

## SUBJ: Aircraft Accident and Incident Notification, Investigation, and Reporting

This order prescribes Federal Aviation Administration (FAA) procedures and responsibilities for aircraft accident and incident notification, investigation, and reporting. It also provides a description of the organization, functions, and authorities of the Accident Investigation Division, AVP-100. This order also provides direction and guidance to aviation safety inspectors and air safety investigators when they are called upon to act as, or support, the FAA Investigator-in-Charge (IIC) during an accident or incident investigation. It also explains the roles and responsibilities of the FAA and the National Transportation Safety Board (NTSB) when conducting investigations. All concerned personnel must familiarize themselves with the provisions of this order that pertain to their operational responsibilities and exercise their best judgment if they encounter situations not covered by the order.

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## **Chapter 1. General Information**

**1. Purpose of This Order.** This order establishes Federal Aviation Administration (FAA) procedures and responsibilities for aircraft accident and incident notification, investigation, and reporting.

**2.** Audience. This order is intended for all FAA personnel that are assigned to lead or support activities associated with aircraft accident and incident notification, investigation, and reporting.

**3.** Where Can I Find This Order? This order is located in electronic format on the FAA's website and within the FAA Office of Accident Investigation and Prevention (AVP) at the following links: <a href="https://employees.faa.gov/tools\_resources/orders\_notices">https://employees.faa.gov/tools\_resources/orders\_notices</a> and <a href="https://www.faa.gov/about/office\_org/headquarters\_offices/avs/offices/avp/orders\_forms">https://employees.faa.gov/tools\_resources/orders\_notices</a> and <a href="https://www.faa.gov/about/office\_org/headquarters\_offices/avs/offices/avp/orders\_forms">https://www.faa.gov/about/office\_org/headquarters\_offices/avs/offices/avp/orders\_forms</a>.

**4.** What This Order Cancels. FAA Order 8020.11C, *Aircraft Accident and Incident Notification, Investigation, and Reporting*, dated February 02, 2010, and FAA Order 8020.11C Change 1 dated October 04, 2011, are cancelled.

**5.** Explanation of Changes. This revision introduces a new chapter to describe and provide practical guidance to the accident investigator, and removes chapters and sections described in detail in FAA Order 8900.1, *Flight Standards Information Management System (FSIMS)*, or cited in other investigative guidance pertaining to other FAA offices and FAA lines of business.

**6. Authority to Change This Order.** Only the Administrator or the Office of the Deputy Administrator may approve substantive changes to this directive. The Executive Director of the Office of Accident Investigation and Prevention may approve changes except those involving policy, assignment of responsibility, and delegation of authority. Those organizations with aircraft accident and incident notification, investigation, and reporting responsibilities should submit proposed changes or additions to the Office of Accident Investigation and Prevention, Accident Investigation Division, AVP-100.

**7. Definitions.** AVP has defined the following terms. You may find other terms referenced in Title 14 Code of Federal Regulations (CFR) §1.1. (See Chapter 7, paragraph 8, for definitions specific to commercial space transportation.)

**a.** Accredited Representative - an individual, typically an NTSB investigator, designated to represent the U.S. during a foreign accident or incident investigation involving U.S. registered, operated, designed or manufactured aircraft. (Reference ICAO Annex 13, Section 5.18)

**b.** Aircraft Accident - An occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage. (See 49 CFR §830.2)

**c.** Event – Something notable that happened in the National Airspace System (NAS), which includes accidents, incidents and occurrences.

**d.** Event Response Team (ERT) - A diverse group of FAA air traffic subject matter experts led by the Event Investigation Manager (EIM) responsible for reviewing significant air traffic events that occur in the NAS as set forth in FAA Order JO 1030.3B, "Initial Event Response."

e. FAA Investigation Participants - Those FAA persons assigned to assist the FAA Investigator-in-Charge (FAA IIC) in an investigation.

**f. FAA Investigator-in-Charge** - FAA personnel assigned to supervise and coordinate all FAA employees participating in an investigation. In each investigation, the FAA IIC is responsible for the management of all FAA resources and for determining whether the facts of the investigation indicate that any of the nine FAA responsibilities were involved in the event. During an NTSB investigation, the FAA IIC serves as the party coordinator for the FAA. During an international investigation, the FAA IIC typically serves as the technical advisor to an NTSB investigator who has been assigned as the U.S. Accredited Representative to the foreign investigative authority in accordance with ICAO Annex 13 protocol.

**g.** Group or Investigative Group - A group of individuals designated by the NTSB IIC to examine all facts within an assigned area of the investigation. Select parties are asked to provide a technical specialist to serve as a group member.

**h. Group Chairman** - The NTSB representative in charge of an investigative group activity during an NTSB investigation. The group chairman leads and supervises the activities of the technical specialists assigned to them and reports to the NTSB IIC.

**i. Group Member** - A member of a technical team of specialists from the FAA and other industry organizations assigned to an NTSB investigative group based on technical qualifications and expertise in the area to be examined.

**j.** Incident - An occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

**k.** International Civil Aviation Organization (ICAO) - A specialized agency of the United Nations that promotes the safe and orderly development of international civil aviation standards and practices.

**l.** ICAO Annex 13, Aircraft Accident and Incident Investigation - Contains the international standards and recommended practices for aircraft accident and incident investigation as adopted at the Convention on International Civil Aviation.

**m.** National Transportation Safety Board (NTSB) - Per 49 CFR §831.2, the NTSB is the Federal agency responsible for the organization, conduct, and control of all civil aviation accident investigations and select incident investigations within the United States (U.S.) and its territories and possessions.

**n. NTSB Investigator-in-Charge (IIC)** - Per 49 CFR §831.8, the designated NTSB IIC organizes, conducts, controls and manages the NTSB's investigation.

**o.** Near Mid-Air Collision (NMAC) - An incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500 feet to another aircraft or where a report is received from a pilot or other flight crewmember stating that a collision hazard existed between two or more aircraft.

p. Occurrence - An abnormal event, other than an incident or accident.

**q. Party to the Investigation** - An individual or an organization designated by the NTSB IIC to participate in the investigation in order to provide technical assistance. Typically, parties are organizations such as the owner/operator, manufacturer, and unions. Organizations are not given automatic party status in an investigation and must be invited by the NTSB IIC, with the exception of the FAA (see 49 CFR §831.11). Per Title 49 United States Code (U.S.C.) §1132(c), the FAA has the right to participate in the investigation in order to carry out the duties of the Secretary of Transportation.

**r. Party Coordinator** - An individual who acts as the point-of-contact between the NTSB IIC and the coordinator's organization during an NTSB investigation. The FAA IIC serves as the party coordinator representing the FAA.

**s.** Pilot Deviation (PD) - An action of a pilot that results in the violation of a Federal Aviation Regulation (FAR) or a North American Aerospace Defense (Command Air Defense Identification Zone) tolerance.

t. Serious Injury - any injury which: (1) requires hospitalization for more than 48-hours, commencing within 7-days from the date an injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) causes severe hemorrhages, or nerve, muscle, or tendon damage; (4) involves any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5-percent of the body surface.

**u.** Significant Event - Any air traffic event in the NAS that may attract regional/national media or political attention, any aircraft proximity with less than 33 percent of the standard, any report of a NMAC with evasive action, or any major event that requires immediate upward notification to the Service Area or Headquarters level.

v. Substantial Damage - Damage or failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairings or cowling, dented skin, small puncture holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered "substantial damage." (See 49 CFR §830.2)

w. Technical Advisor - An individual assigned to assist the U.S. accredited representative during participation in an aircraft accident or incident investigation being conducted by a foreign government. The technical advisor in a foreign investigation serves in a similar role to the party coordinator in a domestic NTSB investigation. (Reference ICAO Annex 13, Section 5.24)

**x.** Title 14 of the Code of Federal Regulations (14 CFR) - Rules prescribed by the FAA governing all aviation activities in the U.S. These rules are also referred to as FARs.

y. Unmanned Aircraft System (UAS) - A system that includes an unmanned aircraft, control station and various mission elements used, or intended to be used, for flight. This includes all classes of airplanes, helicopters, airships, and translational lift aircraft that have no onboard pilot. The term UAS includes the airframe and all associated support elements including the control station, communication links, equipment and personnel necessary to conduct operations.

**z.** Unmanned Aircraft Accident (NTSB Definition) – An occurrence associated with the operation of any public or civil unmanned aircraft system that takes place between the time that the system is activated with the purpose of flight and the time that the system is deactivated at the conclusion of its mission, in which: (1) any person suffers death or serious injury; or (2) the aircraft has a maximum gross takeoff weight of 300 pounds or greater and sustains substantial damage. (See 49 CFR §830.2)

**aa.** Unmanned Aircraft Accident (FAA Definition) – any operation of a small unmanned aircraft (excluding model aircraft) involving at least:(a) serious injury to any person or any loss of consciousness; or (b) damage to any property, other than the small unmanned aircraft, unless one of the following conditions is satisfied: (1) the cost of repair (including materials and labor) does not exceed \$500; or (2) the fair market value of the property does not exceed \$500 in the event of total loss. (See 14 CFR §107.9)

**bb.** Washington Operations Center Complex (WOCC) - The FAA communication center responsible for providing the Administrator, Deputy Administrator, and all FAA Lines of Business with information and communication support to respond to stakeholders in an informed and timely manner.

8. Distribution. Electronic distribution.

### Chapter 2. FAA Organization for Accident Investigation Responsibilities

**1. FAA Investigations.** Title 49 U.S.C. §40113 grants the FAA Administrator the authority to conduct investigations concerning aviation safety. Title 51 U.S.C §50917 grants the FAA authority to investigate commercial space launch mishaps (see Chapter 7, paragraph 8, of this order for additional information).

**a.** The FAA will ensure that all of the facts, conditions, and circumstances leading to an event are recorded and evaluated, and that action is taken to prevent similar events to the extent practical and feasible.

**b.** The FAA will conduct investigations to determine involvement in any of the following nine FAA areas of responsibility:

(1) Performance of FAA facilities or functions (including oversight responsibilities).

(2) Performance of non-FAA owned and operated air traffic control (ATC) facilities or navigational aids.

(3) Airworthiness of FAA-certificated aircraft.

(4) Competency of FAA-certificated airmen, air agencies, commercial operators, or air carriers.

(5) Adequacy of Federal Aviation Regulations.

(6) Airport certification safety standards or operations.

(7) Security standards or operations and/or hazardous materials.

(8) Airman medical qualifications.

(9) Violation of Federal Aviation Regulations.

**2.** Office of Accident Investigation and Prevention (AVP). AVP is the office responsible for directing aircraft accident investigation policy and standards for the FAA.

**a.** AVP's Vision. Being recognized as an FAA and industry leader in safety investigation, analysis, and information sharing.

**b.** AVP's Mission. Making air travel safer through investigation, data collection, risk analysis, and information sharing.

#### 3. AVP Investigative Responsibilities.

**a.** Executive Director, Office of Accident Investigation and Prevention (AVP-1):

(1) Serves as the focal point for the Administrator in coordinating with the public, private, military, domestic, and international counterparts, and with representatives of accident and incident investigation interests.

(2) Provides leadership and direction in the planning, management, and control of office activities.

(3) Develops FAA policy and procedural instructions regarding accident and incident investigation and reporting.

(4) Reviews and assesses operational policies and activities as they relate to accident and incident investigations.

(5) Oversees the development of FAA policies and procedural instructions for the reporting and investigation of accidents and incidents affecting the safety of the NAS.

(6) Directs the FAA's response to notification of an accident, incident or occurrence through the Director, Accident Investigation Division, AVP-100.

(7) Ensures the AVS management team is kept informed and updated on the progress of investigations and their findings.

(8) Apprises the Administrator, Associate Administrators, and other FAA office executives of safety issues and programs related to accident and incident investigation findings and analyses.

(9) Ensures the Administrator, Deputy Administrator, and Associate Administrator for Aviation Safety are provided with an Accident/Incident Information Book of pertinent background materials and data for any major air carrier accident/incident involving large teams of investigators. The Information Book should be provided as soon as possible and updated periodically.

(10) Participates as a member of the NASA Mishap Investigation Board.

(11) Coordinates with the Air Traffic Safety Oversight Service (AOV) on any changes to the investigation and reporting requirements of accidents, incidents and occurrences related to air traffic services, such as those in FAA Order 8020.16, "Air Traffic Organization Aircraft Accident and Incident Notification, Investigation, and Reporting."

**b.** Director, Accident Investigation Division (AVP-100):

(1) Provides leadership and direction in the planning, management, administration and control of division activities.

(2) Ensures AVP-100 investigative personnel are adequately trained and equipped.

(3) Develops, coordinates, manages, and evaluates FAA accident investigation program policies, procedures, and practices.

(4) Serves on behalf of the Executive Director as the FAA's primary point of contact for interaction with the NTSB with regard to investigative policies and activities.

(5) Determines events to which AVP-100 personnel will launch to conduct on-scene investigative activities.

(6) Assigns an AVP-100 FAA IIC for FAA investigations, as required.

(7) Assigns an AVP-100 FAA IIC for select NTSB investigations.

(8) Assigns AVP-100 investigative personnel to support NTSB investigative groups or activities, as necessary.

(9) Assigns a duty officer for purposes of event notification and coordination.

(10) Oversees the operations of the AVP Duty Room.

(11) Acts as (or designates) the FAA spokesperson for NTSB public hearings.

(12) Reports to the AVP Executive Director and appropriate FAA officials the facts, conditions, and circumstances of the event investigated, the apparent causal factors, and the relationships of those findings to FAA safety programs, regulations, and responsibilities.

(13) Oversees event notification programs, providing information to other FAA organizations.

(14) Disseminates initial FAA factual information identified as a result of accident and incident investigations. Produces and updates an Accident/Incident Information Book of pertinent background materials and data for major air carrier accidents/incidents involving large teams of investigators.

(15) Ensures that the AVP-100 Quality Management System documentation is appropriately maintained.

(16) Provides support and curriculum guidance to the Transportation Safety Institute (TSI) aircraft accident investigation courses at the National Aircraft Accident Investigation School, Oklahoma City, Oklahoma.

(17) Makes presentations to the general public on accident/incident investigations, aviation safety, commercial space safety and related matters.

(18) Participates in industry conferences.

(19) Serves as a research sponsor for the Civil Aerospace Medical Institute (CAMI), as needed.

(20) May serve as the AVP-100 FAA IIC for selected events.

c. Accident Investigator (AVP-100):

(1) Performs select duties of the deputy division director or team lead, when required.

(2) Coordinates the internal FAA flow of information regarding unsafe conditions within the NAS.

(3) Serves as the FAA IIC for investigations of select events, when appointed by the AVP-100 division director. AVP-100 FAA IICs have primacy over all other FAA IICs.

(4) Monitors, tracks and records information gathered during investigations and select events.

(5) Serves as the FAA IIC and as the FAA party coordinator for select NTSB investigations.

(6) Serves as a technical advisor to the NTSB and acts as a liaison with other FAA participants during foreign investigations.

(7) Participates in NTSB investigative group activities, as necessary.

(8) Serves as the FAA IIC for accidents involving FAA personnel if the accident or incident involves the FAA Flight Program or government-funded operation.

(9) Coordinates the assignment of FAA participants to act as group members for NTSB investigative group activities.

(10) Provides technical expertise for U.S. military mishap investigations, upon invitation.

(11) Launches on-scene for select foreign and domestic investigations, on a rotational basis. This may require immediate travel to hazardous locations that could demand physical exertion.

(12) Serves as the accident and incident investigation liaison between other FAA offices, U.S. departments and agencies, U.S. military entities, foreign governments, and the aviation industry.

(13) Relays information gathered during an investigation to pertinent FAA offices. In particular, reports to the AVP-100 division director and appropriate FAA officials the facts, conditions, and circumstances of the event investigated, the apparent causal factors, and the relationships of those findings to FAA safety programs, regulations, and responsibilities.

(14) Participates in NTSB investigative group activities, as necessary. In particular, may serve as the primary group member on flight data recorder (FDR), video recorder and cockpit voice recorder (CVR) investigative groups.

(15) Reviews flight data from FDR, global positioning system (GPS) units, and other devices that record onboard parametric aircraft data and video.

(16) Validates and analyzes flight data to provide plots and converted data to FAA investigators, inspectors and engineers for both NTSB investigations and FAA investigations.

(17) Supports safety data collection and analysis with other AVP divisions, as necessary.

(18) Provides assistance to the FAA Autopsy Program Team to identify pilots and obtain autopsy and toxicology results.

(19) Conducts root cause analysis during select investigations to assure proper identification and documentation of causal factors for the purpose of trend analysis to reduce hazards and risks in the NAS.

(20) Submits FAA Safety Recommendations as appropriate, and facilitates corrective actions.

(21) Acts as the AVP-100 Duty Officer on a rotational basis. Receives and documents phone calls from the WOCC, FAA personnel, NTSB personnel and CAMI personnel after normal business hours.

(22) Enters initial event notification into the duty room system database which will be published on the FAA website as required.

(23) Participates in industry conferences.

(24) Serves as a subject matter expert to provide instructional support and curriculum guidance to the TSI aircraft accident investigation courses at the National Aircraft Accident Investigation School, Oklahoma City, Oklahoma.

(25) Makes presentations to the general public on accident/incident investigations, aviation safety, commercial space safety and related matters.

(26) Receives and responds to incoming FAA Hotline calls after normal business hours.

d. FAA Duty Room Accident Information Management Specialist (AVP-100):

(1) Oversees the sorting and categorizing of daily reported events in the NAS for use in determining investigative activity.

(2) Ensures that event notifications are captured within the AVP-100 Duty Room system database.

(3) Collects information on all reported civil aircraft accidents and selected incidents for public dissemination on the FAA's website during each work day.

(4) Maintains a monthly roster of the 24-hour AVP-100 duty officers and distributes this roster to the WOCC and AVP management.

(5) Compiles, reviews, and classifies preliminary notifications for presentation at the AVP-100 daily "round-up" meeting.

(6) Maintains a library of current aeronautical chart and map subscriptions, and historical aircraft make/model and aircraft manuals.

e. FAA Accident Information Program Analyst (AVP-100):

(1) Serves as the FAA liaison for all NTSB investigative requests for information, data, coordination of informational briefings, and interviews.

(2) Coordinates with NTSB public hearing officers and FAA participants for pre-hearing briefings, presentation material review, and compilation of the FAA hearing book.

(3) Develops and maintains reference accident case files and information within associated tracking systems.

(4) Serves as the AVP-100 coordinator for Freedom of Information Act (FOIA) requests, and assists the AVP FOIA coordinator.

(5) Serves as the point-of-contact for the FAA's Frequently Asked Questions program for AVP.

(6) Serves as the point-of-contact for this order.

**4.** Aviation Safety (AVS) Offices Roles and Responsibilities. Other offices within AVS have a responsibility to provide subject matter expertise to support the FAA in the investigation of accidents, incidents and occurrences.

**a.** Flight Standards Service (FS). Detailed instructions regarding FS accident and incident response are outlined in Volume 7 of FAA Order 8900.1, Flight Standards Information Management Systems (FSIMS).

(1) Personnel from Flight Standards District Offices (FSDOs) are frequently assigned to act as the FAA IIC for investigations of accidents and incidents within their districts that do not involve assignment of an AVP-100 IIC.

(2) While the NTSB officially investigates all civil aircraft accidents, and will issue an accident report for each aircraft accident under its jurisdiction, the NTSB often does not travel to the accident scene due to their limited investigator resources. In those cases, the FAA Flight Standards inspector responding to the accident represents the FAA and, as a party to the NTSB investigation, will share information with the NTSB IIC. (See 49 CFR §831.11)

(3) The FAA IIC is responsible for completing FAA Form 8020-23 "FAA Accident/Incident Report." In that report, the FAA IIC makes a determination whether any of the FAA's nine responsibilities had any bearing on the event. In addition, the completed FAA Form 8020-23 contains the FAA IIC's identification of any corrective actions planned or initiated, if applicable.

## b. Office of Aerospace Medicine, Civil Aerospace Medical Institute (CAMI).

(1) The CAMI conducts toxicological analyses on specimens from, and special pathologic studies on, aerospace incident and accident victims.

(2) The CAMI Autopsy Program Team works with the FAA IIC and/or the NTSB IIC, for all fatal accidents, to coordinate autopsies of aircraft accident victims and obtain toxicological specimens.

(3) The CAMI Aeromedical Research Division provides medical expertise for all accidents as requested and medical case reviews and aerospace medical hazard analysis to the FAA IIC for all fatal

accidents. A copy of the medical case review/hazard analysis is also forwarded to the NTSB IIC. CAMI stores case reviews and hazard analysis in an electronic repository for safety analysis.

c. Aircraft Certification Service (AIR). The Aircraft Certification Service (AIR) provides engineering specialists, flight test pilots, manufacturing inspectors, and other specialists in areas such as, but not limited to human factors and continued operational safety to assist in the investigation of aircraft accidents and incidents that raise questions regarding product design and manufacture.

**d.** Air Traffic Safety Oversight Service (AOV). Upon request, AOV provides subject-matter expertise to investigations that involve air traffic control issues.

e. Unmanned Aircraft Integration Office (AUS). Operational and engineering specialists and inspectors from AUS will provide assistance in the investigation of UAS accidents in support of safe integration of UAS operations in the NAS. Flight Standards inspectors or AUS inspectors may be assigned to act as the FAA IIC for investigations of accidents and incidents that do not involve assignment of an AVP-100 IIC. Regardless of who is assigned as the FAA IIC, AUS will collaborate closely with AVP-100 in all accident and incident investigation activities related to UAS operations in the NAS.

**5.** Other FAA Offices and Lines of Business (LOB) Roles and Responsibilities. FAA LOBs and offices outside of AVS also have a responsibility to provide subject matter expertise to support the FAA in the investigation of accidents, incidents, and occurrences. The following organizations have additional investigative responsibilities:

## a. Air Traffic Organization (ATO).

(1) The ATO can provide the initial notification of unsafe conditions in the NAS via the Air Traffic Quality Assurance data system (ATQA), or by manually completing and transmitting FAA Form 8020-9, "Aircraft Accident/Incident Preliminary Notice," or the FAA Form 8020-11, "Incident Report." The Comprehensive Electronic Data Analysis and Reporting (CEDAR) system may also be used. This information encompasses factual data that is required for collection to determine the need for an accident/incident investigation.

(2) When ATO services are involved in an accident or incident, AVP-100 may monitor the internal ATO investigation to ensure proper discharge of FAA responsibilities (see Chapter 4, paragraph 20 of this order for more information).

(3) Detailed direction and guidance regarding air traffic investigations can be found in the following orders:

(a) FAA Order JO 8020.16, "Air Traffic Organization Aircraft Accident and Incident Notification, Investigation, and Reporting," provides direction and guidance to ATO service units, service centers, service areas, offices, and facilities when they are called upon to perform accident and incident investigations.

(b) FAA Order JO 1030.3B, "Initial Event Response," prescribes ATO processes, roles, responsibilities, and timelines for collecting and reporting data in response to significant events in the NAS.

## b. Office of Airport Safety and Standards (AAS).

(1) Upon receipt of notification that an accident or incident has occurred that may involve AAS functions, the regional airports division with jurisdiction will designate an airport certification inspector or other specialist to assist in the investigation.

(2) The Airport Safety and Operations Division, AAS-300, is designated as the primary contact with regard to the coordination of accident and incident information with AVP-100. All airport representatives will report to the FAA IIC and may be assigned to a working group when their expertise is required.

(3) When requested by the FAA IIC, AAS personnel will conduct investigations and provide investigation results to the FAA IIC. When an accident or incident occurs at an airport, the investigation will cover those items of AAS responsibility pertinent to the accident or incident.

(4) Further responsibilities of AAS during accident/incident investigations are detailed in FAA Order 5280.5, "Airport Certification Program Handbook."

c. Office of Chief Counsel (AGC). A primary function of the AGC is to provide legal representation, counsel, and advice to the Office of the Administrator and other FAA offices and services in connection with accident investigations.

(1) The legal services required in an accident investigation vary by accident. Many FAA investigations conducted under Title 49 U.S.C. do not require substantial legal services. Some, however, demand full legal participation. In each accident investigation involving the FAA, it is the responsibility of AGC to provide the appropriate level of legal participation.

(2) A legal representative of AGC shall be designated for each aircraft accident or incident investigation where the degree of FAA interest is substantial enough to warrant legal participation. The legal representative will:

(a) Report to the FAA IIC upon arrival at the accident or incident scene. If not required to proceed to the scene, the representative will be kept informed of the progress of the investigation.

(b) Provide appropriate legal review of all evidence acquired by FAA during the investigation.

(c) Determine if any additional evidence should be obtained concerning the legal aspects of the investigation and request that evidence. This shall not affect the responsibility of the FAA IIC to ensure that all available relevant evidence is obtained. The legal representative should not hinder the normal investigative process.

(d) Brief FAA personnel on their conduct and responsibilities in the presentation of evidence at formal or informal interviews, hearings, or depositions.

(e) Provide legal representation for FAA personnel in all NTSB and military agency interviews and hearings.

(f) Perform all other legal functions which may be required during an investigation.

(g) Assist in the presentation of FAA evidence and the carrying out of FAA responsibilities.

# d. Office of Security and Hazardous Materials Safety Office of National Security Programs and Incident Response (AXE).

(1) The WOCC, AXE-100, notifies AVP-100 of events:

(a) Impacting aviation safety.

(b) Causing substantial damage to property or aircraft or possible injury.

