department-level aviation safety concerns.

(2) Bureau. The responsibility for regularly reviewing the database and taking appropriate action rests with the bureaus. Bureau Aviation Safety Managers are encouraged to provide feedback to SAFECOM submitters and to solve aviation safety problems at the lowest level possible. Department-level problems should be forwarded to the NBC AMD Aviation Safety Manager for review.

B. Publications. The NBC AMD Aviation Safety Office publishes the following:

(1) Safety Alert. The Safety Alert is red-bordered and will be utilized to disseminate information of a significant nature regarding aviation safety within the Department. The three areas addressed are operations, maintenance, or publications. These Safety Alerts will be published on an unscheduled basis (www.nbc.gov/amd).

(2) Aircraft Mishap Prevention Bulletin. The Aircraft Mishap Prevention Bulletin is green bordered and will be utilized to disseminate information of a general nature regarding aircraft mishap prevention concepts, methods, procedures, and efforts. Bulletins will be published on an unscheduled basis as pertinent information/subject materials become available (www.nbc.gov/amd).

(3) Aviation Safety Review (Annual Report). An annual Aviation Safety Review of aircraft mishaps, associated statistical data, and trend analysis will be published and distributed following the mishap-reporting year.

(4) Aircraft Mishap Presentation. An annual aircraft mishap presentation will be developed, which provides a synopsis of the previous year's aircraft mishaps. This presentation will be produced for mishap prevention purposes only. The presentation will contain representative aircraft mishaps, lessons learned, and other relative information.