(c) Anticipated to generate media coverage.

e. Office of Communications (AOC). Representatives of AOC will not release any accident or incident information as the release of the information could interfere with the investigation efforts. The restriction on the release of information is not intended to hamper the free exchange of factual information between individuals and organizations (such as product manufacturers of airframes, engines, etc.) that are part of the investigating team. Media relations staff may release information related to the investigation to the news media or public during the investigation, provided authorization is obtained from:

(1) The NTSB IIC, or concurrence of the NTSB Public Affairs Office, when an investigation is conducted by NTSB; and

(2) The FAA IIC; and

(3) The Administrator or Deputy Administrator.

**f.** Office of Government and Industry Affairs (AGI). Representatives of AGI will advise the Administrator and Deputy Administrator on all matters concerning the Congress, aviation industry groups, and other governmental organizations with respect to aviation accidents and incidents. AGI will serve as the primary point of contact for Members of Congress and congressional staff for all FAA issues and inquiries related to accident and incidents. Designated representatives of AGI will ensure information is provided for the Administrator's Accident/Incident Information Book that are produced by AVP for major air carrier accidents and incidents.

**g.** Office of Commercial Space Transportation (AST). The Commercial Space Launch Act of 1984, as amended, authorizes the Secretary of Transportation to oversee and coordinate U.S. commercial launch activities. AST is the office responsible for implementing commercial space mishap investigation policy and standards for the FAA. Designated representatives of AST will notify the WOCC in the event of a commercial space transportation mishap. See Chapter 7, paragraph 8 of this order for additional information.

## **Chapter 3. FAA Investigation Guidelines**

**1. Overview.** This chapter provides guidelines for the purpose of ensuring a thorough investigation. The FAA will assign an IIC to investigate certain events. The FAA IIC leads the FAA's investigation to ensure that the FAA's responsibilities are met. This chapter describes: FAA IIC qualifications, training, and responsibilities; FAA investigative participant responsibilities; and FAA investigation techniques, processes, organization and conduct.

**2. FAA IIC Qualifications.** The minimum qualifications to act as an FAA IIC include all of the following:

**a.** A working understanding of aviation and/or commercial space practices and procedures.

**b.** Experience in the aviation and aerospace industry including, but not limited to, experience as a pilot, mechanic, aerospace engineer, air traffic control specialist or civil aviation accident investigator.

c. FAA work experience in the fields of aviation and aerospace safety.

d. Accident investigation training (successful completion of a formal curriculum).

**e.** OPM Classification 1800 series knowledge, skills, and abilities, or as approved by the AVP-100 division director or his/her designated representative.

#### 3. Training for FAA Personnel Designated to Participate in an Accident Investigation.

**a.** Transportation Safety Institute (TSI) Courses. The National Aircraft Accident Investigation School, TSI, Mike Monroney Aeronautical Center, Oklahoma City, Oklahoma provides initial training for FAA personnel designated to participate in accident and incident investigations.

(1) Basic accident investigation training includes, but is not limited to the following:

(a) NTSB and FAA regulations, accident reporting, and effective management of resources involved in an aircraft accident.

(b) Fundamental techniques and procedures of field investigations of accidents and incidents such as accident photography, witness interviewing, and investigator safety.

(c) Factors involving operations, airworthiness, crashworthiness, human factors, aircraft performance, powerplant, structures, metallurgy, composite materials, maintenance, weather, design deficiencies, and lessons learned from previous accidents and incidents.

(d) Identification, awareness and mitigation of the hazards associated with working in and around wreckage, including hazards associated with composite materials.

(2) The courses at TSI provide specific training in FAA accident investigation policies and procedures. The AVP-100 division director may approve equivalent training offered elsewhere.

(3) All FAA personnel who may be assigned as the IIC for an aircraft accident investigation must complete the TSI's introductory course, Basic Aircraft Accident Investigation (Course 00035).

(4) All General Aviation Safety Inspectors involved in accident investigation must complete the following courses as soon as practicable:

(a) Experimental Aircraft Accident Investigation (Course 00498).

(b) Advanced General Aviation Accident Investigation (Course 01042).

(c) Basic Rotorcraft Accident Investigation (Course 00007).

(5) All Air Carrier Aviation Safety Inspectors involved in accident investigation must complete the following courses as soon as practicable:

(a) Aircraft Cabin Safety Investigation (Course 00379).

(b) Advanced Commercial Aviation Accident Investigation (Course 01043).

(6) All Aviation Safety Inspectors should complete the following additional training requirements within 10 years of hire:

- (a) Advanced Aircraft Accident Investigation (Course 00003).
- (b) Human Factors in Accident Investigation (Course 00008).

(c) Human Factors in Aviation Maintenance (Airworthiness Inspectors) (Course 01005).

(d) Turbine Engine Accident Investigation (Airworthiness Inspectors) (Course 00027).

**b.** Occupational Safety and Health Administration (OSHA) Training. All FAA personnel are required to meet applicable OSHA standards before being assigned any duties associated with physical contact with an aircraft accident site or aircraft parts that have been in an accident. This training must include: Bloodborne pathogen training -- initial (Course 00541) and recurrent annually (Course 20000090).

**Note:** Personnel, whose specialty may not take them to the accident site, may still be required to participate in the examination or teardown of contaminated aircraft components and may need appropriate OSHA training.

**c.** Security Training for Overseas Investigations. AVP-100 investigators should complete State Department sponsored Diplomatic Security Foreign Affairs Counter Threat (FACT) training, or training with similar content, before traveling overseas for investigations.

**d.** Additional Training Requirements. The AVP-100 division director will designate additional training requirements for AVP-100 investigators as required, based on prior experience and other requirements.

4. General Responsibilities of the FAA IIC. The FAA IIC will:

**a.** Be responsible for the overall FAA investigation and act as the principal contact for all aspects of the investigation.

**b.** Provide contact information to the FAA Regional Operations Center (ROC) or the WOCC, ensuring communication with the appropriate FAA offices.

**c.** Provide the appropriate regional office, and when requested, AVP-100, with timely information of the investigation's progress.

d. Notify FAA offices if their area of responsibility is involved.

e. Brief regional and/or headquarters (AGC-400) legal counsel on accident issues, as appropriate.

**f.** Request technical assistance from appropriate FAA offices through the regional Flight Standards division or AVP-100.

**g.** Act as FAA party coordinator to the NTSB IIC and provide NTSB access to FAA personnel, data, and information (see Chapter 4 of this order).

h. Coordinate the assignment of all FAA personnel to the investigation.

**i.** Provide leadership to the FAA personnel involved as participants in the investigation. This leadership includes overseeing the welfare and safety of those participants, including the following:

(1) Ensure FAA personnel involved in the investigation are made aware of, and provided upon request, the availability of Critical Incident Stress (CIS) counselors.

(2) Assess the hazards at the crash site to identify the types of personal protective equipment required. Ensure FAA investigation team members have the appropriate protective equipment available, and use appropriate precautions when operating in biohazard and/or other hazardous areas of the site.

(3) Ensure FAA team members have access to food and water.

**Note:** Eating and drinking in contaminated areas is not permitted. In addition, all personnel shall use good hygiene prior to eating or drinking when they have been in potentially contaminated areas.

j. Ensure the on-scene preservation and protection of evidence and data.

k. Coordinate with manufacturers, as necessary, to facilitate their access to the accident site.

**l.** Immediately notify appropriate FAA management when violations of Federal Regulations are suspected or discovered.

**5. Safety Precautions.** Safe investigative practices and common sense safety precautions are of vital importance. Each investigation participant must consider that accident sites are often dangerous, difficult, emotionally challenging and physically demanding. Investigations are often conducted off airport in rough terrain and in severe weather conditions. Therefore, it is necessary to be suitably equipped and physically capable of dealing with the challenges that may be faced. An investigator must:

**a.** Wear appropriate gloves when handling wreckage.

**b.** Wear a hard hat when working inside or under wreckage.

**c.** Use care when working near high pressure vessels such as tires, oxygen tanks, emergency slide bottles, etc. Arrangements should be made to have these items removed or deactivated by appropriate personnel.

**d.** Ensure that ballistic recovery systems or other explosive devices for aircraft or commercial space transportation vehicles are disabled if they have not been deployed during the accident sequence.

e. Be alert for shifting wreckage due to unstable terrain.

f. Watch for wreckage suspended in trees.

**g.** Use appropriate protection gear for work in and around biohazard, bloodborne pathogens, burned composite material, radioactive materials, corrosive fluids, fuel and hydraulic fluid. Refer to OSHA and organizational directives for information about exposure control.

**h.** Seek the advice of local experts such as forest rangers, mountain rescue teams, surveyors, and law enforcement personnel when deciding the type of protective clothing and equipment needed. Consider what site preparations have been completed in regard to site safety and be aware of the dangers posed by local wildlife, insects, plants, terrain, and weather.

**i.** Take into consideration the effects of fatigue on personal performance and safety throughout the investigation. Adjust the workload to the circumstances; more may be accomplished in a well-organized 6-hour day than in an unorganized 12-hour day. The quality of the investigation is best served by awareness of the need for mental alertness and physical fitness.

**j.** Provide for first aid, shelter, food, water and fuel before the need arises. Unexpected weather or equipment failures may isolate the investigation team in remote areas.

**k.** Ensure the availability of portable oxygen and other emergency equipment when working at high elevations.

**l.** Use the "buddy system" and a logging in-and-out system for personnel working in remote areas.

**m.** The use of helicopters at accident scenes inaccessible by other means can be extremely dangerous. Thoroughly coordinate the activity of the helicopter crew and the investigation team.

n. Pay attention to required safety measures when working around heavy equipment.

**o.** When the crash scene is in water, only assign fully qualified and properly equipped personnel to missions such as underwater recovery and photography.

**p.** Maintain reliable communications between the investigation headquarters or command post and the various groups working on scene by phone, walkie-talkie, or other communications equipment.

**q.** For commercial space vehicle mishaps, contact AST for information regarding safety precautions.

**r.** Report any injury received while on an accident site regardless of severity per OSHA procedures, and provide treatment immediately.

**6. Potential Hazards.** An investigator should maintain awareness of the hazards associated with the following:

- a. Sharp, jagged pieces of metal or composite strands.
- **b.** Sudden shifting of wreckage or terrain.
- c. Ice that may break up with little or no warning.
- d. Fuel and other flammable agents.
- e. Fire (toxic agents may be present in the smoke of a fire).

**f.** Ignition sources: hot metal, battery (may explode or leak corrosive fluid), ignition wires, electrical power lines, utilities (gas/electricity), grass or wood fire, any explosive or combustible agent.

- g. High pressure vessels such as tires, tanks (oxygen, nitrogen) that may explode unexpectedly.
- h. Hazardous materials from the aircraft or the scene:
  - (1) Agricultural chemicals;
  - (2) Corrosive fluids;
  - (3) Natural gas lines;
  - (4) Batteries;
  - (5) Biological materials; and
  - (6) Composite materials.

i. Explosive devices, such as aircraft ballistic recovery systems, parachutes, ejection seats, air bags, etc.

**j.** Pressurized aircraft systems including: Fuel and oil, pneumatic systems, hydraulic fluid, electrical and oxygen systems. Actuation of aircraft controls and switches could cause inadvertent activation of some systems.

**k.** For accidents involving military aircraft, exercise caution due to the possible presence of ordnance, ejection seats, flares, chaff, jettisoning systems and hazardous chemicals and materials.

**l.** For mishaps involving commercial space vehicles, exercise caution when investigating space mishaps due to presence of hazardous materials. Contact AST for further information regarding specific hazards associated with commercial space transportation mishaps.

**m.** Composite fibers: When composites have burned, use only respirators specifically designed to prevent the inhalation of composite fibers. (Information on the use of respirators may be found in 29 CFR Part 1910.134 OSHA Standards, PPE) Floor wax can be sprayed onto the area to contain the fibers. Care should also be taken to protect the skin from penetration from larger composite fibers which can be extremely sharp and rigid.

**7. Investigation Equipment.** Flight Standards division managers will provide each FSDO in their region with the necessary clothing, biohazard gear, and equipment for accident investigation. The FAA IIC will assure that sufficient biohazard protection gear is on site for FAA use when needed.

**a.** The diversity of aircraft accidents makes it difficult to have all the necessary equipment available. Certain items commonly used in every investigation should be kept in readiness. Accidents in remote areas require special consideration of the provision for shelter, food, and water. Remember, the investigator's kit has to be carried. Do not overload it with unnecessary or duplicate items. Many improvisations can be made in the field. A suggested, but not necessarily complete, list of items follows.

**b.** Proper clothing should be the first consideration. Select clothing appropriate to the climate and environment which can withstand rough usage:

(1) Footwear (steel-toed shoes or boots, rubber over-boots, or waterproof boots).

(2) Gloves (leather work gloves and disposable rubber or latex gloves).

(3) Coveralls and/or hooded sweatshirt and coat or jacket.

(4) Headgear (hardhat, stocking cap, and/or FAA hat).

c. The following items are required to ensure the health, comfort, and safety of the investigator:

(1) Canteen, thermos, and/or sports drinks containing electrolytes needed to maintain good chemical balance in the body and avoid dehydration.

(2) Sunglasses and safety goggles.

(3) First-aid kit, snakebite kit, and first-aid instructions.

- (4) Insect repellant, lip balm and sunscreen lotion.
- (5) Candy bars, gum, cookies, or other quick-energy foods.
- (6) Mentholated ointment (for topical application near nose to dispel strong odors).
- **d.** The following items are commonly used to perform the technical aspects of the investigation:
  - (1) Handheld Global Positioning Satellite (GPS) receiver.
  - (2) Cell phones with GPS and Hi-definition cameras, if permitted.
  - (3) Magnetic compass, small protractor, and Abney level to measure angles of impact.

(4) Measuring tape (50-foot or longer) and 6-inch ruler to be used to depict the scale of items that are photographed.

- (5) Magnifying glass (10X or stronger).
- (6) Marking pens, grease pencils, and chalk sticks.
- (7) Hand-tools including screwdrivers, pliers, adjustable wrench, tin snips, vice grip.
- (8) Flashlight with spare batteries.
- (9) Camera, flash attachment, and spare batteries.
- (10) Digital recorder, spare batteries.
- (11) Power adaptors and equipment chargers.
- (12) Notepad, clipboard, ruled paper, graph paper, pencils, and pens.
- (13) NTSB and FAA accident report forms.
- (14) Parts tags with string or wire (such as NTSB Forms 6120.15 and FAA Form 8020-2).
- (15) Passenger and Witness Statements for interviews.

(16) FAA Order 8020.11, 49 CFR §830 and 49 CFR §831 of NTSB regulations, and ICAO Annex 13, as appropriate.

- (17) Grid, county or state highway maps and sectional (navigational) charts.
- (18) Clean containers for fuel and oil samples.
- (19) Wire, tape, string, or nylon cord to tie and/or secure items.
- (20) Toxicology mailing kit, also known as the "Tox Box."

(21) Small handheld mirror to look inside inaccessible locations.

(22) Small wire or stiff-bristled brush.

(23) Plastic bags (various sizes for small parts).

(24) Biohazard equipment (per OSHA requirements).

#### 8. Sharing of Investigative Information within the FAA.

**a.** During the course of an accident/incident investigation, FAA participants in the investigation will gather factual information related to the circumstances and people involved in that accident/incident. Uncontrolled or in-appropriate release of that information outside the investigation may be contrary to privacy laws, Federal statutes, state or local laws, or agency policy. In addition, in-appropriate release of such information could have a chilling effect on future investigations. For this reason, all information derived from an accident/incident investigation must be carefully controlled.

**b.** It is important to understand; however, that the "party" to any investigation is the FAA, not just the individual participant. Some important information obtained during an investigation should be communicated to individuals or offices within the FAA that have a bona-fide safety need to know. For example, a finding that a certified aircraft has a flaw affecting its airworthiness must be communicated to the responsible Aircraft Certification Office as soon as possible.

**c.** All FAA participants involved in an accident/incident investigation must coordinate release of information from the investigation with the FAA IIC. Any questions should be directed to AVP-100 prior to release.

**Note:** See Chapter 4 paragraph 20 for additional procedures when an ATO Event Response Team is also conducting an investigation on site.

**9. Public Release of Information and Media Inquiry.** The FAA IIC will not release any accident or incident information outside of the investigation, as the release of the information could interfere with the investigation efforts. The FAA does not restrict the release of information between individuals or organizations that are part of the investigating team.

**a.** Refer media requests for information to:

(1) NTSB IIC or NTSB Public Affairs Office.

(2) Regional FAA Public Affairs Office or FAA Headquarters Office of Communications.

**b.** Release of accident and incident information to members and staff of the U.S. Congress is the responsibility of the organization conducting the investigation. For the FAA, the Office of Government and Industry Affairs (AGI) will provide the control point to answer and coordinate the release of information to the Congress.

**10. Initial Actions at the Accident Scene.** Refer to the following list of items that need to be accomplished immediately upon arrival at the accident scene. When the FAA IIC's travel time will

not allow arrival to the accident scene within a reasonable time, telephone calls should be made to relay FAA/NTSB concerns to the on-scene public safety official (sheriff, police, etc.).

**a.** Ensure the site is secure:

(1) Establish contact with local law enforcement officials and request accident scene security by such officials if it has not already been done.

(2) Monitor accident site security. Ensure that only authorized personnel are allowed access to the accident scene.

**b.** Consider site safety biohazards, hazardous materials and aircraft ballistic parachute recovery systems. If hazards exist, secure and control access to the accident site, and:

(1) Coordinate with the NTSB IIC (if on-scene), first responders and local authorities to determine the area of possible contamination, and to place a biohazard placard on wreckage nearest the most visible entry to the biohazard area.

(2) Brief all FAA participants on the biohazard nature of the accident site, the requirements for personal protective equipment at the site, and the personal prohibitions that are to be applied during the investigation in the biohazard areas.

(3) Identify investigative tasks needing personal protective equipment, and the extent of use of that equipment. Arrange for the availability of personal protective equipment for all FAA personnel requiring it, and coordinate disposal of used personal protective equipment.

**Note**: Flight Standards is the resource for personal protective equipment for all FAA personnel. The FAA is not responsible for furnishing personal protective equipment to participants other than FAA personnel.

**c.** Document perishable evidence such as ice, snow, moisture, fuel, etc.

**d.** Ensure that wreckage, mail, or cargo is not disturbed or moved except to the extent necessary to:

(1) Remove persons injured or trapped;

(2) Protect the wreckage from further damage; or

(3) Protect the public from injury.

e. When it is necessary to move aircraft wreckage, mail, or cargo:

(1) Make sketches, descriptive notes and/or take photographs if possible, of the original positions and conditions of the wreckage and any significant impact marks.

(2) Arrange to have cargo/luggage put in a secure area for weighing.

(3) Arrange for preservation/storage of the wreckage.

**f.** Enlist the cooperation of local authorities to obtain comprehensive photographic documentation of human remains prior to removal, if practical. If local authorities remove remains before photographic documentation can be accomplished, the investigator should note the location of the remains and describe the injury(s).

g. De-activate the emergency locator transmitter (ELT).

**h.** Preserve flight data and cockpit voice recorder data. Ensure that power is cut to the recorders so that any recorded data is not destroyed or compromised. If any team member locates the recorders then the FAA IIC must ensure that they are secured. Do NOT attempt to download data from flight recorders without further consultation with the NTSB or AVP-100.

- i. Verify that the ROC notified the NTSB and the WOCC.
- j. Acquire a point of contact for local law enforcement and the local coroner to:
  - (1) Determine autopsy status.
  - (2) Coordinate collection of biological material for toxicological studies.

(3) Provide toxicological boxes for shipment of biological material to CAMI.

(4) Contact the CAMI Autopsy Team (AAM-610) through the ROC at (817) 222-5006, for assistance if you have any difficulty coordinating autopsies with local authorities. Please give pilot and crew member names to the CAMI Autopsy Team as soon as possible.

k. Obtain names, addresses, and telephone numbers of witnesses from law enforcement officers.

**l.** When any team member recognizes evidence of an explosion or criminal activity, do not allow anyone to disturb the wreckage (except for the removal of survivors) until the arrival of the appropriate Federal law enforcement agencies. Critical evidence could be lost if such wreckage is disturbed.

#### 11. Organization and Conduct of the Field Phase of the Investigation.

#### a. General Considerations.

(1) Establish a command post. If the NTSB is on-scene, use their on-scene headquarters as appropriate.

(2) If emergency corrective actions for flight safety are needed, contact the appropriate FAA office and AVP-100 via the WOCC.

(3) Consult with the respective regional air traffic organization and/or AVP-100 to determine the need for, and the extent of, an ATC facility flight inspection.

(4) When air traffic services were involved and/or provided to the accident aircraft, the FAA IIC may request copies of surveillance data and voice communications from the air traffic control facility(s) by contacting the appropriate air traffic service center through the WOCC. In some cases,

although ATC did not provide services to the accident aircraft, the aircraft may have been within surveillance coverage and ATC may be able to produce surveillance data for the investigator.

(5) When a navigational facility was or may have been involved in an accident or incident, the FAA IIC should notify the Technical Operations Aircraft Accident representative (TOAAR) and make a final decision on whether or not a flight inspection of a navigational facility involved or suspected of being involved in an accident or incident is needed. The decision to request a flight inspection is to be based solely on safety concerns and not on economic factors. After a decision has been made, the TOAAR will assist the IIC in coordinating the flight inspection. See FAA Order JO 8020.16, "Air Traffic Organization Aircraft Accident and Incident Notification, Investigation, and Reporting" for further guidance.

(6) The FAA IIC may contact the local FSDO or region with requests for information, equipment, or personnel to assist in the accident investigation. Offices will provide the requested information and assistance by the most expeditious means available.

**b. FAA Organizational Meeting.** Before the accident scene familiarization visit, the FAA IIC should hold an organizational meeting for all FAA participants. The purpose of the meeting is to define the FAA's responsibilities, procedures, and objectives, and to establish what is expected of the FAA participants. The IIC should assure that the FAA participants are made aware of basic expectations.

**c. Investigative Organizational Meeting.** Before or after the accident scene familiarization visit, and in the absence of an NTSB IIC, the FAA IIC should hold an organizational meeting for the entire investigative team. The purpose of the meeting is to define the responsibilities, procedures, and objectives for the investigation. The investigative organizational meeting for most accidents may be an informal conversation involving an FAA IIC and one or more of the following:

- (1) FAA participants.
- (2) Aircraft operator/owner.
- (3) Manufacturer representatives.

**d.** Accident Scene Access. Review statutes and regulations under (see Appendix A of this order) which FAA personnel may demand immediate access to the accident scene when conducting FAA inspections or participating in NTSB accident investigations. If the investigator confronts a person who resists granting access or has difficulty gaining access to inspect and photograph the accident scene, inform the person of the following:

(1) Quote from or refer the person(s) refusing the inspection to 49 U.S.C. §40113(a), which states that the FAA has the legal authority to conduct aviation investigations on behalf of the Secretary of Transportation (see Appendix A of this order). Aircraft accident investigations are a Federal matter and no lower authority has any legal or other right to hide the wreckage or refuse access to it for as long as access is required per 49 U.S.C. §1155(b).

(2) The U.S. Government (NTSB) has the right to take custody of the wreckage, per 49 CFR §830.10.

(3) If the resisting person still does not grant access to the scene, the investigating FAA IIC should immediately notify the NTSB IIC and their FSDO manager who will contact the Chief Counsel's office to take legal action to secure access and institute enforcement proceedings. The Chief Counsel's office should also notify the appropriate NTSB elements of the progress of such situations.

(4) If the FAA IIC is unsure of actions to take to deal with uncooperative agencies or individuals, contact supervisory personnel or AVP-100 for guidance.

e. IIC Credentials for Access to the Accident Scene. The FAA IIC must have at least one of the following credentials to gain access to the accident scene:

(1) Qualified Flight Standards personnel: FAA Form 110A, Aviation Safety Inspector's Credential with numbered Aviation Safety Inspector Badge.

(2) Office of Accident Investigation and Prevention, AVP-100 personnel: FAA Form 8020-20, Aviation Safety Investigator's Credential and numbered Air Safety Investigator badge.

(3) For commercial space mishaps occurring on a Federal launch range, coordinate with AST to arrange for the necessary security access and badging. AST maintains field offices at Patrick Air Force Base, FL (serving Cape Canaveral Air Force Station and Kennedy Space Center), Vandenberg Air Force Base, CA, and Wallops Flight Facility, VA. AST can also arrange for any necessary access to operator facilities.

**f.** Accident Scene Access for FAA Personnel. FAA personnel not specifically assigned as participants or support personnel must not be present at the scene of an accident without the knowledge and consent of the FAA IIC.

#### g. Initial Photography.

(1) Prior to moving or disturbing the wreckage, photograph the accident scene including the path the aircraft took to get to its final resting place and any impact scars.

(2) Printed labels placed in the photographed scene (#1, #2, L, R, South, West, etc.) should be used to ensure detailed and permanent records of identification and orientation. Document these views while walking in a circular fashion to ensure that a 360-degree view of the main wreckage scene is completed with a series of 6 photographs; i.e., 12, 2, 4, 6, 8, and 10 o'clock positions. If possible, mark photographs to be easily identifiable (direction of flight, forward, aft, left, right).

(3) Take photographs of any major structural component or flight controls no longer attached to the main wreckage. Additionally take photographs of the following:

(4) External "macro" views of the main body of the wreckage.

- (5) Surrounding terrain.
- (6) Ground scars leading up to the wreckage.

- (7) Tree strikes or other object damage (if any).
- (8) Airframe ice (if any is adhering to leading edges of aerodynamic surfaces).
- (9) Wings and tail.
- (10) Control surface positions.
- (11) Control surface actuator positions (if possible).
- (12) Trim tab settings (cockpit indications and also airframe trim tabs/actuators).
- (13) Flap and flap lever positions.
- (14) Landing gear and lever positions.
- (15) External views of engine(s) and associated engine controls.
- (16) Turbocharger ducting and clamp positions (if installed).

(17) Control cables and associated hardware (marked prior to being cut by recovery personnel).

- (18) Overall view of cockpit.
- (19) Close-up view of cockpit instruments (no more than 4 instruments to a photograph).
- (20) Electrical switch positions and circuit breakers.
- (21) Throttle quadrant.
- (22) Fuel selector switch.
- (23) Magneto switch position(s).
- (24) Seat belts.

(25) Medications, medical devices, or drugs and other substances found on site should be handled the following way:

(a) Photograph bottles and packages;

(b) Photograph close-up views of individual pills including both sides of pills;

(c) Document relative size of pills by taking photos next to a common object of known size such as a ruler or coin;

(d) Forward photos and descriptions of medications or medical devices to the CAMI Medical Case Review Physician for analysis; and

(e) For fatal accidents the information can be forwarded via the Autopsy Team for analysis.

**h.** Additional Documentation. Further documentation by notes, measurements, etc., is necessary to complement even the most thorough photographic coverage.

(1) Obtain names and contact information of critical personnel on-scene.

(2) Check with first responders such as fire department, rescue, and law enforcement personnel for photo or other documentation of the wreckage scene and cockpit area. Some movement of switches and other debris usually takes place during the initial effort to rescue victims and/or retrieve human remains.

(3) Collect contact information of all witnesses and first responders for interviews and/or statements.

(4) Collect video evidence. Many accidents are captured on video surveillance and security cameras and devices located near the accident site. The value of this evidence is often critical. Reach out to local businesses, government facilities, airport tenants and private residences near the accident site to obtain this video evidence.

(5) Document the following:

(a) Wreckage distribution.

(b) Distribution of human remains, cargo, and aircraft contents.

(c) External flight control positions (rudder, elevator, ailerons, flaps, slats, spoilers, stabilizers, trim tabs).

(d) Cockpit flight control indications.

(e) Cockpit instrument reading and switch positions.

(f) Abnormalities in cabin and cockpit areas.

(g) Global Position System (GPS) or latitude/longitude coordinates of the main wreckage and the location or direction and distance from the main wreckage of any major structural component or flight control that is no longer attached to the main wreckage.

(h) GPS or latitude/longitude coordinates or distance and bearing from main wreckage of ground scars and any other identifying marks including environmental damage.

(i) Fuel and other fluid quantity. Note the location from which any fuel is drained. Look for correct fuel color indicating octane, the presence of water or other contaminants in fuel taken from the fuel tank or gascolator.

(j) Condition of all visible fuel, lubricant and pneumatic lines.

(k) Evidence of fluid leaks (fuel, oil, hydraulics).

(1) Spark plug or ignition leads (condition, attached or detached).

(m) Aircraft configuration (flap position, landing gear, etc.).

(n) Possible explosives (batteries, ballistic recovery parachute systems, etc.).

**Note:** Before attempting to gather samples from military aircraft or space launch vehicles, contact the Office of Commercial Space Transportation (AST) or the appropriate military branch. Fuel or oxidizer may be a hazardous material and such vehicles may have explosive devices on board.

**12. Examination of Evidence.** During the investigation, certain evidence will require more detailed examination. The investigator should consider the following factors during deliberations:

**a.** Missing structures: wing or horizontal stabilizer tips, propeller or rotor tips, missing flight control surfaces: rudder, elevators, flaps, stabilizers, spoilers, slats, tabs, etc.

- **b.** Pre-impact versus post-crash fire evidence.
- c. Metal fatigue versus instantaneous fracture.
- d. In-flight versus impact fracture.
- e. Overloading or out of center of gravity evidence.
- f. Evidence of aircraft attitude at impact.
- g. Controlled versus uncontrolled attitude at impact.
- **h.** Engine power at impact.
- i. Systems operation before impact.
- **j.** Flight control problems.
- **k.** Evidence of an explosion, pre or post impact.
- **I.** Cockpit documentation (switch position, etc.).

**m.** Evidence of impact before final contact with terrain: trees, wires, buildings, terrain, poles, other obstructions.

- **n.** Witness statements.
- **o.** Aircraft performance.

**p.** Devices that record aircraft and crew performance data (FDR/CVR, cockpit display electronic memory circuit chips, GPS, flight data monitoring avionics, etc.).

- **q.** Air traffic control surveillance data.
- r. Air traffic control recorded communications with aircraft.
- s. Air traffic services.
- t. Survival factors.

#### 13. Collection of Witness Statements and Witness Interviews.

**a.** When NTSB investigators are in charge of the on-scene investigation, they will conduct survivor and witness interviews and obtain statements. Refer to Chapter 4, Paragraph 16 of this order for the NTSB interview process.

**b.** For accidents in which the NTSB is not on-scene, the FAA conducts witness and survivor interviews. FAA personnel are to use plain stationery for obtaining statements. Do not use NTSB forms.

c. Obtain the name and contact information of the witness.

**d.** The investigator may obtain a written statement from the witness, or record in writing what the witness provides verbally:

(1) Written Statements. When taking a written statement in person, a good practice is to have the witness provide an oral account first. This gives the inspector an opportunity to identify the significant aspects of the witness's testimony.

(2) Oral Statements. A witness may refuse to provide a written statement, but be willing to provide an oral testimony. In this case, the inspector should preface the written account of an oral statement with a brief explanation regarding the witness (e.g., name, age, location at the time of the event), and a statement indicating that the witness declined to provide a written statement. A recording device may be used provided that the witness gives consent. Indication of the consent must be included with the introductory statements at the beginning of the recording. The inspector should have a third person present for confirmation of the written account of the oral statement, and should ensure the third person signs the statement, certifying it to be what the witness stated.

**e.** Good interviews depend largely upon the interviewer. The interviewer's words, actions, and attitude can determine to a large extent the tone and effectiveness of an interview. Most witnesses are willing to tell what they know when they are informed that the information is to be used to prevent similar accidents.

(1) The qualifications of witnesses should always be considered. Let the witness describe what he/she heard, saw or felt, before asking specific questions.

(2) It can be helpful to provide the witness with a small model or toy aircraft to help the witness show what he/she saw the aircraft do. Terms such as barrel roll, slip, skid, bank, roll, turn, spin, etc., may then be more accurately demonstrated by the witness. This is especially helpful for witnesses who are not experienced with aviation terminology.

(3) Avoid leading the witness. When in doubt, be quiet and let the witness speak. The investigator may ask clarifying questions but should avoid introducing new information.

**f.** When medical aspects appear to be involved, statements from the family physician, other professional sources, and relatives or close associates of the pilot should be obtained. In the event of fatal accidents, a copy of these statements should be forwarded to the CAMI Medical Case Review Physician via the Autopsy Team.

**14. Post-Accident and Incident Autopsy and Drug Testing.** The investigator should arrange autopsies for fatal victims who could have been controlling the aircraft. The investigator must also arrange for post-accident and incident drug and alcohol testing in accordance with current DOT and FAA directives.

**a.** Contact local law enforcement for drug and alcohol testing per 14 CFR §91.17 for nonfatal 14 CFR Part 91 operations (with the exception of sightseeing operators defined in 14 CFR §91.147).

**b.** Ensure that commercial organizations perform the necessary post-accident drug and alcohol testing in accordance with the FAA-mandated testing program. Commercial operations that conduct 14 CFR Part 121, 135 or sightseeing tours as defined in 14 CFR §91.147 must comply with the drug and alcohol testing regulation 14 CFR Part 120. Direct all questions concerning the requirement to test under Part 120 to the Drug Abatement Division, AAM-800, at (202) 267-8442 or drugabatement@faa.gov.

**c.** Refer other post-accident/incident drug testing questions to AAM-610, at (405) 954-2824 or (405) 954-6976.

**d.** Coordinate autopsies and toxicological testing of fatalities of those on board the aircraft with medically qualified local officials under the authority delegated by the Administrator. Designated aviation medical examiners (AMEs) cannot perform this function. The local coroner/medical examiner will usually conduct an autopsy on deceased flight crew.

**e.** Contact the local coroner/medical examiner to ensure that the bodies are not embalmed until after the autopsy and/or specimen collection can be accomplished.

**f.** Arrange, as necessary, for autopsies taking into consideration provisions of local law and religious beliefs.

**g.** Contact the CAMI Autopsy Team (AAM-610) through the FAA's Central Service ROC at (817) 222-5006, for assistance, as necessary. If the medical examiner or coroner would like to discuss payment for autopsy services, please refer the inquirer to the autopsy team.

**h.** Contact the NASA Flight Crew Surgeon for commercial space mishaps where the airman is a NASA Astronaut.

i. Coordinate the use and shipment of the "Tox Box" to the Forensic Toxicology Research Team.

(1) The Forensic Toxicology Research Team detects and measures drugs, alcohol, toxic gases, and toxic industrial chemicals in victims of fatal aircraft accidents as a contribution to the analysis of accident causation:

(2) FAA External Specimen Chain of Custody. Form AC 8025-3 is available on the Bioaeronautical Sciences Research Lab website (http://www.faa.gov/go/toxlab). Page two of the form (Accident Information) can be completed from the PDF file on the website and emailed to 9-AMC-AAM600-SPECIMENS@faa.gov instead of giving the information over the telephone. Both pages can be data entered from the website, but the first page, FAA External Specimen Chain of Custody, must be printed out, signed, and sent with the tox box.

(3) Notify the Bioaeronautical Sciences Research Lab that a tox box is being shipped, by calling telephone number (405) 954-6254. The office will provide a shipping vendor account number for shipping the tox box.

(4) A copy of the FAA External Specimen Chain of Custody form may also be emailed but is not required.

**15. Airman, Medical and Aircraft Records**. Requests for FAA Airman, Medical and Aircraft records by the FAA IIC should be processed as follows:

a. FAA Medical Records:

(1) For deceased airmen: A copy (Blue Ribbon) of a deceased airman's FAA medical history may be obtained from the Aerospace Medical Certification Division, AAM-300. The certified Blue Ribbon copy of the medical record may also be shared with the NTSB by the FAA IIC for deceased airmen only. (See Chapter 4, paragraph 18 of this order)

(2) For living airmen: As a general rule, the FAA is prohibited from releasing the medical records of any living person without the individual's consent. However, in the context of an accident or incident investigation, information contained in medical records may be relevant to aviation safety. The FAA IIC should contact AAM-300 or AVP-100 in these cases.

**Note:** If the NTSB requests access to the FAA medical records of living airmen, see Chapter 4, paragraph 18 of this order for guidance. An NTSB investigator or an NTSB medical officer may review, but not copy, a living airman's medical record at FAA headquarters and only under the supervision of the Federal Air Surgeon or his designee.

**b.** FAA Airman Records. A certified copy (Blue Ribbon) of the airman's FAA certificate history may be obtained from the Airman Certification Branch, AFB-720.

**Note:** If the NTSB requests records of living airmen, see Chapter 4, paragraph 18 of this order. Airmen certification records may be mailed to NTSB, but only to NTSB Headquarters in Washington, DC or one of the four NTSB Regional Office facilities.

**c.** FAA Aircraft Records. A certified copy (Blue Ribbon) of the aircraft historical records (airworthiness/registration) may be obtained from the Aircraft Registration Branch, AFB-710. These records may also be provided to the NTSB.

#### 16. Handling of Wreckage Prior to Removal.

**a.** To avoid post-crash damage, do not rotate the propeller or any other components. Avoid pulling flight control cables, trim cables, and engine control cables before documenting cockpit controls unless there is a specific investigative purpose.

**b.** Do not physically match broken pieces back together. Protect the ends of failed major structural components from further damage so that a laboratory examination may determine the failure characteristics of the damage from the fracture surfaces.

**c.** Consider delaying the disassembly of components in the field due to the potential loss of evidence or further damage. However, depending on the circumstances of the accident and the availability of time and resources, component disassembly at the site may be prudent and appropriate.

**d.** Remove electronic (digital) components only after documenting their external physical condition and utilizing manufacturer guidelines, when available. Try to preserve all cables and connections in their original state.

**Note:** Many avionics and electronic equipment and systems, including digital engine controls, GPS navigation devices, communication radios, primary and navigation flight displays, etc., contain non-volatile or battery-powered memory that may be accessed for retrieval of event data that is useful for the investigation. Do not attempt to "power up" these types of equipment in the field. Some avionics and electronic equipment need to be downloaded in a controlled environment, such as at the manufacturer's laboratory or the NTSB Flight Data Laboratory to avoid the possibility that data may be lost or overwritten when power is applied. When in doubt, seek the guidance of the AVP-100 or the NTSB IIC.

**e.** If any cockpit elements such as engine control levers, valves, or electrical switches were moved during the recovery process, the investigator should document the movement photographically or in written notes.

**17. Preparing Contaminated Parts for Further Examination.** Ideally, all parts that are examined away from the accident scene should be cleaned and disinfected before they are transported. If it is permissible to decontaminate parts, a disinfectant or a 10-percent solution of household chlorine bleach should be applied to all exposed areas. However, cleaning and disinfecting can destroy evidence or damage parts; so it may be necessary to transport contaminated parts.

**a.** Wait a minimum of 30 minutes (or as directed by the manufacturer's disinfectant instructions) before handling the parts with uncontaminated gloves when applying an EPA-registered disinfectant or a 10-percent solution of household chlorine bleach to contaminated parts.

**b.** Use appropriate personal protective equipment in preparing parts for transport. Use padding to protect personnel and preserve evidence on all sharp-edged parts. Use protective equipment in addition to waterproof latex/nitrile-type gloves and work gloves as required depending on the size of the part and environmental conditions.

**c.** Put contaminated sharp objects that are to be transported in appropriate containers separate from non-sharp contaminated objects.
**d.** Use approved shipping containers (identified during training) and label as "Biohazard" to ship contaminated parts.

**18. Concluding the Field Phase of the Investigation**. Consider the field phase of the investigation to be complete when all relevant or required information has been documented. Once the FAA IIC decides to end the field investigation, certain obligations and responsibilities must be considered:

**a.** If the NTSB did not travel to the accident scene, the FAA IIC must notify the NTSB IIC when the field portion of the investigation is completed.

**b.** Document receipt and retention of aircraft parts using FAA Form 8020-2, Aircraft/Parts Identification and Release Tag.

c. Notify parties to the investigation of associated investigation projects.

d. Release FAA participants.

e. Establish a target date for completion of the accident report.

**f.** Coordinate release of the wreckage by NTSB (with the exception of components retained for further examination).

**g.** Arrange for the resolution of financial obligations regarding guard services, services of personnel hired to assist in the investigation, rental equipment, damage to private property, communication facilities, and storage and transport of wreckage.

**Note:** For all accidents, including those in which NTSB does not travel, NTSB will ensure the resolution of financial obligations for guard services, personnel hired to assist in the investigation, rental equipment, damage to private property, communication facilities, and storage and transport of wreckage. Do not commit any funds before contacting the NTSB for funding authorization.

**h.** The FAA IIC (if the NTSB IIC is not on scene) coordinates disposal of the regulated biohazard waste.

## 19. Retention and Examination of Aircraft Parts.

**a.** Title 49 U.S.C. gives the FAA the authority to examine and test aircraft parts as reasonably necessary when conducting investigations. The FAA IIC, in coordination with the NTSB IIC, should obtain the parts directly from the owner or the owner's authorized representative. The FAA is not obligated to reassemble the components, but is obligated to pay for the return of the parts to the owner.

**b.** The sending office should:

(1) Coordinate with the owner of the aircraft/parts when possible, before disassembly of any parts or components.

(2) Not disassemble or clean the parts when parts such as instruments, avionics, carburetors, magnetos, or electrical parts will be sent to a facility (manufacturer, laboratory, etc.) for analysis.

(3) Carefully package and ship the parts in the "as found" condition.

(4) Tag each part with FAA Form 8020-2, "Aircraft/Parts Identification and Release Tag."

(5) Ensure that each copy contains the NTSB accident investigation case number.

(6) Attach the signed cardboard copy securely to the part.

(7) Retain a signed copy.

(8) Give the original form to the owner or the owner's representative.

(9) Include information to contact the NTSB and/or FAA representative before opening or processing the package.

(10) Include the following information on the carrier's bill of lading under "description of articles." Make, model, and aircraft identification number; location and date of event; part name and number.

(11) Contact the designated FAA representative before sending the part to provide the part's expected time of arrival, and to arrange for the representative's participation as needed in the processing.

(12) Do not expose the parts to public view. Large or heavy parts should be boxed or crated.

(13) Ship the parts in accordance with any guidance from the Aircraft Certification Office (ACO) responsible for that product's design approval directs. Properly identify the parts in a Letter of Transmittal that briefly describes the accident and the reason for the examination.

## 20. Release of Aircraft Wreckage and Parts.

**a.** For FAA investigated accidents or incidents, use FAA Form 8020-2, "Aircraft/Parts Identification and Release Tag" to release the aircraft or any of its parts to the registered owner. Do not use NTSB Form 6120.15, "Release of Aircraft Wreckage and Receipt of Aircraft Parts."

b. For NTSB investigated accidents or incidents, see Chapter 4, paragraph 23 of this order.

**21. Destroyed Aircraft.** If the aircraft was determined by NTSB to be destroyed in the accident, advise the Aircraft Registration Branch (AFB-710) in Oklahoma City, Oklahoma, in writing, that the aircraft was destroyed.

## 22. Completion and Distribution of FAA Form 8020-23, "FAA Accident/Incident Report."

**a.** AVP-100 requires the collection of specific information necessary from all FAA IICs during an accident/incident investigation to ensure adequate factual and analytical data is recorded. This information is collected via FAA Form 8020-23, "FAA Accident/Incident Report."

**b**. FAA Form 8020-23 will be completed by the FAA IIC and entered into ATQA within 30 calendar days of notification of an accident/incident. Upon completion, the 8020-23 will be submitted

via ATQA to AFS-620, Aviation Data Systems Branch, for a final data quality assurance (QA) review of the information collected prior to the form being moved from ATQA to the FAA Accident/Incident Database System (AIDS) Source. AFS-620 QA personnel may contact the reporting IIC or FSDO POC to discuss recommended amendments needed during the QA review in order to obtain the most accurate and complete data.

**c**. When new information about an accident/incident is discovered, or if corrective action is required for an existing 8020-23 previously submitted to AFS-620, an amendment to the original 8020-23 shall be completed in ATQA using the amendment process. The amended 8020-23 should only contain the updated and/or corrected information. The amended 8020-23 form will then be submitted through the original distribution process from the IIC to the FSDO POC for an additional FSDO review prior to it being distributed via ATQA for its final AFS-620 QA review.

**Note:** FAA Form 8020-23 reports will remain accessible in ATQA for a period of 365 days after the original or amended date in order to permit the FAA IIC to make any additional amendments. Reports exceeding the 365-day retention time in which an amendment is needed will require a new 8020-23 report to be completed in full, including the basic identifying information in addition to the amended data. Once received by AFS-620, the amended report will replace the original report to prevent duplication of reports.

**d.** At any time assistance or clarification is needed during the completion of an 8020-23 report, please contact AFS-620 at 9-AMC-AID-PROGMGR@FAA.GOV.

**e.** If an accident is downgraded to an incident, an amended FAA Form 8020-23 must be submitted by the FAA IIC.

**f.** Copies of FAA Form 8020-23 reports are obtainable by filing a Freedom of Information Act (FOIA) request and may be released only with permission of AFS-620 and AVP-100.

**g.** The completion of FAA Form 8020-23 for any accident/incident investigation does not take the place of malfunction reporting via FAA Flight Standards documentation such as Service Difficulty Reports (SDRs), etc., or any reporting that is normally documented via the Program Tracking and Reporting Subsystem (PTRS).

**h.** Deficiencies identified during the investigation that are related to the FAA's nine areas of responsibility must be annotated on FAA Form 8020-23 report with a very brief factual description of the deficiency. It is incumbent on the inspector or investigator to determine whether or not corrective action is needed.

**i.** For U.S.-registered aircraft accidents that occur in foreign countries, the FAA technical advisor to the U.S. Accredited Representative will complete FAA Form 8020-23 (blocks 1 through 20 only) within 30 calendar days of notification.

**23. Destruction of Documents and Information.** Destroy all documents related to the accident in accordance with FAA document retention policies, found in FAA Order 1350.14B, "Records Management."

## 24. Accident Investigations Involving FAA or NTSB Personnel and Flight Operations.

**a.** The NTSB must investigate all accidents and reportable incidents involving FAA aircraft or crewmembers.

(1) An FAA aircraft is defined as any aircraft, which is owned, leased, under military bailment, rented by the FAA, or operated by FAA personnel when in an official FAA capacity.

(2) In the case of an accident or reportable incident involving an FAA Flight Program aircraft, AVP-100 will assign the FAA IIC.

**Note:** FAA Flight Program aircraft do not include aircraft rented by an FAA employee for routine travel as per the FAA travel policy regarding travel card use and voucher reimbursement.

(3) AVP-100 is responsible for clearly identifying FAA's role in an accident involving an FAA Flight Program aircraft (e.g. FAA crewmember, FAA aircraft, or job task aircraft with FAA on board), and for conveying this information to the NTSB.

(4) If during any NTSB investigation of an FAA Flight Program aircraft operation (to include owned, leased, and rented), and the NTSB authorizes the aircraft's owner/operator as a party to the investigation, ATO Flight Program Operations will serve as a party to the investigation as the aircraft owner/operator (independent of the role of AVP-100 in the investigation).

(5) The FAA must participate in the NTSB investigation of all FAA aircraft accidents and incidents in the same manner as in the NTSB investigation of civil aircraft accidents and incidents.

**b.** The FAA must investigate all accidents and incidents involving aircraft piloted by NTSB personnel. The investigations will be conducted by AVP-100 investigators.

## 25. FAA Safety Recommendation Program.

**a.** The main purpose of accident and incident investigation is to determine how and why they occur, and prevent such events in the future. The natural next step in the safety process is the development of recommendations, actions, and strategies that can mitigate or eliminate the factors found to be directly or indirectly related to the cause of the event.

**b.** The FAA Safety Recommendation Program is one of the processes used to identify and correct safety deficiencies in the NAS and on U.S. manufactured aviation products used internationally. FAA inspectors and investigators, by virtue of their qualifications and aviation experience, objectively examine the facts, conditions, and circumstances of an accident or incident. They also identify and submit safety recommendations using procedures outlined in FAA Order 8020.17, "FAA Procedures for Handling FAA and International Safety Recommendations." Inspectors, investigators, and all other FAA personnel should be alert for issues that warrant corrective actions, whether they arise during an investigation, surveillance, or other duties.

**c.** Information on submitting a Safety Recommendation and the Safety Recommendation process can be obtained from the AVP Safety Recommendation Branch (AVP-420). Refer to FAA Order 8020.17, "FAA Procedures for Handling FAA and International Safety Recommendations."

This order prescribes uniform agency procedures and responsibilities for submitting and responding to aviation-related safety recommendations made by an FAA employee or by an international State aviation authority. It also provides direction and guidance for processing the safety recommendations, including the submittal, receipt, review, and coordination of the FAA's response letter to the recommendation.

**d.** The submitter of a safety recommendation should also consider coordinating the identification and proposed resolution of any unsafe conditions with the Office of Accident Investigation and Prevention to further enhance situational awareness and to facilitate a more streamlined response. To fully address the issues identified, the offices that are assigned safety recommendations must address each with the thoroughness necessary to respond to the deficiency or to propose alternate actions.

## **Chapter 4. NTSB Investigation Guidelines**

**1. Overview.** Title 49 U.S.C. §1132 provides for the appropriate participation of the FAA in NTSB investigations (see Chapter 2, Paragraph 1 of this order and Appendix A). This chapter describes the coordination between the FAA and the NTSB during an NTSB-led investigation. The technical aspects of an accident/incident investigation are found in Chapter 3 of this order. This Chapter describes the coordination between the FAA and NTSB during an NTSB-led investigation.

**2. Organization of the Investigation.** The NTSB conducts investigations using a party system. The FAA is automatically granted party status to all NTSB investigations. Other parties may include aircraft manufacturers, operators or other organizations that can contribute to the investigation. Participants will be organized into groups such as: aircraft operations, maintenance, human factors, recorders, etc. FAA personnel, led by the FAA IIC as the FAA party coordinator, may be assigned to participate in any of these groups.

**3.** NTSB Investigation Authority. The NTSB investigates accidents in accordance with Title VII of the Federal Aviation Act of 1958 and the Independent Safety Board Act of 1974, as amended; and serious incidents, to determine probable cause. The NTSB also has additional responsibilities.

**a.** The NTSB is responsible for the organization, conduct, and control of all accident and incident investigations involving any civil aircraft or certain public aircraft within the U.S., its Territories, Possessions, and those that occur outside the U.S. when the accident/incident is not in the territory of another country, i.e., in international waters. (See Appendix A, Parts 2 and 3 of this order).

**b.** The NTSB is responsible for supporting accident/incident investigations that occur outside the U.S. and its Territories which involve U.S. manufactured/operated aircraft in accordance with ICAO Annex 13 Accident Investigation agreements.

**c.** In most instances involving non-fatal accidents, the NTSB will not to travel to the accident scene to conduct its investigation, and will rely on the FAA to document the scene.

**d.** Because both the NTSB and the FAA have independent statutory authority, as well as differing statutory rules and mandates, differences in the requirements of the two agencies may arise during an accident or incident investigation. The FAA will comply with 49 CFR §831.5 and not interfere with the NTSB investigation. Conversely, the NTSB cannot prohibit or interfere with FAA actions required to ensure the continuing safety of the NAS. Title 49 U.S.C. §40113, grants the FAA Administrator the authority to conduct investigations concerning aviation safety.

**Note:** There may be times when the FAA needs additional information not required by the NTSB. In gathering that evidence, the FAA will coordinate with the NTSB IIC in a manner that does not interfere with the investigation. A joint policy between FAA and NTSB regarding this coordination was developed in Ashburn, Virginia, and resulted in a letter dated June 4, 2014. This letter is known as the "Ashburn Accord" and is attached in Appendix A, Part 4.

## 4. FAA and NTSB Accident and Incident Investigation Agreements.

**a.** The FAA and the NTSB have agreed that the following apply when NTSB conducts an on-scene investigation:

(1) The investigation is under the control and direction of the NTSB IIC.

(2) The FAA must at all times have a coordinator (FAA IIC) designated as its principal representative until the investigation is complete. The designation of a person as the FAA IIC conveys the authority to obtain and use the services of all needed FAA personnel, facilities, and records. Through this principal representative, NTSB will make available to FAA any documents, reports, and other evidence from the investigation and any tentative recommendations so that the FAA may immediately take the necessary corrective actions.

(3) Participation of other FAA personnel must be determined by the FAA IIC. The FAA IIC must work with the NTSB IIC in coordinating all FAA's activities.

(4) FAA personnel assigned to a group must work under the direction of the group chairperson and remain with the group until that phase of the investigation has been completed or they are released by the NTSB IIC and the FAA IIC.

(5) The NTSB IIC must inform the FAA IIC of all aspects of the investigation.

(6) Relevant investigation records and reports must be made available to FAA in an orderly and timely manner.

(7) The NTSB IIC shall not release the aircraft wreckage until the FAA agrees that it is no longer needed (see Paragraph 23 of this chapter).

**5. Other Parties.** In addition to the involvement of the NTSB and the FAA, other parties may participate in the investigation of an accident. Company safety personnel, manufacturing representatives, union representatives, and others may be onsite to assist in the investigation. It is important that all personnel involved with the accident investigation be aware of the other parties and their teams in order to establish communication channels for obtaining and exchanging information in an efficient and cordial manner.

## 6. Separate FAA Investigation.

**a.** If the FAA IIC determines that an unsafe condition exists in any of the FAA's nine areas of responsibility, the FAA may conduct a separate investigation to gather the information necessary and the FAA IIC will inform the NTSB IIC as soon as possible. The FAA IIC must make it clear that the FAA is acting on its own behalf, independent of the NTSB's investigation and must inform the NTSB IIC of any additional and pertinent information it obtains during the FAA investigation.

**b.** 49 U.S.C. §40113 requires the FAA to investigate accidents and enforce the regulations. The FAA cannot ignore instances where non-compliance is discovered. However, no enforcement action will be undertaken by any of the participants of an NTSB safety investigation.

**c.** If information becomes available during the NTSB investigation that indicates noncompliance may be present, notify the FAA IIC as soon as possible. The FAA IIC will notify the NTSB IIC and the appropriate FAA office(s). An FAA enforcement action separate from the NTSB safety investigation may begin. **Note:** No enforcement action should be initiated by the FAA until the NTSB has completed the field investigation. Exceptions can be made in the interest of safety, such as an emergency revocation of a certificate.

**d.** FAA personnel participating in the NTSB's safety investigation should not normally participate in the separate FAA enforcement action. The preferred method of conducting a concurrent and parallel investigation with the NTSB is for Flight Standards to assign another inspector other than the FAA IIC to conduct the FAA investigation, if resources permit.

**Note:** Principal operations inspectors (POI), principal maintenance inspectors (PMI), and principal avionics inspectors (PAI) assigned to a certificate holder or commercial operator involved in an accident must be available to the FAA IIC as soon as possible after notification of the accident. The FAA IIC is responsible for determining the extent of the principal inspector's involvement with the investigation. This decision will be made by the FAA IIC after consulting with the principal inspector, the district office manager, and/or the appropriate Flight Standards division manager. The FAA IIC should avoid using a principal inspector for investigations involving that inspector's assigned certificate holders or operators if possible.

e. The NTSB does not normally share information such as copies of documents, photos, data, witness statements, etc. obtained through and by the NTSB safety investigation with the FAA personnel conducting an enforcement action. The FAA inspectors performing the enforcement work must acquire their own evidence and information through their own efforts separate from the NTSB safety investigation. However, gathering evidence for enforcement purposes may occur concurrently with the safety investigation. For example, both FAA and NTSB investigators take separate notes of interview with witnesses.

**Note:** It is important to note that, in conducting these investigations, there may be times when Flight Standards, AVP-100, or other FAA offices need additional information not required by the NTSB. In gathering that evidence, the FAA will coordinate with the NTSB IIC in a manner that does not interfere with the investigation. A joint policy between FAA and NTSB regarding this coordination was developed in Ashburn, Virginia, and resulted in a letter dated June 4, 2014. This letter is known as the "Ashburn Accord" and is attached in Appendix A, Part 4.

**f.** When FAA inspectors collect evidence for use against an airman, certificate holder, or commercial operator, there must be no question in the mind of the person from whom the evidence is being requested that the inspector is not working under the direction of the NTSB. For example, witness or crewmember statements should never be written on NTSB forms; however, the rules of evidence do not prohibit FAA inspectors and NTSB investigators from gathering information simultaneously, such as when interviewing a witness, as long as the witness is aware that the information is being given to both the NTSB and to the FAA separately.

g. Information from open enforcement cases must not be shared outside the FAA.

## 7. Initial Notification.

**a.** The FAA WOCC will notify the NTSB Response Operations Center of all major aviation disasters and other aircraft accidents, incidents, and midair collisions having significant congressional

or public interest. The FAA WOCC also provides reports to the NTSB of near midair collisions and operational errors each scheduled workday.

**b.** The FAA will notify the NTSB of all occurrences of commercial space launch, reentry accidents, and launch site accidents.

**c.** The appropriate FAA ROC will notify, as soon as practicable, the respective NTSB regional office of all aviation accidents and incidents coming to the FAA's attention which occur within its geographical area of responsibility.

**8.** Notification Reporting via FAA Forms 8020-9 and 8020.11. FAA Form 8020-9, "Aircraft Accident/Incident Preliminary Notice," and FAA Form 8020-11, "Incident Report," can be used for the initial reporting of an event in the NAS, although these forms are not in an electronic format and must be manually completed. The data blocks in these forms encompass factual data that is required for collection to determine the need for an accident/incident investigation.

**9. ATO Flight Program Operations (Hangar 6).** ATO Flight Program Operations coordinates the use of FAA aircraft for accident investigation launches directly with the NTSB. FAA aircraft and crewmember services are limited to air transportation of NTSB and FAA personnel to the scene of accidents/incidents that occur within the contiguous U.S., within the States of Alaska and Hawaii, and within foreign countries on a no-cost basis in accordance with the Reimbursable Memorandum of Agreement between Department of Transportation and National Transportation Safety Board, Appendix A: Federal Aviation Administration (as amended). This service is subject to crewmember and aircraft availability and FAA operational requirements. One seat will be reserved for the AVP-100 FAA IIC on any Flight Program Operations airplane launch involving an aviation or commercial space accident or incident. Additionally, one seat will be reserved for the ATO accident/incident investigator or his/her representative when ATO facilities or personnel are involved in the accident/incident. The AVP-100 IIC and/or AVP-100 division director will coordinate with the NTSB regarding FAA participation in the launch.

## 10. Coordination.

**a.** The majority of accident/incident investigations will be conducted under the direction of the NTSB IIC whether the NTSB chooses to travel to the accident scene or not.

**b.** The FAA will designate an FAA IIC who serves as the FAA party coordinator to the NTSB's investigation.

**c.** The FAA IIC should:

(1) Use the NTSB's accident on-scene headquarters "Command Post" as the FAA IIC's headquarters during the field phase of the investigation.

(2) Contact the appropriate FAA office and notify the NTSB IIC and AVP-100 if emergency corrective actions are needed.

(3) Consult with the respective regional air traffic organization and/or AVP-100 to determine the need for and extent of an ATC facility flight inspection. Notify the NTSB IIC of the resulting decision.

(4) Determine the need for assignment of additional FAA personnel to the accident investigation. The FAA IIC will coordinate adding or removing FAA personnel from the NTSB investigation with the NTSB IIC. The FAA IIC determines the qualifications necessary for personnel to represent the FAA.

**d.** The NTSB IIC should:

(1) Keep the FAA IIC informed of the progress of the investigation. Specifically, pertinent records obtained and factual reports prepared during the investigation will be made available to the FAA IIC.

(2) Coordinate with the FAA IIC for the release of the accident/incident aircraft, launch vehicle, or reentry vehicle wreckage (See Paragraph 24 of this section for further details).

**11. FAA Action When FAA Arrives on Accident Scene before the NTSB IIC.** When the NTSB is anticipated to be present on scene, refer to Chapter 4 of this order. Consider consulting with NTSB regarding the removal of human remains from the accident scene. Additionally, wait for the NTSB investigator to conduct in-depth witness interviews except in the case of transient witnesses.

**12. NTSB Organizational Meetings.** When the NTSB IIC is on scene to conduct the investigation, the NTSB will conduct an investigative organizational meeting following the initial site visit and familiarization. The FAA IIC and FAA participants should attend the meeting. In this case, the FAA IIC organizational meeting will include only FAA personnel and should follow the NTSB's organizational meeting. The FAA's organizational meeting is described in Chapter 3, paragraph 11 of this order.

## 13. FAA Participants.

**a.** FAA participants report to and are tasked under the direction of the FAA IIC in all matters related to the function(s) assigned by and/or agreed to by the FAA IIC.

**b.** If assigned to an NTSB investigative group, FAA participants must not withdraw from the investigation until that phase of the investigation has been completed or until they are released by the NTSB IIC and the FAA IIC. Participants must submit reports if requested by the FAA IIC.

**c.** FAA participants will provide information only to members of the investigative group and appropriate FAA personnel on a need-to-know basis.

**d.** The FAA IIC must be made aware of the nature and content of any information that will be shared outside of the immediate investigative group prior to its transmission. In no case will FAA participants discuss details of the investigation with the media or other non-involved personnel.

e. FAA personnel not specifically assigned as participants or support personnel must not be present at the scene of an accident without the knowledge and consent of the FAA IIC.

**14. Investigative Groups.** The NTSB divides the investigative activity into subject areas by forming investigative groups to collect information on the subject areas pertinent to the investigation.

**a.** Not every subject area in an investigation will require corresponding group activity. An NTSB specialist may handle some subject areas while other areas may not be relevant to the particular event.

**b.** The FAA IIC, in coordination with the NTSB IIC, will select group participants based on subject matter expertise. The investigative groups typically include: ATC, powerplant, structures, systems, weather, survival factors, airports, aircraft performance, materials, fire/explosion, FDR, CVR/video/sound, operations, and human performance.

15. Special Investigative Groups. The following investigative groups have unique characteristics:

a. FDR. AVP-100 will provide personnel to participate on the FDR group.

**b. CVR/Video/Sound Spectrum.** The CVR/video/sound spectrum investigative groups are conducted in Washington, DC and have unique legal requirements. If the FAA IIC or his/her designee is unable to travel to Washington, DC, AVP-100 will provide personnel to participate on the group.

**c. Operations/Human Performance.** The FAA IIC will select participants for this group based on subject matter expertise in aviation operations and human factors. Participants in this group will collect data on many operational and human aspects of the accident; for instance: flight plans, dispatch, fatigue, medical condition, etc. One of the primary techniques used in this group to gather information is the interview. Operations and Human Performance investigative groups are usually combined but may be separated during a major investigation.

**16. NTSB Interviews.** When the NTSB is in charge of the on-scene investigation, they will typically conduct survivor and witness interviews and obtain statements.

a. Interviews may be conducted in person or via teleconference.

**b.** Interviewees may have legal representation.

**c.** NTSB leads the interview followed by questions from the other parties. All group participants will be given an opportunity to question the witness in turn and should not interrupt during the interview.

**d.** In some NTSB investigations, a witness may wish to exclude the FAA from the interview. The request will be honored; however, the witness should be informed that he/she may be requested to participate in a separate FAA interview at a later time.

## 17. Responsibilities of FAA Participants Assigned to an NTSB Investigative Group.

**a.** FAA participants will report directly to the FAA IIC. The participants to be assigned to NTSB investigative groups will participate in the investigation as group members. Investigative groups work under the direction of an NTSB group chairman.

**b.** Typical activities in a group include:

(1) Gathering factual information in the field, laboratory or office settings.

(2) Participating in group preparation of factual field notes. The NTSB group chairman will eventually draft a factual report from these field notes which will be placed in the public docket after all group participants have reviewed the draft report.

(3) Providing reports as requested by the NTSB or the military group Chairman.

**c.** The group member will inform the FAA IIC of the exhibits or information that have been obtained during the group's investigation and if requested, furnish the FAA IIC with a copy of each.

d. The group member will report to the FAA IIC at the end of each day's activities.

**e.** The group member must provide an immediate verbal report (followed by a written description, if requested) to the FAA IIC whenever any of the following is found (nine areas of responsibility):

(1) Performance of FAA facilities or functions was a factor.

(2) Performance of non-FAA owned and operated ATC facilities or navigational aids was a factor.

(3) Airworthiness of FAA-certificated aircraft was a factor, including FAA oversight responsibilities.

(4) Competency of FAA-certificated airmen, air agencies, commercial operators, or air carriers was a factor.

(5) Federal Aviation Regulations (14 CFR) were inadequate.

(6) Airport certification safety standards or operations were a factor.

(7) Security standards or operations, and/or hazardous materials were a factor.

(8) Airmen medical qualifications were a factor.

(9) Federal Aviation Regulations (14 CFR) were potentially violated.

**f.** Upon being released by the NTSB group chairman, the FAA group member will report to the FAA IIC before departing the scene for final release at the close of the group's on-scene investigation.

**g.** When group chairman factual reports are received for review, members will either concur or non-concur with the report, in whole or in part. When the FAA non-concurs, the FAA group member will:

(1) Inform the group chairman in writing and give the reason(s) for non-concurrence. (Non-concurrence may be due to a need for correction of substantive information, misstatement of fact, etc.).

(2) Provide a copy of the non-concurrence immediately to the FAA IIC and to AVP-100.

Note: NTSB may or may not act upon information received in this manner.

**18. Airman, Medical and Aircraft Records**. NTSB requests for FAA Airman, Medical and Aircraft records should be processed as follows:

**a.** FAA Medical Records.

(1) For deceased airmen: A copy (Blue Ribbon) of a deceased airman's FAA medical history may be obtained from the Aerospace Medical Certification Division, AAM-300. The certified Blue Ribbon copy of the medical record may also be shared with the NTSB by the FAA IIC for deceased airmen only.

(2) For living airmen: As a general rule, the FAA is prohibited from releasing the medical records of any living person without the individual's consent. However, in the context of an accident/incident investigation, information contained in the medical records of living airmen may be relevant to aviation safety. Upon request, an NTSB investigator or an NTSB medical officer may review, but not copy, a living airman's medical record only at FAA headquarters and only under the supervision of the Federal Air Surgeon or their designee. To accomplish this review, the records will be provided to AVP-100 for NTSB review coordination. Following the review, the FAA will provide the NTSB, upon request, copies of these records for further examination or retention in NTSB facilities provided all of the following conditions are satisfied:

(a) The NTSB will not share airman medical records within the investigative group due to privacy concerns.

(b) The NTSB will retain only those records required to support their determination of probable cause or safety recommendations.

(c) The NTSB will secure the records in the portion of the NTSB's investigation docket that is designated For Official Use Only.

(d) The NTSB recognizes that records under this section fall under their responsibility of for the provision of all legal protections.

(e) The NTSB will ensure that the medical records of living pilots not be made public, except only in very specific circumstances and then only after advance notice to, and in consultation, with the FAA.

**b.** FAA Airman Records. Upon request, the FAA will provide the NTSB a certified copy (Blue Ribbon) of the airman's FAA certificate history. These records may be obtained directly from the Airman Certification Branch, AFS-760, or through the FAA IIC. Airmen certification records may be mailed to NTSB, but only to NTSB Headquarters in Washington, DC or one of the four NTSB Regional Office facilities.

**c.** FAA Aircraft Records. Upon request, the FAA will provide the NTSB a certified copy (Blue Ribbon) of the aircraft historical records (airworthiness/registration). These records may be obtained directly from the Aircraft Registration Branch, AFS-750.

**19. Examination of Deceased Air Crew Members.** Title 49 U.S.C. §1134(f) authorizes the NTSB to order an autopsy and seek other necessary tests. The FAA IIC may need to work with the NTSB IIC if local authorities do not wish to conduct an autopsy or toxicology testing. The CAMI Autopsy Program Team can assist with this process.

**20. Air Traffic Control Investigation Procedures.** Accidents and incidents that involve ATO services and facilities require additional procedures.

**a.** The FAA IIC will provide the NTSB with ATC audio recordings, radar data, and similar documentation as requested. The FAA IIC should request air traffic data by contacting the appropriate geographic ATO Service Center Quality Control Group office through the WOCC.

**b.** ATO Event Response Team. If an accident or incident involving air traffic services is deemed a significant event, ATO may form an Event Response Team (ERT) to conduct a review of air traffic services and performance. The ERT manager will:

(1) Act as the primary ATO liaison with the FAA IIC or NTSB Air Traffic Control Group Chairman.

(2) Facilitate and assist facility personnel in the compilation of audio recordings, radar data, and similar documentation requested by the NTSB.

(3) Act as the sole ATO representative responsible for providing data directly to the NTSB.

Note: The ERT manager may not serve as a group member to a formal NTSB investigation.

(4) For accident investigations when an FAA IIC is present on-site, the ERT manager will establish liaison with the FAA IIC and act as the FAA IIC's principal contact for all ATO information and documentation. The ERT manager will provide an initial briefing of pertinent facts to the FAA IIC at the earliest opportunity, and provide copies of all data/information to the FAA IIC, as requested.

(5) For additional information, refer to FAA Order JO 1030.3B, "Initial Event Response," which describes ATO processes, roles and responsibilities, and timelines for collecting and reporting data in response to significant events in the NAS. Additionally, FAA Order JO 8020.16, "Air Traffic Organization Aircraft Accident and Incident Notification, Investigation, and Reporting," provides direction and guidance to ATO service units, service centers, service areas, offices, and facilities when they are called upon to review air traffic services and performance.

**21. FDR Data Recovery.** When there is flight data, aircraft data or any kind of data associated with aircraft operation or performance, the FAA IIC may request assistance from AVP-100. This data may include data from a FDR, CVR, quick access recorder (QAR), GPS, cockpit displays, or other non-volatile memory devices.

**a.** The NTSB IIC is responsible for transferring the components or data to the NTSB's recorder division for processing. The NTSB then distributes this data as follows:

(1) FDR and QAR data will be sent to AVP-100 for analysis and distribution to appropriate FAA personnel.

(2) GPS and other non-volatile memory data may be distributed directly to the FAA IIC; however, if assistance is needed in processing or analyzing the data, AVP-100 is available to assist.

(3) The CVR transcript is released to the FAA and to the public when the NTSB docket for the investigation is opened. Typically, this occurs several months after the field phase of the investigation has been completed.

**b.** If the NTSB does not provide data services and the FAA IIC needs information, contact AVP-100 for coordination.

**c.** The FAA may use data received from the NTSB in its investigation; however, this data should not normally be used in enforcement action. If the FAA independently obtains this information, the FAA is permitted to use the data in enforcement action(s). Contact AVP-100 for assistance.

**22. Conclusion of the Field Investigation.** The FAA IIC may consider the field phase of the investigation to be complete when all relevant or required information has been documented and the NTSB IIC determines the field phase is complete. The FAA IIC should:

**a.** Request from the NTSB IIC copies of all pertinent notes, exhibits, and NTSB group chairman reports generated during the NTSB on-scene investigation if not already received.

**b.** Review all information obtained by and discussed in each NTSB group with each FAA participant before the participant is permitted to leave the accident scene.

**c.** Request a verbal report from any FAA participant who is called away from the investigation before the FAA IIC can conduct a review of information obtained by the participant.

**23. Release of Aircraft Wreckage and Parts at Conclusion of Investigation.** NTSB will release the wreckage of all accidents or incidents that it investigates. However, the NTSB has agreed it will not release the wreckage until the FAA IIC agrees that it is no longer needed. If the FAA IIC requests that the NTSB retain control of the wreckage for a period beyond NTSB's investigative needs, the FAA will bear the cost of storage and security if any, for this additional period. If the FAA needs to further examine the wreckage after the NTSB has completed its investigation, the FAA IIC should request that the NTSB IIC retain possession of the wreckage or release the wreckage to the FAA via NTSB Form 6120.15, "Release of Aircraft Wreckage and Receipt of Aircraft Parts" (see Appendix A). The FAA will re-release the wreckage using FAA Form 8020-2.

**24. Flow and Dissemination of Accident Information**. All information concerning the accident obtained by any person or organization participating in the investigation must be passed to the NTSB IIC. Aside from FAA investigative group members, all information concerning the accident obtained by any FAA personnel must be passed to the NTSB IIC through the FAA IIC. Investigative group members must coordinate flow of information with the FAA IIC and their respective NTSB group chairman.

**25.** Public Release of Information and Media Inquiry. For FAA public release of information, refer to Chapter 2, Paragraph 5(e), and also Chapter 3, Paragraph 9 of this order. Refer all media requests for information to the NTSB IIC.

## **Chapter 5. NTSB Public Hearings and Depositions**

**1. Public Hearings.** The NTSB may order a public hearing as part of an accident or incident investigation whenever the Board deems it necessary in the public interest. The rules governing NTSB investigative hearings and depositions testimony under oath appear in Title 49 CFR Part 845.

**2. Depositions.** The NTSB may elect to take depositions in lieu of conducting a public hearing. The purpose of NTSB-taken depositions in accident and incident investigations is the same as for hearings as described in 49 CFR § 845.2.

**3.** FAA Action upon Notification of NTSB Hearing/Deposition. When notified that the NTSB will take depositions or that the NTSB will hold a Public Hearing, AVP-100 will contact the NTSB's hearing officer to determine NTSB's requirement for FAA witnesses. Immediately thereafter, AVP-100 will contact the FAA IIC and the Office of the General Counsel Assistant Chief Counsel, Litigation & General Law Division, AGC-400, for the purpose of coordinating FAA's efforts to prepare for the hearing or deposition.

## 4. FAA Spokesperson Selection and Duties.

**a.** The AVP-100 division director, or his/her designated representative, will serve as the FAA spokesperson for prehearing conferences and formal hearings.

**b.** The FAA spokesperson represents and speaks for the FAA, and will be permitted to question FAA and non-FAA witnesses during the hearing. The spokesperson should therefore:

(1) Develop a comprehensive line of questions.

(2) Review any documentary evidence to be introduced by an FAA employee.

(3) Confer with FAA witnesses and legal representatives prior to the hearing or deposition. The spokesperson will ensure the FAA witnesses are briefed on conduct, responsibilities and expectations.

(4) Consult with Litigation & General Law Division, AGC-400 for legal counsel and procedural briefings regarding FAA personnel who are designated as hearing witnesses.

## 5. FAA Representation at Pre-Hearing Conferences and Hearings.

**a.** AVP-100 will limit FAA representatives at the pre-hearing conference and hearing to only those personnel whose advice and assistance are essential for the proper representation of the FAA. Representatives should consist of:

(1) FAA Spokesperson;

(2) FAA IIC;

- (3) AVP-100 representative;
- (4) AGC-400 representative; and

(5) FAA technical specialists designated by the FAA Spokesperson with the advice of the appropriate FAA elements.

**b.** The NTSB does not normally require witnesses to attend pre-hearing conferences. However, if attendance is required, FAA employee witnesses must be accompanied by one or more of the following personnel:

- (1) The FAA Spokesperson;
- (2) The FAA IIC;
- (3) The employee's supervisor;
- (4) A legal representative from AGC-400; and
- (5) A representative for the employee's line of business.

6. Responsibilities of FAA Employees Called As Witnesses. FAA employees named as witnesses for NTSB public hearings or depositions will confer with the FAA spokesperson, legal representatives, and other personnel as deemed necessary by the FAA spokesperson, prior to testifying. Each FAA witness at a Public Hearing must be thoroughly familiar with all facts revealed during the investigation that are within the witness's area of responsibility and technical specialty. The witness should have pertinent manuals, handbooks, and other material available for reference.

**7.** Exhibits and Transcripts. The NTSB will provide AVP-100 with a set of exhibits before NTSB hearings and NTSB depositions. After the witness testifies, a transcript can be ordered by AVP-100 from the court reporter for a fee.

## Chapter 6. FAA Incident Investigation and Reporting

1. Overview. The FAA investigates aircraft incidents, and collects and analyzes aircraft incident reports because the reports provide an excellent source of accident prevention information. An active incident reporting system is the foundation of a good safety program. Aircraft incident investigations may result in regulatory changes, issuance of Airworthiness Directives, revised procedures, standards, policy, etc. Support for such actions depends on facts discovered during the investigation. All relevant facts should be documented. Specific guidance for the collection and reporting of incidents and occurrences can be found in FAA Order 8900.1, FSIMS, Volume 7.

**2. Incident.** An incident is defined as an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations. This definition covers a broad range of events and may include the following:

- **a.** Damage to an aircraft (other than an accident);
- **b.** Runway incursion or excursion;
- c. Pilot deviations (PD);
- d. Near midair collision (NMAC); and
- e. Unmanned Aircraft Systems (UAS) Reports.

**3.** Occurrence Reporting. Until an event can be identified as an incident, it will be regarded as an occurrence. Not all events that are brought to the attention of Flight Standards inspectors have an obvious impact on the safety of operations, nor are they readily identifiable as an incident. Some occurrences, such as a low-speed abort or an air turnback, may require an assessment for its potential impact on safety. The advantage of labeling an event as an occurrence is that it allows for an assessment of the risk and the facts for an accurate identification of the event, without generating unnecessary reports and development of safety actions.

**4.** FAA Completion and Distribution of FAA Form 8020-23, "FAA Accident/Incident Report." AVP-100 requires the collection of specific information necessary from all FAA IICs during an incident investigation to ensure adequate factual and analytical data is recorded. This information is collected via FAA Form 8020-23, "FAA Accident/Incident Report." The process of completing incident reports is the same as the process for accident reports. See Chapter 3, paragraph 22 of this order.

**5.** Service Difficult Reports (SDR). Some aircraft malfunctions are documented by use of a Service Difficulty Report (SDR), a Mechanical Interruption Summary, a Malfunction or Defect report, or another reporting method. However, if an aircraft operational incident is associated with the malfunction or failure, the operational incident must also be documented by the reporting FSDO on FAA Form 8020-23. FAA investigators should take the appropriate corrective action of submitting or requesting an SDR when an accident or incident is related to a mechanical problem. The SDR operator control number should be entered into the 8020-23 report.

**6.** Air Traffic Reports to Flight Standards. The ATO utilizes Mandatory Occurrence Reports (MOR), and Electronic Occurrence Reports (EOR) to collect preliminary event information. ATO employees are mandated to report all observed or suspected occurrences which meet the MOR criteria (Reference FAA Order JO 7210.632," Air Traffic Organization Occurrence Reporting"). The preliminary reports are received by Flight Standards through the ATQA program or the CEDAR program. It is Flight Standards' responsibility to analyze and validate the reports through an analysis of the air traffic data. When validated, the investigator should take appropriate actions to mitigate any future reoccurrence of the event by the respective operator, pilot or crew.

**7. Pilot Deviation (PD).** PDs are the actions of a pilot that result in the violation of a FAR (14 CFR) or a North American Aerospace Defense (Command Air Defense Identification Zone) tolerance. This includes actions of a pilot that result in a failure to comply with an ATC clearance and/or instruction. PDs are typically investigated by Flight Standards field offices. Specific guidance for the collection and reporting of incidents and occurrences can be found in FAA Order 8900.1, FSIMS, Volume 7.

**8.** Foreign Air Carrier Incidents. The FAA IIC for an incident that occurs in a U.S. jurisdictional area and which involves a foreign air carrier must notify the responsible FAA field office with geographic responsibility for 14 CFR Part 129. The responsible FAA office must inform the appropriate foreign government aviation agency and the foreign air carrier's representative of the incident. The location of the responsible FAA field office for each foreign air carrier is listed in the National Vital Information System (NVIS). FAA Form 8020-23 must be completed and distributed for each foreign air carrier incident in ATQA. Reference FAA Order 8900.1, FSIMS, Volume 12.

**9.** Near Mid-Air Collision (NMAC). A Near Mid-Air Collision (NMAC) is an incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500 feet to another aircraft or where a report is received from a pilot or other flight crewmember stating that a collision hazard existed between two or more aircraft. For air carrier aircraft operating under Part 121 or 135, the Certificate Management Office (CMO)/FSDO will conduct the investigation. The CMO can coordinate with the Flight Standards Office in whose jurisdiction the incident occurred as necessary. For other than air carrier aircraft, the FSDO in whose area the incident occurred will conduct the investigation. The inspector should document all factors involved in the incident on FAA Form 8020-15. After consideration of the facts of the case, the inspector must rate the incident's risk of collision as a "A" critical, "B" potential, "C" low potential, "D" no potential, or "E" unknown potential. Specific guidance for NMAC reporting can be found in FAA Order 8900.1, FSIMS, Volume 7.

## Chapter 7. Special Types of Aircraft Accident/Incident Investigations

**1.** Foreign Investigations. The FAA may participate in foreign accident investigations upon request. ICAO Annex 13 provides that such investigations are the responsibility of the country in which the accident occurs.

**a.** In accordance with ICAO Annex 13, FAA participation will normally be in the role of technical advisor to the U.S. accredited representative. The technical advisor's role is comparable to the roles and responsibilities of a FAA party coordinator in a domestic accident investigation.

**b.** AVP-100 will coordinate all FAA activity for foreign accident investigations. If AVP-100 does not travel in support of the event, the International Field Office (IFO) representative should maintain awareness of accident investigation activities and keep AVP-100 advised of the ongoing accident investigation activity.

**2. Public Aircraft Investigations**. Unlike civil aircraft, public aircraft are not subject to all of the regulations contained in Title 14 of the Code of Federal Regulations. However, the investigation is handled in the same manner as a civil aircraft investigation and the involvement of any of the FAA's nine responsibilities will be determined.

**3.** Military Investigations. Title 49 U.S.C. provides for FAA's participation in the investigation of a military aircraft accident (termed "mishap" by the military services) in certain circumstances:

**a.** In the case of any civil aircraft accident investigation, or any accident investigation conducted by the NTSB that involves both civil and military aircraft, the FAA Administrator may properly discharge his or her duties and responsibilities in accordance with Title 49 U.S.C.

**b.** In the case of an accident that involves only military aircraft and when functions of the FAA are or may be involved, the military authorities will provide for investigation participation by the Administrator upon request. These functions could include the involvement of an air traffic control facility operated by the FAA, an accident aircraft which is similar to an FAA type-certificated aircraft, an FAA certificated airman, or an FAA-certificated joint use airport.

**c.** The Armed Forces have developed joint regulations by mutual agreement to implement Title 49 U.S.C. (see Air Force Regulation AFJI 91-206, Army Regulation 95-30, Operations Navy Instruction 3750.16, and Coast Guard Regulation 307).

**d.** Typically, AVP-100 will provide the FAA IIC for military mishap investigations and coordinate all FAA activity concerning military mishaps, if requested or needed. Other FAA personnel who encounter any circumstance in which there is a question concerning FAA's authority to investigate an accident or incident involving military aircraft should consult with AVP-100.

**4. Ultralight Vehicles**. The NTSB does not investigate unregistered ultralight vehicles as defined under 14 CFR §103. The FAA's involvement is to determine the category and classification of the vehicle (an ultralight is an unregistered, single-occupant vehicle, not requiring an airworthiness certificate). While the FAA also will not normally investigate unregistered ultralight vehicle accidents or compile an accident or incident report, the FAA does have the responsibility to determine if the particular operation was in compliance with 14 CFR and if there was any aviation safety impact which

requires corrective action. For example, if a conflict with other aircraft operations existed over a congested area, or if a fatality resulted from an ultralight operation, these factors may indicate violations of 14 CFR and necessitate an on-scene investigation to document areas of noncompliance. Additionally, if widespread accident publicity is anticipated, the AVP-100 duty officer should be advised of the event immediately.

**5. Parachute Jumping**. During parachute jumping operations, if a parachutist is injured and the aircraft is not involved in the event, an accident/incident report is not required. However, fatalities to a parachutist during jumping operations must be investigated by Flight Standards and an FAA Form 8020-23 must be completed.

**6.** Emergency Aircraft Evacuations. An emergency evacuation that results in a serious injury or a fatality is classified as an aircraft accident and is investigated as such.

7. Criminal Incidents. The following provisions will serve as a guide to FAA personnel who may be involved either directly or indirectly in matters concerning criminal acts against airports, navigational facilities, aircraft, air carriers, passengers, or crewmembers. (See also FAA Order 2150.3, "Compliance and Enforcement Program" and FAA Order 1600.38, "Employee and Other Internal Security Investigations").

**a.** The willful or malicious damage or destruction of Federal installations, airports, aircraft, air navigation facilities or interference with crewmembers or passengers or other crimes against air commerce or aircraft are Federal offenses and punishable under 18 U.S.C. or 49 U.S.C. If there is any indication or evidence of possible criminal activity, investigative personnel will notify their immediate supervisor and the NTSB who will in turn, notify the appropriate Federal authorities.

**b.** It may also be appropriate to notify the pilot-in-command and the aircraft operator. The operator and concerned authorities can then determine the required action.

## 8. Commercial Space Transportation Mishap Investigations.

**a.** FAA Authority. The Commercial Space Launch Act of 1984, as amended, authorizes the Secretary of Transportation to oversee and coordinate U.S. commercial launch activities. In carrying out these responsibilities, the Secretary is authorized to initiate investigations and inquiries for the purpose of enforcing the Act. The FAA's authority to investigate commercial space launch mishaps is contained in Section 50917 of 51 U.S.C., Subtitle V, Chapter 509, Commercial Space Launch Activities. Depending on international policy and agreements, the FAA's investigation authority can extend to accidents involving U.S. space launch services conducted outside the U.S.

**b.** Definitions. Definitions applicable to commercial space transportation, including mishap, launch accident, etc. are defined in 14 CFR §401.5. Launch site accident is defined in 14 CFR §420.5.

**c.** Role of the NTSB. On June 5, 1989, the DOT's former Office of Commercial Space Transportation and the NTSB executed Appendix H to the 1975 "Reimbursable Memorandum of Agreement Between Department of Transportation and National Transportation Safety Board." This agreement, updated in January 2000, outlines the relationship between the Associate Administrator for Commercial Space Transportation (AST) and NTSB, and establishes the relationships, notification procedures, coordination requirements, and reporting responsibilities of AST and the NTSB in connection with accident investigations associated with commercial space launch activities, and identifies areas in which exchange of data and use of resources or services of one agency by another may be requested. See Appendix A, Part 5 of this order.

d. Specifically, NTSB could investigate all commercial space launch accidents resulting in:

(1) Known impact of a commercial launch vehicle, its payload or any component thereof outside the impact limit lines designated by the launch range facility;

(2) A fatality or serious injury (as defined in 49 CFR 830.2) to any person who is not associated with commercial space launch activities and who is not located on the launch range facility;

(3) Any damage estimated to exceed \$25,000 to property which is not associated with commercial space launch activities and which is not located on the launch range facility;

(4) Events subject to Section 304(a)(1)(f) of the Independent Safety Board Act of 1974; or

(5) Other events subject to mutual agreement of NTSB and AST.

**Note:** Nothing in this agreement impairs AST's authority to conduct investigations of mishaps under applicable provisions of law or to obtain information directly from parties involved in, and witnesses to, a commercial space mishap.

**e.** AST Investigations. AST has the authority to conduct independent investigations parallel to an NTSB investigation, including, but not limited to the following:

(1) Accidents not investigated by the NTSB.

(2) Incidents or other identified mishaps.

(3) Flight safety system malfunctions.

(4) Failure of a safety organization or safety process associated with or related to commercial space activities.

(5) Suspected regulatory violations or violations of an FAA license or experimental permit and associated orders.

**f.** Operator-Led Investigations. Based on the nature and consequences of a mishap, AST may authorize the commercial operator to conduct the investigation in accordance with their approved investigation plan under FAA oversight. Per commercial space transportation requirements, regulated operators are responsible for establishing an accident investigation plan identifying the procedures and criteria by which they will investigate accidents, incidents, and other mishaps.

g. Determination of FAA IIC.

(1) In the event of a commercial space mishap in which the NTSB is the investigating agency, AVP-100 will provide the FAA IIC. AST will provide assistance and expertise to the FAA IIC in coordination with AVP-100.

(2) When the NTSB is not the investigating agency, AST will coordinate with AVP-100 to determine which organization will provide the FAA IIC. If the FAA IIC is provided by AST, AVP-100 will provide IIC assistance and expertise in coordination with AST. Space mishaps have many special considerations and immediate coordination with AST and AVP-100 is critical.

**h.** Selection of AST Personnel. Selection of AST personnel to participate in an NTSB or AST investigation shall be determined by the FAA IIC and be subject to the recommendation of AST-1.

i. Other Federal Investigations.

(1) The United States Air Force (USAF) may elect to conduct an investigation independent of an NTSB, FAA, or operator-led investigation for launches launched from a Federal launch range or involving common launch vehicles, launch vehicle systems, or components. In such cases, FAA and NTSB may request official observer status as agreed upon in the 2004 "Memorandum of Understanding Between the National Transportation Safety Board, United States Air Force, and Federal Aviation Administration Regarding Space Launch Accidents." NASA may also request observer status. A copy of this agreement can be found at: http://www.faa.gov/about/office\_org/headquarters\_offices/ast/about/moa\_mou/

(2) The National Aeronautics and Space Administration (NASA) may elect to conduct an investigation independent of an NTSB, FAA, or operator-led investigation of FAA-licensed launches launched under contract for NASA or involving common launch vehicles, launch vehicle systems, or components. In such cases, FAA, NTSB, and USAF may request official observer status.

j. Official Observer Status.

(1) All FAA requests for official observer status in a NASA, USAF, or operator-led investigation should be coordinated with AST.

(2) Similarly, all outside agency requests for official observer status in an FAA or operator-led investigation under FAA oversight should be coordinated with the FAA IIC and AST.

(3) Personnel observing or participating in an investigation will be under the control and direction of the lead agencies IIC (e.g. NTSB IIC, FAA IIC, USAF Safety Investigation Board President, etc.). All such personnel will follow the lead agency's rules regarding the handling and release of information or other evidence collected during the investigation.

## 9. Unmanned Aircraft Systems (UAS) Investigations.

**a.** Overview. UAS come in a variety of platforms and serve diverse operational purposes. They may have a wingspan as long as a large jet airplane or as small as a radio-controlled model that can be held in one hand. Operators of UAS are a diverse community and include, but are not limited to, hobbyists, commercial operators, public entities such as Federal, State and Local Law Enforcement Agencies, and colleges/universities. In order to support safe and effective integration of UAS technology with manned aircraft operating in the NAS, the FAA issues Certificates of Authorization or Waiver (COA) for public aircraft entities and Special Airworthiness Certificates in the Experimental Category for civil operators. Additionally, FAA has developed the framework within 14 CFR Part 107 to enable certain small Unmanned Aircraft System (sUAS) operations to be conducted for many different nonrecreational purposes without requiring an airworthiness certificate, exemption, or a COA.

**b.** UAS Accident Definitions. The NTSB's definition of a UAS accident differs from the definition found in the FAA's recent 14 CFR Part 107 for small commercial UAS. Regardless, both definitions are to be used for reporting and investigation purposes, depending on the circumstances.

(1) NTSB Definition. A UAS accident is defined by the NTSB as an occurrence associated with the operation of any public or civil UAS that takes place between the time that the system is activated with the purpose of flight and the time that the system is deactivated at the conclusion of its mission, in which any person suffers death or serious injury, or the UAS has a maximum gross takeoff weight of 300 pounds or greater and sustains substantial damage. In the case of a midair collision between a manned aircraft and a UAS that weighs less than 300 pounds in which no injuries were sustained, consideration should be given to the damage incurred to the manned aircraft to determine if the criteria for substantial damage to the manned aircraft has been met.

(2) FAA Part 107 Definition. A UAS accident is defined by the FAA as any operation of a small unmanned aircraft (excluding model aircraft) involving at least:(a) serious injury to any person or any loss of consciousness; or (b) damage to any property, other than the small unmanned aircraft, unless one of the following conditions is satisfied: (1) the cost of repair (including materials and labor) does not exceed \$500; or (2) the fair market value of the property does not exceed \$500 in the event of total loss.

**c.** UAS Investigation Methodology. While UAS differ in many respects from manned aircraft, the basic investigative process remains generally the same as for manned civil aircraft. However, for UAS investigations, issues involving command and control links, control station operation and the unique human factors aspects of remote pilot operation must be taken into consideration. Detailed guidance regarding UAS accident and incident notification and investigation of UAS can be found in FAA Order 8900.1, FSIMS, Volume 16.

(1) As in manned aircraft operations, on-site accident investigations are required for all UAS accidents involving fatalities, as well as any UAS accident that occurred while operating under a COA, a Special Airworthiness Certificate or through a UAS Flight Research/Flight Training Center.

(2) FSDO and AUS inspectors will lead and conduct the vast majority of UAS accident/incident investigations as the FAA IIC. However, AVP-100 will likely assume the FAA IIC role for UAS accidents/incidents that involve serious injuries, fatalities, collision with a manned aircraft resulting in substantial damage, high public visibility, or situations that may call for AVP leadership.

(3) The FAA IIC will rely on AUS-200 inspectors, or Flight Standards personnel familiar with UAS operations, as necessary, for technical and operational expertise. During the investigative process AVP-100 and AUS-200 will maintain a collaborative relationship, sharing data and coordinating communications as necessary to support ASIs and the FSDO.

**d.** FAA Form 8020-23 must be completed for all UAS accidents and processed in the same manner as a manned aircraft accident. However, some of the data blocks in the 8020-23 form require unique information. Additional details regarding the completion of FAA Form 8020-23 for UAS accidents/incidents can be found in FAA Order 8900.1, FSIMS, Volume 16.

**e.** Model Aircraft Considerations. The FAA does not investigate accidents/incidents involving "model aircraft," which is defined as an aircraft capable of sustained flight in the atmosphere that is flown within the operator's visual line of sight and only for hobby or recreational purposes. An aircraft must meet the statutory requirements to be considered model aircraft in accordance with the Special Rule Model Aircraft, Section 336(a) of Public Law 112-95 and 14 CFR Part 101.

## Chapter 8. Safety Management System (SMS) Post-Accident Guidance

## 1. Role of Accident and Incident Investigation in SMS.

**a.** The FAA's mission is, "To provide the safest, most efficient aerospace system in the world." To support its mission, the FAA is implementing an SMS to integrate the management of safety risk into business planning, operations, and decision making in order to enhance safety for the flying public and strengthen the FAA's worldwide leadership in aviation safety. An SMS is a formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of safety risk controls. It includes systematic procedures, practices, and policies for the management of safety risk. The SMS consists of four main components that work together to enable the FAA to manage the safety risk in the aerospace system. They are:

- (1) Safety Policy;
- (2) Safety Risk Management (SRM);
- (3) Safety Assurance; and
- (4) Safety Promotion.

Accident and incident investigation has an important role in SMS. The investigation function falls within the Safety Assurance component of SMS. Safety Assurance includes processes within the SMS that function systematically to ensure the performance and effectiveness of safety risk controls and that the organization meets or exceeds its safety objectives through the collection, analysis, and assessment of information. The specific output of Safety Assurance is the determination that the operational system is meeting requirements, as well as the identification of hazards or ineffective controls. Within the SMS, investigating accidents and incidents provides important information regarding specific failures in the system, which enables the identification of potential hazards and/or ineffective risk controls. In both cases, the SRM process is used to develop revisions to existing risk controls or new risk controls to mitigate safety risk. Information from investigating accidents and incidents supports the application of SRM. SRM is used to establish the necessary safety risk controls so similar failures do not occur in the future resulting in additional incidents or accidents.

## Appendix A

## Pertinent NTSB Regulations, Agreements and Forms

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#### Part 1. 49 CFR 800 APPENDIX. REQUEST TO THE SECRETARY OF THE DEPARTMENT OF TRANSPORTATION TO INV ESTIGATE CERTAIN AIRCRAFT ACCIDENTS

Appendix to Part 800–Request to the Secretary of the Department of Transportation to Investigate Certain Aircraft Accidents

(a) Acting pursuant to the authority vested in it by Title VII of the Federal Aviation Act of 1958 (49 U.S.C. 1441) and section 304(a)(1) of the Independent Safety Board Act of 1974, the National Transportation Safety Board (Board) hereby requests the Secretary of the Department of Transportation (Secretary) to exercise his authority subject to the terms, conditions, and limitations of Title VII and section 304(a)(1) of the Independent Safety Board Act of 1974, and as set forth below to investigate the facts, conditions, and circumstances surrounding certain fixed-wing and rotorcraft aircraft accidents and to submit a report to the Board from which the Board may make a determination of the probable cause. (b) The authority to be exercised hereunder shall include the investigation of all civil aircraft accidents involving rotorcraft, aerial application, amateur-built aircraft, restricted category aircraft, and all fixed-wing aircraft which have a certificated maximum gross takeoff weight of 12,500 pounds or less except:

(1) Accidents in which fatal injuries have occurred to an occupant of such aircraft, but shall include accidents involving fatalities incurred as a result of aerial application operations, amateur-built aircraft operations, or restricted category aircraft operations.

(2) Accidents involving aircraft operated in accordance with the provisions of Part 135 of the Federal Air Regulations entitled "Air Taxi Operators and Commercial Operators of Small Aircraft."

(3) Accidents involving aircraft operated by an air carrier authorized by certificate of public convenience and necessity to engage in air transportation.

(4) Accidents involving midair collisions.(c) *Provided*, That the Board may, through the chiefs of its field offices, or their designees

who receive the initial notifications, advise the Secretary, through his appropriate designee, that the Board will assume the full responsibility for the investigation of an accident included in this request in the same manner as an accident not so included; and Provided further, That the Board, through the chiefs of its field offices, or their designees who receive initial notifications may request the Secretary, through his appropriate designee, to investigate an accident not included in this request, which would normally be investigated by the Board under section (b) (1) through (4) above, and in the same manner as an accident so included.

(d) Provided, That this authority shall not be construed to authorize the Secretary to hold public hearings or to determine the probable cause of the accident; and Provided further, That the Secretary will report to the Board in a form acceptable to the Board the facts, conditions, and circumstances surrounding each accident from which the Board may determine the probable cause.

(e) And provided further, That this request includes authority to conduct autopsies and such other tests of the remains of deceased persons aboard the aircraft at the time of the accident, who die as a result of the accident, necessary to the investigations requested hereunder and such authority may be delegated and redelegated to any official or employee of the Federal Aviation Administration (FAA). For the purpose of this provision, designated aviation examiners are not deemed to be officials or employees of the FAA.

(f) Invoking the provisions of section 701(f) of the Federal Aviation Act of 1958, and section 304(a)(1) of the Independent Safety Board Act of 1974, is necessary inasmuch as sufficient funds have not been made available to the Board to provide adequate facilities and personnel to investigate all accidents involving civil aircraft. This request, therefore, is considered to be temporary in nature and may be modified or terminated by written notice to the Secretary.

# Part 2. 49 CFR 830, NOTIFICATION AND REPORTING OF AIRCRAFT ACCIDENTS OR INCIDENTS AND OVERDUE AIRCRAFT, AND PRESERVATION OF AIRCRAFT WRECKAGE, MAIL, CARGO, AND RECORDS

PART 830—NOTIFICATION AND REPORTING OF AIRCRAFT ACCIDENTS OR INCIDENTS AND OVERDUE AIRCRAFT, AND PRESERVATION OF AIRCRAFT WRECKAGE, MAIL, CARGO, AND RECORDS

Subpart A—GeneralSec.830.1Applicability.830.2Definitions.

# Subpart B—Initial Notification of Aircraft Accidents, Incidents, and Overdue Aircraft

830.5 Immediate notification.830.6 Information to be given in notification.

# Subpart C—Preservation of Aircraft Wreckage, Mail, Cargo, and Records

830.10 Preservation of aircraft wreckage, mail, cargo, and records.

# Subpart D—Reporting of Aircraft Accidents, Incidents, and Overdue Aircraft

830.15 Reports and statements to be filed.

AUTHORITY: Independent Safety Board Act of 1974, as amended (49 U.S.C. 1101–1155); Federal Aviation Act of 1958, Public Law 85–726, 72 Stat. 731 (codified as amended at 49 U.S.C. 40101).

SOURCE: 53 FR 36982, Sept. 23, 1988, unless otherwise noted.

## Subpart A—General

§ 830.1 Applicability.

This part contains rules pertaining to:

(a) Initial notification and later reporting of aircraft incidents and accidents and certain other occurrences in the operation of aircraft, wherever they occur, when they

involve civil aircraft of the United States; when they involve certain public aircraft, as specified in this part, wherever they occur; and when they involve foreign civil aircraft where the events occur in the United States, its territories, or its possessions.

(b) Preservation of aircraft wreckage, mail, cargo, and records involving all civil and certain public aircraft accidents, as specified in this part, in the United States and its territories or possessions.

[60 FR 40112, Aug. 7, 1995]

### § 830.2 Definitions.

As used in this part the following words or phrases are defined as follows:

*Aircraft accident* means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage. For purposes of this part, the definition of "aircraft accident" includes "unmanned aircraft accident," as defined herein.

*Civil aircraft* means any aircraft other than a public aircraft.

*Fatal injury* means any injury which results in death within 30 days of the accident.

*Incident* means an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

*Operator* means any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

*Public aircraft* means an aircraft used only for the United States Government, or an aircraft owned and operated (except for commercial purposes) or exclusively leased for at least 90 continuous days by a government other than the United States Government, including a State, the District of Columbia, a territory or possession of the United States, or a political subdivision of that government. "Public aircraft" does not include a government-owned aircraft transporting property for commercial purposes and does not include a government-owned aircraft transporting passengers other than: transporting (for other than commercial purposes) crewmembers or other persons aboard the aircraft whose presence is required to perform, or is associated with the performance of, a governmental function such as firefighting, search and rescue, law enforcement, aeronautical research, or biological or geological resource management; or transporting (for other than commercial purposes) persons aboard the aircraft if the aircraft is operated by the Armed Forces or an intelligence agency of the United States. Notwithstanding any limitation relating to use of the aircraft for commercial purposes. an aircraft shall be considered to be a public aircraft without regard to whether it is operated by a unit of government on behalf of another unit of government pursuant to a cost reimbursement agreement, if the unit of government on whose behalf the operation is conducted certifies to the Administrator of the Federal Aviation Administration that the operation was necessary to respond to a significant and imminent threat to life or property (including natural resources) and that no service by a private operator was reasonably available to meet the threat.

*Serious injury* means any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (3) causes severe hemorrhages, nerve, muscle, or tendon damage; (4) involves any internal organ; or (5) involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Substantial damage means damage or failure which adversely affects the structural strength, performance, or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. Engine failure or damage limited to an engine if only one engine fails or is damaged, bent fairings or cowling, dented skin, small punctured holes in the skin or fabric, ground damage to rotor or propeller blades, and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wingtips are not considered "substantial damage" for the purpose of this part.

Unmanned aircraft accident means an occurrence associated with the operation of any public or civil unmanned aircraft system that takes place between the time that the system is activated with the purpose of flight and the time that the system is deactivated at the conclusion of its mission, in which:

(1) Any person suffers death or serious injury; or

(2) The aircraft has a maximum gross takeoff weight of 300 pounds or greater and sustains substantial damage.

[53 FR 36982, Sept. 23, 1988, as amended at 60 FR 40112, Aug. 7,1995; 75 FR 51955, Aug. 24, 2010]

## Subpart B—Initial Notification of Aircraft Accidents, Incidents, and Overdue Aircraft

§ 830.5 Immediate notification.

The operator of any civil aircraft, or any public aircraft not operated by the Armed Forces or an Intelligence agency of the United States, or any foreign aircraft shall immediately, and by the most expeditious means available, notify the nearest National Transportation Safety Board (NTSB) office<sup>1</sup> when:

(a) An aircraft accident or any of the following listed serious incidents occur:

(1) Flight control system malfunction or failure;

(2) Inability of any required flight crewmember to perform normal flight duties as a result of injury or illness;

<sup>1</sup> NTSB regional offices are located in the following cities: Anchorage, Alaska; Atlanta, Georgia; West Chicago, Illinois; Denver, Colorado; Arlington, Texas; Gardena (Los Ange- les), California; Miami, Florida; Seattle, Washington; and Ashburn, Virginia. In addition, NTSB headquarters is located at 490 L'Enfant Plaza, SW., Washington, DC 20594. Contact information for these offices is available at <u>http://www.ntsb.gov</u>.

(3) Failure of any internal turbine engine component that results in the escape of debris other than out the exhaust path;

(4) In-flight fire;

(5) Aircraft collision in flight;

(6) Damage to property, other than the aircraft, estimated to exceed \$25,000 for repair

(including materials and labor) or fair market value in the event of total loss, whichever is less.

(7) For large multiengine aircraft (more than 12,500 pounds maximum certificated takeoff weight):

(i) In-flight failure of electrical systems which requires the sustained use of an emergency bus powered by a back-up source such as a battery, auxiliary power unit, or air-driven generator to retain flight control or essential instruments;

(ii) In-flight failure of hydraulic systems that results in sustained reliance on the sole remaining hydraulic or mechanical system for movement of flight control surfaces;

(iii) Sustained loss of the power or thrust produced by two or more engines; and

(iv) An evacuation of an aircraft in which an emergency egress system is utilized.

(8) Release of all or a portion of a propeller blade from an aircraft, excluding release caused solely by ground contact;

(9) A complete loss of information, excluding flickering, from more than 50 percent of an aircraft's cockpit displays known as:

(i) Electronic Flight Instrument System (EFIS) displays;

(ii) Engine Indication and Crew Alerting System (EICAS) displays;

(iii) Electronic Centralized Aircraft Monitor (ECAM) displays; or

(iv) Other displays of this type, which generally include a primary flight display (PFD), primary navigation display (PND), and other integrated displays;

(10) Airborne Collision and Avoidance System (ACAS) resolution advisories issued either:

(i) When an aircraft is being operated on an instrument flight rules flight plan and compliance with the advisory is necessary to avert a substantial risk of collision between two or more aircraft; or

(ii) To an aircraft operating in class A airspace.

(11) Damage to helicopter tail or main rotor blades, including ground damage that requires major repair or replacement of the blade(s);

(12) Any event in which an operator, when operating an airplane as an air carrier at a publicuse airport on land:

(i) Lands or departs on a taxiway, incorrect runway, or other area not designed as a runway; or

(ii) Experiences a runway incursion that requires the operator or the crew of another aircraft or vehicle to take immediate corrective action to avoid a collision.

(b) An aircraft is overdue and is believed to have been involved in an accident.

[53 FR 36982, Sept. 23, 1988, as amended at 60 FR 40113, Aug. 7, 1995; 75 FR 927, Jan. 7, 2010; 75 FR 35330, June 22, 2010]

# § 830.6 Information to be given in notification.

The notification required in § 830.5 shall contain the following information, if available:

(a) Type, nationality, and registration marks of the aircraft;

(b) Name of owner, and operator of the aircraft;

(c) Name of the pilot-in-command;

(d) Date and time of the accident;

(e) Last point of departure and point of intended landing of the aircraft;

(f) Position of the aircraft with reference to

some easily defined geographical point; (g) Number of persons aboard, number killed,

and number seriously injured; (h) Nature of the accident, the weather and the

extent of damage to the aircraft, so far as is known; and

(i) A description of any explosives, radioactive materials, or other dangerous articles carried.

# Subpart C—Preservation of Aircraft Wreckage, Mail, Cargo, and Records

# § 830.10 Preservation of aircraft wreckage, mail, cargo, and records.

(a) The operator of an aircraft involved in an accident or incident for which notification must

be given is responsible for preserving to the extent possible any aircraft wreckage, cargo, and mail aboard the aircraft, and all records, including all recording mediums of flight, maintenance, and voice recorders, pertaining to the operation and maintenance of the aircraft and to the airmen until the Board takes custody thereof or a release is granted pursuant to § 831.12(b) of this chapter.

(b) Prior to the time the Board or its authorized representative takes custody of aircraft wreckage, mail, or cargo, such wreckage, mail, or cargo may not be disturbed or moved except to the extent necessary:

(1) To remove persons injured or trapped;

(2) To protect the wreckage from further damage; or

(3) To protect the public from injury.

(c) Where it is necessary to move aircraft wreckage, mail or cargo, sketches, descriptive notes, and photographs shall be made, if possible, of the original positions and condition of the wreckage and any significant impact marks.

(d) The operator of an aircraft involved in an accident or incident shall retain all records, reports, internal documents, and memoranda dealing with the accident or incident, until authorized by the Board to the contrary.

# Subpart D—Reporting of Aircraft Accidents, Incidents, and Overdue Aircraft

#### § 830.15 Reports and statements to be filed.

(a) Reports. The operator of a civil, public (as specified in § 830.5), or foreign aircraft shall file a report on Board Form 6120.1/2 (OMB No. 3147-0001)<sup>2</sup> within 10 days after an accident, or after 7 days if an overdue aircraft is still missing. A report on an incident for which immediate notification is required by § 830.5(a) shall be filed only as requested by an authorized representative of the Board.

(b) Crewmember statement. Each crewmember, if physically able at the time the report is submitted, shall attach a statement setting forth the facts, conditions, and circumstances relating to the accident or incident as they appear to him. If the crewmember is incapacitated, he shall submit the statement as soon as he is physically able.

(c) Where to file the reports. The operator of an aircraft shall file any report with the field office of the Board nearest the accident or incident.

[53 FR 36982, Sept. 23, 1988, as amended at 60 FR 40113, Aug. 7, 1995]

<sup>2</sup> Forms are available from the Board field offices (see footnote 1), from Board headquarters in Washington, DC, and from the Federal Aviation Administration Flight Standards District Offices.

#### Part 3. 49 CFR 831, Accident/Incident Investigation Procedures

## PART 831—INVESTIGATION PROCEDURES

#### Subpart A—General

Sec. 831.1 Applicability of this subpart. Responsibility of the NTSB. 831.2 831.3 Authority of Directors. 831.4 Nature of investigation. 831.5 Priority of NTSB investigations. 831.6 Request to withhold information. 831.7 Representation during an interview. 831.8 Investigator-in-charge. 831.9 Authority during investigations. Autopsies and postmortem 831.10 testing. 831.11 Parties to the investigation. 831.12 Access to and release of wreckage, records, mail, and cargo. 831.13 Provision and dissemination of investigative information 831.14 Proposed findings.

## Subpart B—Aviation Investigations

831.20 Authority of NTSB in aviation investigations.
 831.21 Other Government agencies and NTSB aviation investigations.
 831.22 International aviation investigations.

#### Subpart C—Highway Investigations

831.30 Authority of NTSB in highway investigations.

#### Subpart D—Railroad, Pipeline, and Hazardous Materials Investigations

831.40 Authority of NTSB in railroad, pipeline, and hazardous materials investigations.

Authority: 49 U.S.C. 1113(f).

#### Subpart A—General

## § 831.1 Applicability of this subpart.

 (a) Except as provided in Subpart E of this part regarding marine casualties, and unless specified by the National Transportation Safety Board (NTSB), the provisions of this subpart apply to all NTSB investigations conducted under its statutory authority.

(b) Consistent with its statutory authority, the NTSB conducts investigations of transportation accidents that include, but are not limited to: accidents, collisions, crashes, derailments, explosions, incidents, mishaps, ruptures, or other similar accidents. Use of the term "accident" throughout this part includes all such occurrences.
(c) Throughout this part, the term "IIC" means the NTSB investigator-in- charge.

## § 831.2 Responsibility of the NTSB.

The NTSB is required to investigate— (a) Aviation accidents as described in subpart B of this part; (b) Highway accidents as described in subpart C of this part; (c) Railroad, pipeline, and hazardous materials accidents as described in subpart D of this part; and

(d) Any accident that occurs in connection with the transportation of people or property that, in the judgment of the NTSB, is catastrophic, involves problems of a recurring nature or would otherwise carry out the intent of its authorizing statutes. This authority includes selected events involving the transportation of hazardous materials, including their release.

#### § 831.3 Authority of Directors.

Subject to the provisions of § 831.2 of this part and part 800 of this chapter, the Directors of the Office of Aviation Safety, Office of Highway Safety, or Office of Railroad, Pipeline and Hazardous Materials Investigations, may order an investigation into any transportation accident.

#### § 831.4 Nature of investigation.

(a) *General.* The NTSB conducts investigations, or has them conducted, to determine the facts, conditions, and circumstances relating to an accident. The NTSB uses these results to determine one

or more probable causes of an accident, and to issue safety recommendations to prevent or mitigate the effects of a similar accident. The NTSB is required to report on the facts and circumstances of accidents it investigates. The NTSB begins an investigation by monitoring the situation and assessing available facts to determine the appropriate investigative response. Following an initial assessment, the NTSB notifies persons and organizations it anticipates will be affected as to the extent of its expected investigative response.

(b) NTSB products. An investigation may result in a report or brief of the NTSB's conclusions or other products designed to improve transportation safety. Other products may include factual records, safety recommendations, and other

safety information.

(c) *NTSB* investigations are fact-finding proceedings with no adverse parties. The investigative proceedings are not subject to the Administrative Procedure Act (5 U.S.C. 551 *et seq.*), and are not conducted for the purpose of determining the rights, liabilities, or blame of any person or entity, as they are not adjudicatory proceedings.

## § 831.5 Priority of NTSB investigations.

(*a*) Relationships with other agencies.

Except as provided in 49
 U.S.C. 1131(a)(2)(B) and (C) regarding suspected criminal actions, an investigation conducted under the authority of the NTSB has priority over any investigation conducted by another Federal agency.
 The NTSB will provide for appropriate participation by other Federal agencies in any NTSB investigation. Such agencies may not participate in the NTSB's probable cause determination.

(3) The NTSB has first right to access wreckage, information, and

resources, and to interview witnesses the NTSB deems pertinent to its investigation.

(4) As indicated in § 831.9(c) of this part, the NTSB has exclusive authority to decide when and how the testing and examination of evidence will occur.

(5) The NTSB and other Federal agencies will exchange information obtained or developed about the accident in the course of their investigations in a timely manner. Nothing in this section prohibits the NTSB from sharing factual information with other agencies.

(6) Incident command system. The NTSB recognizes the role of incident command systems to address emergencies. The NTSB does not assume the role of a first responder agency.

(i) The NTSB IIC or his designee will participate in the incident command system to identify and coordinate investigative needs related to the preservation and collection of information and evidence.

(ii) The NTSB may collect information and evidence from the incident command in a timely and reasonable manner so as not to interfere with its operations.

(b) Investigations by other Federal agencies. (1) Nothing in this section limits the authority of any Federal agency to conduct an investigation of an accident or incident under applicable provisions of law or to obtain information directly from parties involved in, and witnesses to, a transportation accident. Other agencies are expected to coordinate with the NTSB IIC to avoid interference with, and duplication of, the NTSB's investigative efforts. These agencies will not participate in the NTSB's probable cause determination.

(2) The NTSB recognizes that state and local agencies may conduct activities related to an accident under investigation by the NTSB. These agencies will not participate in the NTSB's probable cause determination.

(3) Except as described in § 831.30 of this part regarding highway investigations, the NTSB may request that a Federal agency provide to the NTSB the results of that agency's investigation of an accident when such investigation is intended to result in safety improvements or remedial action. The NTSB will not routinely request regulatory enforcement records or investigation results.

## § 831.6 Request to withhold information.

(a) *Applicability*. This section applies to information the NTSB receives from any source that may be subject to the Trade Secrets Act (18 U.S.C. 1905) or the Freedom of Information Act (FOIA, 5 U.S.C. 552).

(b) *Disclosure*. The NTSB is authorized by 49 U.S.C. 1114(b) to disclose, under certain circumstances, confidential commercial information that would otherwise be subject to penalties for disclosure under the Trade Secrets Act, or excepted from disclosure under FOIA. The NTSB may exercise this authority when disclosure is necessary to support a key finding, a safety recommendation, or the NTSB's statement of probable cause of an accident.

(c) Disclosure procedures. Information submitted to the NTSB that the submitter believes qualifies as a trade secret or as confidential commercial information subject either to the Trade Secrets Act or Exemption 4 of FOIA must be so identified by the submitter on each page that contains such information. In accordance with 49 U.S.C. 1114(b), the NTSB will provide the submitter of identified information (or information the NTSB has reason to believe qualifies as subject to the Trade Secrets Act or Exemption 4 of FOIA) the opportunity to comment on any disclosure contemplated by the NTSB. In all instances in which the NTSB decides to disclose such information pursuant to 49 U.S.C. 1114(b) or 5 U.S.C. 552, the NTSB will provide at least 10 days' advance notice to the submitter. Voluntarily provided safety information.

(1) The NTSB will not disclose safety-related information voluntarily submitted to the NTSB if the information is not related to the exercise of the NTSB's investigation authority, and if the NTSB finds disclosure of the information might inhibit the voluntary provision of that type of information.

(d) (2) The NTSB will review voluntarily provided safety information for confidential content, and will de- identify or anonymize any confidential content referenced in its products.

(e) *Other.* Any person may make written objection to the public disclosure of any other information, such as interview summaries or transcripts, contained in any report or document filed, or otherwise obtained by the NTSB, stating the grounds for such objection. The NTSB on its own initiative or if such objection is made, may order such information withheld from public disclosure, when, in its judgment, the information may be withheld under the provisions of an exemption to the FOIA (see part 801 of this chapter), and its release is found not to be in the public interest.

## § 831.7 Representation during an interview.

(a) Any person interviewed in any manner by the NTSB has the right to be accompanied during the interview by no more than one representative of the witness's choosing. The representative—

(1) May be an attorney;

(2) May provide support and counsel to the witness;

(3) May not supplement the witness's testimony; and

(4) May not advocate for the interests of a witness's other affiliations (*e.g.*, the witnesses employer).

(b) An investigator conducting the interview may take any necessary action (including removal of the representative from the interview) to ensure a witness's representative acts in accordance with the provisions of paragraph (a) of this section during the interview, and to prevent conduct that may be disruptive to the interview.

#### § 831.8 Investigator-incharge.

In addition to the subpoena and deposition authority delegated to investigative officers under this chapter, a person designated as IIC for an investigation is authorized to—

(a) Organize, conduct, control, and manage the field phase of an investigation, even when a Board Member is present;

(b) Coordinate all resources and supervise all persons (including persons not employed by the NTSB) involved in an on-site investigation; and

(c) Continue his or her organizational and management responsibilities through all phases of the investigation, including consideration and adoption of a report or brief determining one or more probable causes of an accident.

## § 831.9 Authority during investigations.

(a) General authority of investigators. To carry out the statutory responsibilities of the agency, an NTSB investigator

may—

(1) Conduct hearings;

(2) Administer oaths;

(3) Require, by subpoena or otherwise, the production of evidence and witnesses;

(4) Enter any property where an accident subject to the NTSB's jurisdiction has occurred, or wreckage from any such accident is located, and take all actions necessary to conduct a complete investigation of the accident;

(5) Inspect, photograph, or copy any records or information (including medical records pursuant to paragraph (b)(2) of this section), and correspondence regardless of the date of their creation or modification, for the purpose of investigating an accident;

(6) Take possession of wreckage, records or other information if it determines such possession is necessary for an investigation; and

(7) Question any person having knowledge relevant to a transportation accident.

(b) *Subpoenas.* The NTSB may issue a subpoena, enforceable in Federal District Court, to obtain testimony or evidence related to an accident, including but not limited to personal electronic devices.

(1) The NTSB's authority to issue subpoenas includes access to medical records and specimens.

(2) For purposes of the Health Insurance Portability and Accountability Act of 1996 (HIPAA), Public Law 104–191, and the regulations promulgated by the DHHS, 45 CFR 164.501 *et seq.*, the NTSB is a "public health authority" to which protected health information may be disclosed by a HIPAA "covered entity" without the prior written authorization of the subject of the records. In addition, the NTSB may issue a subpoena to gain access to such information.

(c) *Examination of evidence.* In accordance with 49 U.S.C. 1134(d), the NTSB has exclusive authority to decide timing, manner and method of testing and examination of evidence, and extraction of data.

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#### § 831.10 Autopsies and postmortem testing.

When a person dies as a result of having been involved in a transportation accident within the jurisdiction of the NTSB—

(a) The NTSB is authorized to obtain, with or without reimbursement, a copy of a report of autopsy performed by a State or local authority on such person.

(b) The NTSB may order an autopsy or other postmortem tests of any person as may be related to its investigation of a transportation accident. The IIC may direct that an autopsy or other test be performed if necessary for an investigation. Provisions of local law protecting religious beliefs with respect to autopsies shall be observed to the extent they are consistent with the needs of the investigation.

## § 831.11 Parties to the investigation.

(a) *Participants*. (1) The IIC may designate one or more entities to serve as parties in an investigation. Party status is limited to those persons, Federal, state, or local government agencies and organizations whose employees, functions, activities, or products were involved in the accident and that can provide suitable qualified technical personnel to actively assist in an investigation. To the extent practicable, a representative proposed by party organizations to participate in the investigation may not be a person who had direct involvement in the accident under investigation.

(2) Except for the FAA, no entity has a right to participate in an NTSB investigation as a party.

(3) The participation of the Administrator of the FAA and other Federal entities in aviation accident investigations is addressed in § 831.21 of this part.

(4) Participants in an investigation (*e.g.*, party representatives, party coordinators, and/or the larger party organization) must follow all directions and instructions from NTSB representatives. Party status may be revoked or suspended if a party fails to comply with assigned duties and instructions, withholds information, or otherwise acts in a manner prejudicial or disruptive to an investigation.

(b) Prohibitions on serving as party representatives. (1) In accordance with § 845.6 of this chapter, no party representative may occupy a legal position or be a person who also represents claimants or insurers.

(2) Failure to comply with these provisions may result in sanctions, including loss of party status.

(c) *Disclosures*. (1) The name of a party and its representative may be disclosed in documents the NTSB places in the public docket for the investigation.

(2) The NTSB may share information considered proprietary or confidential by one party with other parties during the course of an investigation, but will preserve the confidentiality of the information to the greatest extent possible.

(3) Section 831.6(d) of this part describes how the NTSB will handle voluntarily submitted safety information, and the NTSB's determination whether to share any such information. The NTSB will de- identify the source of such information when deciding to share it.

(d) Party agreement. Except for representatives of other Federal agencies, all party representatives must sign the "Statement of Party Representatives to NTSB Investigation" (Statement) upon acceptance of party status. Failure to timely sign the statement may result in sanctions, including loss of party status. Representatives of other Federal agencies, while not required to sign the Statement, will be provided notice of and must comply with the responsibilities and limitations set forth in the agreement.

(e) Internal review by a party. (1) To assure coordination of concurrent efforts, a party to an investigation that conducts or authorizes a review of its own processes and procedures as a result of an accident the NTSB is investigating, by signing the party agreement, agrees to, in a timely manner—

(i) Inform the IIC of the nature of the review; and

(ii) Provide the IIC with the findings from the review.

(2) If the findings from a review contain privileged information—,

(i) The submitting party must inform the IIC that the review contains privileged information;

(ii) The submitting party must identify the privileged content at the time of submission to the IIC;

(iii) The NTSB must, if informed that such information is being submitted, review the information for relevancy to the investigation, and determine whether public disclosure of the information is necessary for the investigation.

(3) The NTSB may use the protections described in § 831.6 of this part, as applicable, to protect certain findings from public disclosure.

(4) Investigations performed by other Federal agencies during an NTSB investigation are addressed in § 831.5 of this part.

## § 831.12 Access to and release of wreckage,

records, mail, and cargo. (a) Only persons authorized by the NTSB IIC

may be permitted access to wreckage, records, mail, or cargo.

(b) Wreckage, records, mail, and cargo in the NTSB's custody will be released when the NTSB determines it has no further need for such items. Recipients of released wreckage must sign an acknowledgement of release provided by the NTSB.

# § 831.13 Provision and dissemination of investigative information.

(a) *Applicability*. This section applies to:

(1) Information related to the accident or incident;

(2) Any information collected or compiled by the NTSB as part of its investigation, such as photographs, visual representations of factual data, physical evidence from the scene of the accident, interview statements, wreckage documentation, flight data and cockpit voice recorder information, and surveillance video; and

(3) Any information regarding the status of an investigation, or activities conducted as part of the

## 8020.11D Appendix A

investigation.

(b) *Provision of information.* All information described in paragraph (a) of this section and obtained by any person or organization participating in the investigation must be promptly provided to the NTSB, except where the NTSB authorizes the party to retain the information.

(c) *Release of information.* Parties are prohibited from releasing information obtained during an investigation at any time prior to the NTSB's public release of information unless the release is consistent with the following criteria:

(1) Information released at the scene of an accident—

(i) Is limited to factual information concerning the accident and the investigation released in coordination with the IIC; and

(ii) Will be made by the Board Member present at the scene as the official spokesperson for the NTSB. Additionally, the IIC or representatives from the NTSB's Office of Safety Recommendations and Communications may release information to media representatives, family members, and elected officials as deemed appropriate.

(2) The release of information described in paragraph (a)(1) of this section by the NTSB at the scene of an accident does not authorize any party to the investigation to comment publicly on the information during the course of the investigation. Any dissemination of factual information by a party may be made only as provided in this section.

(3) A party may disseminate information related to an investigation to those individuals within its organization who have a need to know for the purpose of addressing a safety issue including preventive or remedial actions. If such internal release of information results in a planned safety improvement, the party must inform the IIC of such planned improvement in a timely manner before it is implemented.

(4) Any other release of factual information related to the investigation must be approved by the IIC prior to release, including:

(i) Dissemination within a party organization, for a purpose not described in paragraph (b)(3) of this section;

(ii) Documents that provide information concerning the investigation, such as written directives or informational updates for release to employees or customers of a party;

(iii) Information related to the investigation released to an organization or person that is not a party to the investigation;

(d) The release of recordings or transcripts from certain recorders may be made only in accordance with the statutory limitations of 49 U.S.C. 1114(c) and (d).

#### § 831.14 Proposed findings.

(a) *General*. Any party to the investigation designated under § 831.11 may submit to the NTSB written proposed findings to be drawn from the evidence produced during the course of the investigation, a proposed probable cause, and/or proposed safety recommendation(s) designed to prevent future accidents.

(b) *Timing of submissions.* The IIC will inform parties when submissions are due. All written submissions must be received by the IIC by the due date. If there is a Board meeting, the due date will be set prior to the date the matter is published in the Federal Register.

### Subpart B—Aviation Investigations

#### § 831.20 Authority of NTSB in aviation accident investigations.

(a) Scope. The NTSB is authorized to investigate-

(1) Each accident involving a civil aircraft in the United States, and any civil aircraft registered in the United States when an accident occurs in international waters;

(2) Each accident involving a public aircraft as defined in 49 U.S.C. 40102(a)(41), except for aircraft operated by the U.S. Armed Forces or by an intelligence agency of the United States;

(3) With the participation of

appropriate military authorities, each accident involving a military aircraft and-

(i) a civil aircraft; or (ii) certain public aircraft as described in paragraph (a)(2) of this section.

(b) Authority to examine or test. Pursuant to § 831.9 of this part, a credentialed employee of the NTSB is authorized to examine or test any civil or certain public aircraft, aircraft engine, propeller, appliance, or property aboard such aircraft involved in an accident or incident subject to the NTSB's authority.

#### § 831.21 Other Government agencies and NTSB aviation investigations.

(a) Pursuant to 49 U.S.C. 1132(c) and 106(g)(1)(A), the NTSB will provide for the participation of the Administrator of the FAA in the investigation of an aircraft accident when participation is necessary to carry out the duties and powers of the FAA Administrator.

(b) Title 49 U.S.C. 1131(a)(2) provides for the appropriate participation by other departments, agencies, or instrumentalities of the United States Government in the investigation of an aircraft accident by the NTSB.

(c) Rights and duties of other Federal agencies. (1) The FAA and other Federal agencies named as parties to an aircraft accident investigation will be accorded the same rights and privileges, and are subject to the same limitations, as other parties. Participation in an investigation includes the duty to timely share with the NTSB any information that has been developed by the FAA or other Federal agency in the exercise of that agency's investigative authority.

(2) In exercising its authority, the FAA or other Federal agency may obtain information directly from a party to an accident or incident under investigation by the NTSB.

(3) Information obtained by another Federal agency must be timely shared with the NTSB.

(4) Investigative activities by another Federal agency must be coordinated to ensure that they do not interfere with the NTSB's

investigation.

(5) Under no circumstances may an NTSB aviation accident investigation for which the FAA or any other Federal agency has conducted fact-finding be considered a joint investigation with shared responsibility. Decisions about what information to include in the public docket will be made by the NTSB.

(6) Notwithstanding the rights and duties described in paragraphs (c)(1) through (5) of this section, determining the probable cause of an accident is exclusively the right and duty of the NTSB.

(d) An FAA employee designated to act by the NTSB IIC has the same authority as an NTSB investigator when conducting activities under this part. The investigation remains that of the NTSB.

(e) Nothing in this section may be construed as inhibiting the FAA from proceeding with activities intended to fulfill a statutory requirement or objective, including the collection of data for safety management or enforcement purposes. Section 831.5 of this part also applies to the investigation of aviation accidents.

#### § 831.22 International aviation investigations.

(a) General. (1) Annex 13 to the Convention on International Civil Aviation, Aircraft Accident and Incident Investigation (Annex 13) contains standards and recommended practices for the notification, investigation, and reporting of certain accidents involving international civil aviation.

(2) Annex 13 provides that the state of occurrence of an accident or incident is responsible for the investigation when the state is a signatory to the Convention.

(b) The NTSB—
(1) Is the U.S. agency that fulfills the obligations of the United States under Annex 13, in coordination with and consistent with the requirements of the United States Department of State.

(2) Participates in the investigation as the accredited representative to an international investigation when the accident involves a civil aircraft(i) of a U.S. operator;(ii) of U.S. registry;

(iii) of U.S. manufacture; or (iv) when the U.S. is the state of design or manufacture of the aircraft or parts thereof.

(c) Technical advisers. Once designated the accredited representative in an international investigation, the NTSB may elect to receive assistance by appointing one or more advisers to serve under the NTSB's direction. Such technical advisers-

(1) Work at the direction and under the supervision of the NTSB accredited representative.

(2) Are subject to the provisions of § 831.13 of this part while working under the supervision of the NTSB accredited representative.

(d) If an accident occurs in a foreign state that is not a signatory to the Convention, or if an accident or incident involves an aircraft that is not a civil aircraft, the NTSB will participate in the investigation in accordance with any agreement between the United States and the foreign state that addresses such occurrences.

(e)The NTSB's disclosure of records of a foreign investigation is limited by statute (49 U.S.C 1114(f)) and by § 831.6 of this part.

### Part 4. NTSB AND FAA JOINT POLICY LETTER: FAA ACCESS TO CONTINUED OPERATIONAL SAFETY (COS) INFORMATION DURING A NTSB INVESTIGATION

## NATIONAL TRANSPORTATION SAFETY BOARD FEDERAL AVIATION ADMINISTRATION JOINT POLICY LETTER

June 4, 2014

To: Distribution attached

Subject: Federal Aviation Administration Access to Continued Operational Safety (COS) Information During a National Transportation Safety Board Investigation

The National Transportation Safety Board (NTSB) and the Federal Aviation Administration (FAA) both perform critical roles in maintaining aviation safety. This letter is being distributed to the aviation industry to clarify the roles and responsibilities of the NTSB and the FAA during an incident or accident investigation.

The NTSB, through its Office of Aviation Safety, investigates all civil aviation accidents and select incidents in the United States and also participates in foreign accident investigations involving US-certificated air carriers or US-manufactured equipment in accordance with the Convention on International Civil Aviation. The NTSB determines the probable causes of about 1,500 aviation accidents and incidents annually. The NTSB assigns an investigator-in-charge (IIC) for every NTSB investigation, even if NTSB personnel do not travel to the scene.

The FAA has the authority to investigate aviation safety-related matters as necessary to ensure COS and does so as needed after a significant accident or incident. The FAA depends on the cooperation of design approval holders and operators in these investigations to ensure collection of timely and relevant data.

By statute, the NTSB investigation of an aviation accident or incident takes priority over other agencies' investigations. The NTSB and the FAA recognize the intent of Congress to prevent duplication between the respective investigations and to require that the NTSB take the lead role in investigations. Accordingly, the FAA participates as a party in NTSB aviation accident and incident investigations, enabling the FAA to obtain safety-critical information in a timely manner from the NTSB's comprehensive fact-gathering activities.

The FAA may require information in addition to that required by the NTSB or it may require information more expeditiously than the NTSB to address urgent unsafe conditions. The FAA is authorized to obtain such information directly from parties. To help ensure that the appropriate priority is placed on the collection of investigative information that the FAA needs promptly to ensure COS, the NTSB, the FAA, and the operator or manufacturer (or both, as appropriate) will conduct an interagency communication call at the start of an investigation to identify and coordinate information requests. Following that call, any information that is provided to the FAA must be shared simultaneously with the NTSB. If there are any questions regarding an information request, the assigned NTSB investigator-incharge can be contacted immediately through the NTSB Response Operations Center at (202) 314-6290.

The NTSB will lead interviews of operator and manufacturer personnel and will conduct them as soon as practical. An FAA party representative, along with other party representatives, will be invited to participate in the NTSB interviews. The FAA may conduct its own follow-up interviews of these personnel if the FAA needs additional information to ensure COS and will share the results of these interviews with the NTSB in a manner consistent with the FAA's obligations as a party. Furthermore, if the NTSB is unable to conduct interviews within a reasonable time, the FAA will coordinate with the NTSB to conduct its interviews to ensure COS and provide the results to the NTSB.

Although the NTSB and the FAA have different roles, we share the need for timely, unimpeded access to operational safety information. We thank you for your cooperation in ensuring aviation safety.

Sincerely,

John DeLisi, Director Office of Aviation Safety National Transportation Safety Board

Tony Fazio, Director Accident Investigation and Prevention Federal Aviation Administration

cc: FAA Aircraft Certification Offices-All Personnel FAA Certificate Management Offices-All Personnel NTSB Office of Aviation Safety-All Investigative Personnel

# Part 5. MEMORANDUM OF UNDERSTANDING BETWEEN THE NTSB AND FAA REGARDING SPACE LAUNCH ACCIDENTS

### APPENDIX H

### FEDERAL AVIATION ADMINISTRATION

### ASSOCIATE ADMINISTRATOR FOR COMMERCIAL SPACE TRANSPORTATION

This Appendix H is an appendix to the "Reimbursable Memorandum of Agreement Between Department of Transportation and National Transportation Safety Board" entered into on May 15, 1975 and establishes the relationships, notification procedures, coordination requirements, and reporting responsibilities of the Federal Aviation Administration's (FAA) Associate Administrator for Commercial Space Transportation (AST), and the National Transportation Safety Board (NTSB) in connection with accident investigations associated with commercial space launch activities, and identifies areas in which exchange of data and use of resources or services of one agency by another may be requested.

## 1. ACCIDENT INVESTIGATION

NTSB will investigate all commercial space launch at idents resulting in:

- a. Known impact of a commercial launch vehicle, its payload or any component thereof outside the impact limit lines designated by the launch range facility; or
- b. A fatality or serious injury (as defined in 49 CFR 830.2) to any person who is not associated with commercial space launch activities and who is not located on the launch range facility; or
- c. Any damage estimated to exceed \$25,000 to property which is not associated with commercial space launch activities and which is not located on the launch range facility.

Nothing in this agreement impairs the authority of the NTSB to investigate any other commercial space launch accident which, in the judgement of the Board, is subject to Section 304(a)(1)(F) of the Independent Safety Board Act of 1974.

Any other investigations of commercial space launch accidents by NTSB, other than those described above, will be subject to the mutual agreement of NTSB and FAA.

## 2. <u>ACCIDENT NOTIFICATION</u>

NTSB and FAA agree to notify each other promptly of the occurrence of all commercial space launch accidents which NTSB will investigate as provided for in paragraph 1.

## 3. ACCIDENT INVESTIGATION PROCEDURES

The following general procedures govern investigations of commercial space launch accidents by NTSB:

- a. The accident investigation will be under the control and direction of the NTSB investigator-in-charge (IIC).
- b. NTSB will be solely responsible for releasing factual information on the investigation to the public and will assign the official spokesperson for the investigation.
- c. FAA shall be designated by NTSB as a party to each accident investigation and public hearing, and will in turn designate a principal representative as the FAA coordinator for each accident.
- d. Selection of FAA/AST personnel to participate in the investigation shall be determined by the FAA coordinator and subject to approval by the NTSB IIC. The coordinator shall work with the IIC in conducting his or her activities.
- e. FAA personnel assigned to a particular investigative group shall work under the direction of the group chairperson and shall remain with the assigned group until that phase of the investigation has been completed or they are released by the IIC and the FAA coordinator. They will submit to the group chairperson whatever information they obtain during the course of the investigation.
- f. The IIC shall keep the FAA coordinator informed of the progress of the investigation.
- g. Pertinent records obtained and factual reports prepared during the investigation shall be made available to FAA/AST through the FAA coordinator in a timely and orderly manner.

- h. In the event additional facts are needed by FAA/AST, but not required by NTSB, they may be obtained by the FAA coordinator following notification of the NTSB IIC, on the condition that it does not interfere with the on- going NTSB investigation. In obtaining such facts, FAA personnel shall make it clear that they are not acting under NTSB direction. In addition, the FAA coordinator shall notify the NTSB IIC of any FAA intent to take any enforcement action if the NTSB investigation is not yet complete.
- i. Subject to the provisions of Section 304(a)(1)(F) of the Independent Safety Board Act of 1974, as amended, nothing in this agreement impairs the authority of FAA/AST to conduct investigations of accidents under applicable provisions of law or to obtain information directly from parties involved in, and witnesses to, a commercial space launch accident.
- j. The NTSB IIC shall not release any wreckage until FAA/AST agrees that it is no longer needed. In the event FAA/AST requests NTSB to retain control of any wreckage for a period of time beyond NTSB's investigative needs, that period of time shall not exceed 60 days from the data of request. FAA/AST shall be responsible for the storage and security costs, if any, for additional time.

## 4. <u>EXCHANGE OF INFORMATION</u>

NTSB and FAA will each provide to the other copies of all accident reports, research reports, studies and other documents normally available to the public upon request. In addition, NTSB and FAA shall each have access to the other's accident data files and tapes on a continuing basis.

Approved Patricia G. Smith Associate Administrator for Commercial Space Transportation [Signed August 26, 1999]

Bernard S. Loeb National Transportation Safety Board [ Signed January 1, 2000 ]

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REGISTRATION       MAXAGENER       SERUEL NO.       SERUEL NO.       SERUEL NO.       SERUEL NO.         AREFANAL CYCLE       TOTAL       TOTAL       TOTAL       TOTAL       SERUEL NO.         21. FACTORS. DENTRY FEMARY FACTOR AS A. DESTREY SECONDARY FACTORS, FANY, AS X.       TOTAL       SANTAGENERATIONAL FACTORS.       Nonk         21. FACTORS. DENTRY FEMARY FACTOR AS A. DESTREY SECONDARY FACTORS.       Nonk       Nonk       Z.       TYPE OF OPERATIONS         21. FACTORS. DENTRY FEMARY FACTOR AS A. DESTREMENTATION       SANTAGENERATIONAL FACTORS       Nonk       Z.       TYPE OF OPERATIONS         21. ACCHNICAL FACTORS       MONE       PILOT NOVER       FUEL CONTAMINATION       CORROSION       SANTAGENERATIONAL FACTORS       Nonk         21. DESTRICTION       ALTOMPROPER FUEL       GRUIND CEW ERROR       FILOT NOVER CE       BISINESS         21. DESTRICTION FAILURE       DESTREMENTATION       CORROSION       OVER GROSS WEIGHT       CARBURENT CE       BISINESS         21. DESTREMENTATION       ANDOLOGER FART       OVER GROSS WEIGHT       CARBURENT CE       CORPORATE         21. DESTREMENTATION       ANTOMARKE       PREOFER FART       COMPORATE       BISINESS         21. DESTREMENTATION       ANTOMARKE       STELEMENTATION       AREFACTOR       AREFACTOR         21. DESTREMEN	11 AIRCRAFT			-								+					
MALEADOREL	REGISTRATION					<u> </u>						+					
SEEJAL NO.       ABEPAME CYCLE       TOTAL       TOTAL         11: FACTORS - IDENTFY PRIMARY FACTOR AS A. DENTFY SECONDARY FACTORS, FANY, AS X.       ZU       TYPE OF OPERATIONS         210. TECHNICAL FACTORS       INONE       210. TECHNICAL FACTORS       INONE         214. TECHNICAL FACTORS       INONE       210. TECHNICAL FACTORS       INONE         214. TECHNICAL FACTORS       INONE       210. OPERATIONAL FACTORS       INONE         214. TECHNICAL FACTORS       INONE       210. OPERATIONAL FACTORS       INONE         214. TECHNICAL FACTORS       INONE       210. OPERATIONAL FACTORS       INONE         214. TECHNICAL FACTORS       INONE       PILOT INDUCED ERROR       PILOT INCALCED AND CREW ERROR       PILOT INCAPACTATED       IPERONAL         216. TECHNICAL FACTOR       ABERGAL FY       OWER RENAMPLOT       DOWNWIND TAKEOFF       IDSTRUCTION         217. TECHNICAL FACTOR       BAROARE AND TO       OVER RENAMPLOT       DOWNWIND TAKEOFF       IDSTRUCTION         218. TECHNICAL FACTOR       BAROARE AND TO       OVER RENAMPLOT       COBROGROM       FERRY       EDSTRUCTION       EDSTRUCTION<	MAKE/MODEL	TOTAL AIRFRAME HRS		1—		-				+		+					
IP ACTORS - DENTIFY REMARY FACTOR AS A. IDENTIFY SECONDARY FACTORS. IF ANY, AS X.       22. TYPE OF OPERATIONS         DIAL CONSTRUCTION DEVINCE THE INSTRUCTIONS DEVINCE ADD ON THE INSTRUCTIONS       SAME       21.       TYPE OF OPERATIONS         DIAL CONSTRUCTION DEVINCE THE INSTRUCTIONS       SAME       PLOT INCAACTATED       UNKNOWN         GEAR COLLAPSE       LOST FOWER       FILE DEPLETION       SAME       UNKNOWN         GEAR COLLAPSE       LOST FOWER       FILE DEPLETION       SAME       UNKNOWN         GEAR COLLAPSE       LOST FOWER       FILE DEPLETION       SAME ADD ADD ADD ADD ADD ADD ADD ADD ADD AD	SERIAL NO.		$\Pi$	i —		-				+		+					
21A. TECHNICAL FACTORS       NONK       21B. OPERATIONAL FACTORS       NONK       NONK         GEAR COLLAPSE       LOST FOWER       FUEL DERLETION       SABOTAGE       UNKNOWN         GEAR COLLANDER       AUTOIMPROPER FUEL       ELOT INCLOED ERROR       FUELO TINCPACITATED       PERSONAL         RELL FATTORIE       INTLICHT FIRE       OTHER THAN FLOT       DOWNWIND TAKEOFF       INSTRUCTION         DESIGN OF ARLIPE       INTLICHT FIRE       OTHER THAN FLOT       DOWNWIND TAKEOFF       DOSTRUCTION         METAL FATTORIE       INTLICHT FIRE       OTHER THAN FLOT       CORFORATE       BUSINESS         METAL FATTORIE       INTLICHT FIRE       OTHER ACTORS       EMERGENCY LANDING       FERRY         ADDON-COMPLIANCE       INTROVER FART       CO OUT OF LIMITS       EMERGENCY LANDING       AERIAL APPLICATION         MERGENCY LANDING       AREIAL APPLICATION       AREIAL APPLICATION       AREIAL APPLICATION       AREIAL APPLICATION         FIRE AFTER LANDING       ALTON       STR				ORS,	IF ANY, AS	s x.				<u> </u>		_					
GEAR COLLAPSE         LOST FOWER         FUEL DEFLETION         SABOTAGE         UNKNOWN           GEAR UP LANDING         FOD         FULOT NUMERIE TRUE         SABOTAGE         UNKNOWN           GEAR UP LANDING         FOD         FULOT NUMERIE TRUE         SABOTAGE         UNKNOWN           GEAR UP LANDING         FOD         FULOT NUMERIE TRUE         FELOT NUMERIE TRUE         CARGO           FIRE OR STRUCTION         AUTOIMPROPER FAIL         GROUND CREW BROR         FULOT NUMERIE TRUE TO NUMERIE TRUE         CARBURETOR NE         BUSINESS           METAL FATIORE         INFORMER BARALIATION         AVIORICS         OVER GROSS WEIGHT         HIT KNOWN OBJECT         CORPORATE           IMMOVER INSTALLATION         AVIORICS         STRUCK ANIMAL         HARD LANDING         FERRY           AD INDOCOMPLIANCE         GYPER FART         CO OUT OF LIMITS         HARD LANDING         FERRY           AD INDOCOMPLIANCE         GYPER FART         CO OUT OF LIMITS         HARD LANDING         AERIAL APPLICATION           SYSTEM FALLARE         ALTINETER         TRUE ANDING         AERIAL APPLICATION         ARBULANCE / AR EVAC           SYSTEM FALLARE         ALTINETER         TRUE ANDING         AERIAL APPLICATION         BANNER TOW           SYSTEM FALLANDING         ALTINETER         T	_										22.	TY	PE OF OI	PERATIONS			
GEAR UP LANDING         FOD         FULLOWING         FOLOURDAY           PRE OR EXT, GSION         AUTOINGROPE FUEL         GROUND CEEW ERROR         PILOT INC/ALCOHOL         CARGO           PRE OR EXT, GSION         AUTOINGROPE FUEL         GROUND CEEW ERROR         PILOT INC/ALCOHOL         CARGO           BLADERATOR FAILURE         INFLIGHT FIRE         OTHER THAN PLOT         DOWNWEND TAKCOFF         INSTRUCTION           DESION OF ARCRAFT         ISKOFTAMES         TOTAGE ACCUTE INCIDENT         CARBURETOR ICE         BISINSS           METAL FATIGUE         INFLIGHT FIRE         OVER GROSS WEIGHT         HIT KNOWN OBJECT         CORPORATE           MPROPER NATTENANCE         INFLIGHT FIRE         OVER GROSS WEIGHT         HIT KNOWN OBJECT         CORPORATE           MPROPER NATILATION         AVIGATION SYSTEM         BIBD STRIKE         OVERSHOT RUNWAY         ABEIAL APPLICATION           DECOMPRESSION         INAVIGATION SYSTEM         BIBD STRIKE         OVERSHOT RUNWAY         ABEIAL OBSERVATION           SYSTEM FAILURE         ALTIMETER         ISTAL APPLICABLENOT AVAILABLE         UNDERSHOT RUNWAY         ABEIAL OBSERVATION           SYSTEM FAILURE         ALTIMETER         ISTAL APPLICABLENOT AVAILABLE         LOSS OF ONTROL         FIREFIGHTING           1120 FART AME         210 MANUFACTURER			1			TO	-		INE		<b></b>						
PRE OR EXPLOSION       AUTOOMPROPER FUEL       INSUIT MODERS       PLOJ TR.C.F.ALCHALTATED       PROVAL         PULL CONTAMINATION       CORROSSION       GROUND CEW ERROR       PLOJ TR.C.F.ALCHALTATED       CARGO         BLADEROTOR FAILURE       INFLIGHT PERE       OTHER THAN PLOT       DOWNWIND TALEOFF       INSTRUCTION         DESIGN OF ARCRAFT       SMOKEFUMES       PARACHUTE INCIDENT       CARBURETOR ICE       BUSINESS         METAL FATIGUE       INFLIGHT PERE       OTHER THAN PLOT       CARBURETOR ICE       BUSINESS         METAL FATIGUE       INFLIGHT PEREAL       OVER GROSS WEIGHT       HIT KNOWN OBJECT       CORPORATE         METAL FATIGUE       INFLIGHT PEREAL       OVER GROSS WEIGHT       HIT KNOWN OBJECT       CORPORATE         METAL FATIGUE       INFLIGHT PEREAL       OVER SHOWN OBJECT       CORPORATE       BUSINESS         METAL FATIGUE       INFLIGHT PEREAL       OVERSHOT RUNWAY       ARELAL OBSERVATION         PEREAFTER LANDING       AUTO-FLOT       FART       INDERSHOT RUNWAY       ARBULANCE / AIR EVAC         INFL ASTRUCE       ALTO-HLOT       FART       INDERSHOT RUNWAY       ARBULANCE / AIR EVAC         1217. MATSONNER       210 MANUFACTURER       INDERSHOT RUNWAY       ARBULANCE / AIR EVAC         1216. VATABLE       AUDORCOMMUNICATION																	
PUEL CONTAMINATION     CORROSION     OTHER THAN PILOT     DOWNWIND TACEOFF     INSTRUCTION       DESIGN OF ALRCRAFT     SMOKE/FUMRES     PARACHUTE INCIDENT     CARBURETOR ICE     BUISINESS       METAL FATGUE     INFIDUCTION     COUT OF LIMITS     EMERGENCY LANDING     AERIAL APPLICATION       MEROFER INSTRUCTION     AVIORATION SYSTEM     INFIDUCTION     FERRY     COUT OF LIMITS     EMERGENCY LANDING     AERIAL APPLICATION       DECOMPRESSION     NAVIGATION SYSTEM     BIBD STRIKE     OVERSHOT RUNWAY     AERIAL APPLICATION       DECOMPRESSION     NAVIGATION SYSTEM     BIBD STRIKE     OVERSHOT RUNWAY     AERIAL APPLICATION       SYSTEM FAILURE     ALTIMETER     STOLEN AIRCRAFT     LOSS OF CONTROL     FIREPIGHTING       210. FART NAME     IDMANUFACTURER     218. PART NUMBER     MISMANAGED GEAR     AIRSMANAGED GEAR       210. FART NAME     IDMANUFACTURER     218. PART NUMBER     MISMANAGED CONTROLS     SIGHTSEEING       210. TAPLICABLENOT AVAILABLE     NOT APPLICABLENOT AVAILABLE     MISMANAGED CONTROLS     SIGHTSEEING       NOT APPLICABLENOT AVAILABLE     NOT APPLICABLENOT AVAILABLE     ABORTED TAKEOFF     SKYDIVINJ / PARACHUTE       210. FART NAME     VOICE REST SYSTEM     SNOW     WARE TURBULENCE     PUBLIC USE       211. FART NAME     IDMANUFACTURER     218. PRACHUTE ACOFF     SKYDIVINJ	FIRE OR EXPLOSION AUTO/IMP9			_						_		_					
BLADE/ROY RAILORE       INFLUCH TREE       PARACHUTE INCIDENT       CARBURETOR ICC       BUSINESS         METAL FATIGUE       INFLICHT BREAKUP       OVER GROSS WEIGHT       HIT KNOWN OBJECT       CORPORATE         IMPROPER INSTITUTES       INFLICHT BREAKUP       OVER GROSS WEIGHT       HIT KNOWN OBJECT       CORPORATE         IMPROPER INSTITUTION       AVIONICS       CG OUT OF LIMITS       EMBROENCY LANDING       FERRY         AD NON-COMPLIANCE       GYRO       STRUCK ANIMAL       HARD LANDING       APPLICATION         DECOMPRESISSION       NAVIGATION SYSTEM       BIRD STRIKE       OVERSHOT RUNWAY       AERIAL OBSERVATION         PIRE ATTER LANDING       ALITIMETER       PAX DISTURBANCE       UNDERSHOT RUNWAY       ARBULANCE / AIR EVAC         SYSTEM FAILURE       ALITIMETER       STOLEN AIRCRAFT       LOSS OF CONTROL       FIREPORTING         210. MANUFACTURER       210. MANUFACTURER       2110. MANUFACTURER       MISMANAGED GEAR       AIR SHOW         211. VX. BRIFEFING SOURCE       24.       PRECIPITATION       MISMANAGED GEAR       AIR SHOW         212. VX. BRIFEFING SOURCE       24.       PRECIPITATION       MISMANAGED GEAR       AIR SHOW         214. VX. BRUTESTING       NOT APPLICABLE/NOT AVAILABLE       NOT APPLICABLE/NOT AVAILABLE       ABORTED TAKEOFF       SKYDIVING																	
METAL FATGUE     INFLIGHT BREAKUP     OVER GROSS WEIGHT     HIT KNOWN OBJECT     CORPORATE       IMPROPER NAMTENNET     IMPROPER PART     CG OUT OF LIMITS     EMERGENCY LANDING     FERRY       AD NON-COMPLAINCE     GTRO     STRUCK ANIMAL     HARD LANDING     AERIAL APPLICATION       AD NON-COMPLAINCE     GTRO     STRUCK ANIMAL     HARD LANDING     AERIAL APPLICATION       PREAFTER LANDING     AUTO-PLOT     PAX DISTURBANCE     OVERSHOT RUNWAY     AERIAL OBSERVATION       PREAFTER LANDING     AUTO-PLOT     PAX DISTURBANCE     UNDERSHOT RUNWAY     AERIAL OBSERVATION       11. PARE AFTER LANDING     AUTO-PLOT     PAX DISTURBANCE     UNDERSHOT RUNWAY     AERIAL OBSERVATION       12. PART NAME     210. MANUFACTURER     STOLEN AURCRAFT     LOSS OF CONTROL     FIREFIGITING       211. PART NAME     210. MANUFACTURER     211. PART NUMBER     MISMANAGED GEAR     AR SHOW       212. PART NAME     211. PART NUMBER     MISMANAGED GEAR     AIR SHOW       212. OMANUFACTURER     211. PART NUMBER     MISMANAGED GEAR     AIR SHOW       213. WX BRIEFING SOURCE     1. ANTONAL WEATHER SERVICE     RAIN     MISMANAGED GEAR     AIR TOUR       214. PATWAS     VOICE RESP. SYSTEM     SNOW     MISMANAGED CONTROLS     SIGHTSEEING       214. PATWAS     VOICE RESP. SYSTEM     SNOW																	
IMPROPER INSTALLATION     IMPROPER INSTALLATION <th< td=""><td>METAL FATIGUE INFLIGHTE</td><td></td><td>OVER GROSS</td><td>WEI</td><td>IGHT</td><td></td><td colspan="4"></td><td colspan="4"></td></th<>	METAL FATIGUE INFLIGHTE		OVER GROSS	WEI	IGHT												
AD NON-COMPLIANCE     GYRO     STRUCK ANIMAL     HARD LANDING     AERIAL APPLICATION       DECOMPRESSION     NAVIGATION SYSTEM     BIRD STRIKE     OVERSHOT RUNWAY     AERIAL OBSERVATION       SYSTEM FAILURE     ALTIMETER     PAX DISTURBANCE     UNDERSHOT RUNWAY     AABULANCE / AIR EVAC       SYSTEM FAILURE     ALTIMETER     PAX DISTURBANCE     UNDERSHOT RUNWAY     AABULANCE / AIR EVAC       RADIOCOMMUNICATION     TRANSFONDER     STOLEN AIRCRAFT     LOSS OF CONTROL     FIREPIGHTING       210. MANUFACTURER     211. FART NUMBER     STOLEN AIRCRAFT     STALLSPIN     BANNER TOW       211. CPART NAME     210. MANUFACTURER     211. FART NUMBER     MISMANAGED GEAR     AIR SHOW       212. WX. BRIEFING. SOURCE     24. PRECIPITATION     MISMANAGED CONTROLS     SIGHTSEEING       NOT APPLICABLE/NOT AVAILABLE     NOT APPLICABLE/NOT AVAILABLE     NOT APPLICABLE/NOT AVAILABLE     ABORTED TAKEOFF     SKYDIVING / PARACHUTE       NOT APPLICABLE/NOT AVAILABLE     NOT APPLICABLE/NOT AVAILABLE     NOT APPLICABLE/NOT AVAILABLE     ABORTED TAKEOFF     SKYDIVING / PARACHUTE       PATWAS     VOICE RESP. SYSTEM     SNOW     WEATHER     GROUND     CAMBERCIAL     PUBLIC USE       MILITARY     COMPUTER BRIEFING     RREEZING RAIN     GROUND     CRUMER/CIAL     MANEUVER     DIPARUVER/COMMERCIAL       MULTARY		rati	COOUT OF L	IMIT	8												
PIRE AFTER LANDING       AUTO-PLOT       DAUD STAND       OVERSHOT RUNWAY       AERIAL OBSERVATION         SYSTEM FAILURE       ALTIMETER       PAX DISTURBANCE       UNDERSHOT RUNWAY       AMBULANCE / AIR EVAC         RADIOCOMMUNICATION       TEANSPONDER       STOLEN AIRCRAFT       LOSS OF CONTROL       FIREFIGHTING         21F. JASC CODE       COMPONENT FAILURE       HIJACK AIRCRAFT       LOSS OF CONTROL       FIREFIGHTING         21C PART NAME       21D. MANUFACTURER       21E PART NUMBER       MISMANAGED GEAR       AIR SHOW         21 WX BRIEFING SOURCE       24.       PRECIPITATION       MISMANAGED GEAR       AIR SHOW         22 WX BRIEFING SERVICE       24.       PRECIPITATION       MISMANAGED GEAR       AIR SHOW         23 WX BRIEFING SERVICE       10 ANTOPALORER SERVICE       NOT APPLICABLE/NOT AVAILABLE       ABORTED TAKEOFF       SKYDIVING / PARACHUTE         10 ANTOPAL WAX THER SERVICE       RAIN       AIRFRAME ICE/FROST       AIR TOUR         11 COMMERCIAL WX, SERVICE STATION       HAIL       AIRFRAME ICE/FROST       AIR TOUR         12 COMPANY       TV/RADIO WEATHER       PREEZING GRIZZLE       WAKE TURBULENCE       PUBLIC USE         12 OMMERCIAL WX, SERVICE       SIGHT SERVICE       SIGHT SERVICE       MANEL/VER       TAXI         12 OMMERCIAL WX, SERVICE	AD NON-COMPLIANCE GYRO				,					-							
SYSTEM FAILURE     ALTIMETER     PAX DISTURBANCE     UNDERSHOT RUNWAY     AMBULANCE / AIR EVAC       IR.ADIOCOMMUNICATION     TRANSPONDER     STOLEN AIRCRAFT     LOSS OF CONTROL     FIREFIGHTING       211. JASC CODE     COMPONENT FAILURE     HUACK AIRCRAFT     LOSS OF CONTROL     FIREFIGHTING       212. JASC CODE     210. MANUFACTURER     211. PART NUMBER     MISMANAGED GEAR     AIR SHOW       21. WX BRIEFING SOURCE     24. PRECIPITATION     MISMANAGED CONTROLS     SIGHTSEEING       NOT APPLICABLENOT AVAILABLE     NOT APPLICABLENOT AVAILABLE     AND TAPPLICABLENOT AVAILABLE     AIR FAME ICE/FROST     AIR TOUR       PLIGHT SERVICE STATION     HAIL     AIRFRAME ICE/FROST     AIR TOUR     AIR TOUR       PLIGHT SERVICE STATION     HAIL     VOICE RESP. SYSTEM     SNOW     WEATHER     COMMERCIAL       COMPANY     TV/RADIO WEATHER     FREEZING DRIZZLE     WAKE TURBULENCE     PUBLIC USE     MANEUVER       MILTIARY     COMPUTER BRFING     DRIZZLE     MARTHER FACTORS     GROUND     CRUISE     MANEUVER       10HER     OTHER     OTHER     TAXID     DESCENT     HOVER/HOLDING       23     WEATHER FACTORS     ROTATION     TOUCHDOWN     OTHER       24     WEATHER FACTORS     ROTATION     TOUCHDOWN     OTHER       100ST     TUR	and other responses.						OVERSE	OTRU	WAY								
11. JASC CODE     COMPONENT FAILURE     HIJACK AIRCRAFT     LOSS OF CONTROL     FIREFIGHTING       21C. PART NAME     21D. MANUFACTURER     21E. PART NUMBER     MISMANAGED GEAR     AIR SHOW       21. VXX. BRIEFING SOURCE     24.     PRECIPITATION     MISMANAGED CONTROLS     SIGHTSEEING       NOT APPLICABLE/NOT AVAILABLE     NOT APPLICABLE/NOT AVAILABLE     NOT APPLICABLE/NOT AVAILABLE     ABORTED TAKEOFF     SKYDIVING / PARACHUTE       NATIONAL WEATHER SERVICE     RAIN     AIR FRAME ICE/FROST     AIR TOUR       FLIGHT SERVICE STATION     HAIL     AIRFRAME ICE/FROST     AIR TOUR       COMMERCIAL WX, SERVICE     SLEET     WAKE TURBULENCE     PUBLIC USE       OMMERCIAL WX, SERVICE     SLEET     WAKE TURBULENCE     PUBLIC USE       OMMERCIAL WX, SERVICE     SLEET     WAKE TURBULENCE     PUBLIC USE       MULTARY     COMPUTER BRIFFING     PREEZING RAIN     GROUND     CRUISE     MANEUVER       MILTARY     COMPUTER BRIFFING     PREEZING RAIN     GROUND     CLIMB     UNI-UP AREA       0THER     OTHER     TURBULENCE/WINDERSTORM     TAKEOFF     LANDING     CLIMB       25.     WEATHER FACTORS     ROTATION     TOUCHLORM     OTHER     NON AVAILABLE     NON AVAILABLE       1     SMOKE     DENSITY ALTITUDE     28. RUNWAY CONDITIONS <td< td=""><td>SYSTEM FAILURE ALTIMETE</td><td>R</td><td></td><td>-</td><td></td><td colspan="4">UNDERSHOT RUNWAY</td><td></td><td>AIR EVAC</td></td<>	SYSTEM FAILURE ALTIMETE	R		-		UNDERSHOT RUNWAY					AIR EVAC						
International and the service       210. MANUFACTURER       2112. PART NUMBER       STALLSPIN       BANNER TOW         21. WX. BRIEFING SOURCE       24.       PRECIPITATION       MISMANAGED GEAR       AIR SHOW         23. WX. BRIEFING SOURCE       24.       PRECIPITATION       MISMANAGED CONTOLS       SIGHTSEEING         24. NOT APPLICABLE/NOT AVAILABLE       NOT APPLICABLE/NOT AVAILABLE       ABORTED TAKEOFF       SKYDIVING / PARACHUTE         25. NOT APPLICABLE/NOT AVAILABLE       NATIONAL WEATHER SERVICE       RAIN       AIR TOUR       AIR TOUR         26. OMMERCIAL WX, SERVICE       SLEET       WAKE TURBULENCE       PULICABLE/NOT AVAILABLE       AIR TOUR         27. OMPARCIAL WX, SERVICE       SLEET       WAKE TURBULENCE       PULICABLE       COMMERCIAL         28. WAS VOICE RESP. SYSTEM       SNOW       WEATHER       COMMERCIAL       MINNOWN       INTARY         29. PHASE OF FLIGHT       UNKNOWN       PREZING RAIN       GROUND       CRUISE       MANEUVER         29. PIBEP       UNKNOWN       PRIZZLE       MINNEUVER       TAXEOFF       LANDING       CLUBIO         20. OMPUTER BRIEFING       PREZING RAIN       GROUND       CRUISE       MANEUVER         21. MANUNANDYN       PRIZZLE       OTHER       TAXEOFF       LANDING       CLUBIO							LOSS OF CONTROL										
23     WX. BRIEFING SOURCE     24.     PRECIPITATION     MISMANAGED GEAR     AIR SHOW       23     WX. BRIEFING SOURCE     24.     PRECIPITATION     MISMANAGED CONTROLS     SIGHTSEEING       NOT APPLICABLE/NOT AVAILABLE     NOT APPLICABLE/NOT AVAILABLE     ABORTED TAKEOFF     SKYDIVING / PARACHUTE       NATIONAL WEATHER SERVICE     RAIN     AIRFRAME ICE/FROST     AIR TOUR       FLIGHT SERVICE STATION     HAL     AIRFRAME ICE/FROST     AIR TOUR       COMMERCIAL WX SERVICE     SLEET     WAKE TURBULENCE     PUBLIC USE       PATWAS     VOICE RESP. SYSTEM     SNOW     WEATHER     COMMERCIAL       COMPANY     TV/RADIO WEATHER     PREEZING DRIZZLE     29.     PHASE OF FLIGHT     UNKNOWN       MILITARY     COMPUTER BRIEFING     PREEZING RAIN     GROUND     CRUISE     MAINEUVER       OTHER     INKNOWN     DRIZZLE     30.     TAXI     DESCENT     HOVER/HOLDING       OTHER     OTHER     OTHER     TAXI     DESCENT     HOVER/HOLDING       OTHER     CROSSWIND     CLIME OUT     TAXI     DESCENT     HOVER/HOLDING       1     NONE / NOT APPLICABLE     THUNDERSTORM     CLIME OUT     ROTATION     OTHER       25.     WEATHER FACTORS     THUNDERSTORM     CLIME OUT     NOT AVAILABLE     S					-		STALL/SPIN					BAN	NER TOW				
NOT APPLICABLE/NOT AVAILABLE       NOT APPLICABLE/NOT AVAILABLE       ABORTED TAKEOFF       SKYDIVING/PARACHUTE         NATIONAL WEATHER SERVICE       RAIN       AIRFRAME ICE/FROST       AIR TOUR         FLIGHT SERVICE STATION       HAIL       AIRFRAME ICE/FROST       AIR TOUR         COMMERCIAL WEATHER SERVICE       SLEET       WAKE TURBULENCE       PUBLIC USE         PATWAS       VOICE RESP. SYSTEM       SNOW       WEATHER       COMMERCIAL         COMPANY       TVIRADIO WEATHER       PREEZING DRIZZLE       2%       PHASE OF FLIGHT       UNKNOWN         MILITARY       COMPUTER BRIEING       PREEZING RAIN       GROUND       CRUISE       MANEUVER         PIREP       UINKNOWN       DRIZZLE       MANEUVER       TAXEOFF       LANDING       CLIMB         OTHER       OTHER       OTHER       TAXEOFF       LANDING       CLIMB         23.       WEATHER FACTORS       ROTATION       TOUCEIDOWN       OTHER         1422       CROSSWIND       ZI.MELOCE/WINDSTORM       INC       NOT AVAILABLE																	
NATIONAL WEATHER SERVICE     RAIN     AURITAL WEATHER SERVICE     SKIDIVINO/FARACHOLE       FLIGHT SERVICE STATION     HAL     AIRFRAME ICE/FROST     AIR TOUR       COMMERCIAL WX, SERVICE     SLEET     WAKE TURBULENCE     PUBLIC USE       PATWAS     VOICE RESP. SYSTEM     SNOW     WEATHER     COMMERCIAL       COMPANY     TV/RADIO WEATHER     FREEZING DRIZZLE     %     PHASE OF FLIGHT     UNKNOWN       MILITARY     COMPUTER BRIEFING     FREEZING DRIZZLE     %     PHASE OF FLIGHT     UNKNOWN       PIREP     UNKNOWN     DRIZZLE     MANEUVER     MANEUVER       OTHER     OTHER     OTHER     TAKEOFF     LAINING       3.     WEATHER FACTORS     ROTATION     IOUCHDOWN     OTHER       3.     WEATHER FACTORS     RUN-UP AREA     ROTATION     IOUCHDOWN       MONE / NOT APPLICABLE     THUNDERSTORM     ILIGHTMING STRIKE <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ROLS</td> <td></td> <td></td> <td></td> <td></td>										ROLS							
FLIGHT SERVICE STATION     HAIL     AIRFRAME ICE/ROST     AIR TOUR       COMMERCIAL WX, SERVICE     SLEET     WAKE TURBULENCE     PUBLIC USE       PATWAS     VOICE RESP. SYSTEM     SNOW     WEATHER     COMMERCIAL       COMPANY     TV/RADIO WEATHER     FREEZING DRIZZLE     M. PHASE OF FLIGHT     UNKNOWN       MILITARY     COMPUTER BRIEFING     FREEZING DRIZZLE     M. PHASE OF FLIGHT     UNKNOWN       PIBEP     UNKNOWN     DRIZZLE     MANEUVER     TAXI     DESCENT     HOVE/RHOURDING       OTHER     OTHER     OTHER     TAXI     DESCENT     HOVE/RHOUDING       0THER     OTHER     TAXI     DESCENT     HOVE/RHOUDING       23.     WEATHER FACTORS     ROTATION     TOURHERSTORM     CLIMB OUT       1     HAZE     CROSSWIND     CLIMB OUT     ROLLOUT       1     DUST     TURBULENCE/WINDSTORM     IMC     VMC     NOT AVAILABLE       1     SMOKE     DENSITY ALITITUDE     SRUMWAY CONDITIONS     TIME REPORTEP       1     BLOWING SMOKE     WIND SHEAR     SANDSTORM     DRY     WET     SNOW (WET)     SNOW (WET)			JALE WOLLAYAL									-		ARACHUTE			
PATWAS     VOICE RESP. SYSTEM     SNOW     WEATHER     COMMERCIAL       COMPANY     TV/RADIO WEATHER     FREEZING DRIZZLE     %     PHASE OF FLIGHT     UNKNOWN       MILITARY     COMPUTER BRIEFING     FREEZING RAIN     GROUND     CRUISE     MANEUVER       PIREP     UNKNOWN     DRIZZLE     MANEUVER     TAXI     DESCENT     HOVER/HOLDING       OTHER     OTHER     OTHER     OTHER     CLIMB     CLIMB     CLIMB OUT     RUN-UP AREA       3.     WEATHER FACTORS     ROTATION     TOUCHICOWN     OTHER     OTHER       3.     WEATHER FACTORS     ROTATION     TOUCHICOWN     OTHER       HAZE     CROSWIND     CLIMB OUT     ROTATION     TOUCHICOWN       HAZE     DUST     TURBULENCE/WINDSTORM     INC     NOT AVAILABLE       SMOKE     DENSITY ALTITUDE     28. RUWAY CONDITIONS     TIME REPORTED       FOG     LIGHTNING STRIKE     NOT APILICABLE     SNOW (WET)     SNOW (WET)       BLOWING SMOKE     WIND SHEAR     SANDSTORM     DRY     WET     SLUSH     SNOW (WET)	FLIGHT SERVICE STATION	HAIL								r -							
COMPANY     TV/RADIO WEATHER     FREEZING DRIZZLE     20. PHASE OF FLIGHT     UNKNOWN       MILITARY     COMPUTER BRIEFING     FREEZING RAIN     GROUND     CRUISE     MANEUVER       PIREP     LINKNOWN     DRIZZLE     TAXI     DESCENT     HOVER/HOLDING       OTHER     OTHER     OTHER     TAXI     DESCENT     HOVER/HOLDING       OTHER     OTHER     OTHER     TAXI     DESCENT     HOVER/HOLDING       23.     WEATHER FACTORS     ROTATION     TOUCHDOWN     OTHER       23.     WEATHER FACTORS     ROTATION     TOUCHDOWN     OTHER       24.     NONE / NOT APPLICABLE     THUNDERSTORM     CLIMB OUT     ROLLOWT       25.     WEATHER FACTORS     CROSSWIND     CLIMB OUT     ROLLOWN     OTHER       25.     WEATHER FACTORS     CROSSWIND     CLIMB OUT     ROLLOWN     OTHER       26.     ONNE / NOT APPLICABLE     THUNDERSTORM     IMC     YMC     NOT AVAILABLE       27.     ACTUAL WEATHER     IMC     VMC     NOT AVAILABLE     IMC     YMC     NOT AVAILABLE       27.     ACTUAL WEATHER     IMC     VMC     NOT AVAILABLE     IMC     YMC     SMOW (WET)     SNOW (WET)       28.     DENDWING SNOW     DRY     WET     SMOW					7				ENCE								
MILITARY     COMPUTER BRIEFING     FREEZING RAIN     IS FILINGE OF FILINGT     OTHER       PIREP     UINKNOWN     DRIZZLE     TAXI     DESCENT     HOVERHOLDING       OTHER     OTHER     OTHER     TAXI     DESCENT     HOVERHOLDING       23.     WEATHER FACTORS     ROTATION     TOUCHDOWN     OTHER       1     NONE / NOT APPLICABLE     THUNDERSTORM     CLIMB OUT     ROLLOUT       1     HAZE     CROSSWIND     CRUSSWIND     OTHER       1     DUST     TURBULENCE/WINDSTORM     IMC     VMC     NOT AVAILABLE       1     SMOKE     DENSITY ALITIUDE     21. RUNWAY CONDITIONS     TIME REPORTED       1     BLOWING SMOKE     WHITE OUT     SMOG     DRY     WET     SLOW (WET)     SNOW (WET)	TOTOL TOTOL TO TOTAL		177LE			~			ICH					1			
PIREP     LINKNOWN     DRIZZLE     TAXI     DESCENT     HOVER/HOLDING       OTHER     OTHER     OTHER     TAXI     DESCENT     HOVER/HOLDING       23     WEATHER FACTORS     DEPARTURE ROLL     APPROACH     RUN-UP AREA       24     WEATHER FACTORS     CLIMB OUT     ROLLOUT     ROLLOUT       HAZE     CROSSWIND     CLIMB OUT     ROLLOUT       DUST     TURBULENCE/WINDSTORM     IMC     VMC     NOT AVAILABLE       SMOKE     DENSITY ALTITUDE     28. RUNWAY CONDITIONS     TIME REPORTED       BLOWING SMOKE     WHITE OUT     SMOG     DRY     WIT     SNOW (WIT)     SNOW (WIT)       BLOWING SMOKE     WIND SHEAR     SANDSTORM     DRY     DRY     WIT     SLOWING WATER		FREEZING RA				<i>2</i> 0.			I								
IARCOFF     LANDING     CLIMB       23.     WEATHER FACTORS     DEPARTION     TOUCHDOWN     OTHER       24.     WEATHER FACTORS     ROTATION     TOUCHDOWN     OTHER       25.     WEATHER FACTORS     ROTATION     TOUCHDOWN     OTHER       26.     NONE / NOT APPLICABLE     THUNDERSTORM     CLIMB OUT     ROLLOUT       27.     ACTUAL WEATHER     DUST     TURBULENCE/WINDSTORM     IMC     NOT AVAILABLE       28.     DUST     TURBULENCE/WINDSTORM     IMC     VMC     NOT AVAILABLE       5MOKE     DENSITY ALTITUDE     28. RUNWAY CONDITIONS     TIME REPORTED       FOG     LIGHTNING STRIKE     NOT APPLICABLE     NOT APPLICABLE       BLOWING DUST     BLOWING SNOW     DRY     DRY     WET       BLOWING SMOKE     WHITE OUT     SMOG     ICE (COVERED)     ICE (PATCHES)     STANDINO WATER					]		TAXI						_				
WEATHER FACTORS     ROTATION     TOUCHDOWN     OTHER       NONE / NOT APPLICABLE     THUNDERSTORM     CLIMB OUT     ROLLOUT     ROLLOUT       HAZE     CROSSWIND     TURBULENCE/WINDSTORM     IMC     NOT AVAILABLE     IMC       DUST     TURBULENCE/WINDSTORM     IMC     NOT AVAILABLE     IMC     NOT AVAILABLE       SMOKE     DENSITY ALTITUDE     28. RUNWAY CONDITIONS     TIME REPORTED       FOG     LIGHTNING STRIKE     NOT APPLICABLE     IMC     SNOW (WET)     SNOW (ORY)       BLOWING SMOKE     WHITE OUT     SMOG     ICE (OVEREID)     ICE (PATCHES)     STANDINO WATER	OTHER	OTHER															
NONE / NOT APPLICABLE     THUNDERSTORM     CLIMB OUT     ROLLOUT       HAZE     CROSSWIND     27. ACTUAL WEATHER       DUST     TURBULENCE/WINDSTORM     IMC     VMC     NOT AVAILABLE       SMOKE     DENSITY ALTITUDE     28. RUNWAY CONDITIONS     TIME REPORTED       BLOWING SMOKE     UHITE OUT     SMOG     DRY     WET     SLUSH     SNOW (WET)     SNOW (DRY)       BLOWING SMOKE     WHITE OUT     SMOG     ICENG CONDITIONS     STANDINO WATER	25. WEATHER FA						1			4							
DUST     TURBULENCE/WINDSTORM     INC     VMC     NOT AVAILABLE       SMOKE     DENSITY ALTITUDE     28. RUNWAY CONDITIONS     TIME REPORTED       POG     LIGHTNING STRIKE     NOT APPLICABLE     Image: Condition of the second sec				CLIMB OUT ROLLOUT													
SMOKE         DENSITY ALTITUDE         28. RUWAY CONDITIONS         TIME REPORTED           FOG         LIGHTNING STRIKE         NOT APPLICABLE         Image: Constraint of the second se										-							
FOG         LIGHTNING STRIKE         NOT APPLICABLE         NOT APPLICABLE           BLOWING DUST         BLOWING SNOW         BLOWING SNOW         DRY         WET         SNOW (WET)         SNOW (DRY)           BLOWING SMOKE         WHITE OUT         SMOG         ICENG CONDITIONS         WIND SHEAR         SANDSTORM         ICE (PATCHES)         STANDING WATER																	
BLOWING DUST         BLOWING SNOW         DRY         WET         SLUSH         SNOW (WET)         SNOW (DRY)           BLOWING SMOKE         WHITE OUT         SMOG         ICENG CONDITIONS         WIND SHEAR         SANDSTORM         ICE (PATCHES)         STANDING WATER								REPORTE	PORTED								
BLOWING SMOKE WHITE OUT SMOG ICING CONDITIONS WIND SHEAR SANDSTORM ICE (PATCHES) STANDING WATER														OW (WET) SNOW (DRY)			
ICING CONDITIONS WIND SHEAR SANDSTORM	BLOWING SMOKE		S										D WATER				
GUSTY WINDS OTHER			\$	AND	STORM		1	and the second s	U '		( and )						
FAA FORM 8020-23 (01-10) SUPERSEDES FAA FORMS H026-3 and H026-16 INFORMATION IS PRELIMINARY AND SUBJECT TO CHANGE NSN: 6652-66-922-1666	GUSTY WINDS	OTHER															

## Part 6. FAA Form 8020-23, FAA Accident/Incident Report

																AT	QAJ	EPOR	r NUN	IBER	
					-												╧				
29. PILOT TRAINING (C)	_	<b>—</b>	<u> </u>	m. 1, 1	acos	DTHE	Two	MOST RECEN	TIRA	UNING EV	INTS, IF APP	LICABL		_	<u> </u>			AL		KNO	WN
	YES	NO	UNK	(MC	D/DA	(118)	$\vdash$	(MO/DA/YR					Y	S NO	UNK	Ø	10 / E	A/YR)	+	(MO/E	A/YR)
SAFETY SEMINAR/CLINIC	+						┝		-	AIR CAR SIMULAT	RIER TRAN	ISITIO	4	+-	+				_		
WINGS PROGRAM AIR CARRIER INITIAL	+	-					⊢				HIRD PART	TY .	+	+	+				+		
AIR CARRIER INITIAL	+						┝		-	(CONTRA	CT TRAIN										
AIR CARRIER RE-QUALIFICATION							┝		4	OTHER											
		(A.11)	CAR			EUA	CT	ATTON INT	TAT	τD	YES		NO	EV	ACTIA	TION	INT	PIER	_	YES	N
38 EVACUATION OVERVIEW (AIR CARRIER ONLY) EVACUATION INITIA 31. PILOT INFORMATION NOT APPLICABLE										ERTIFICATE TYPE SECOND PILO								-			
NAME	1		-		-						ECREATIO										
DATE OF BIRTH	$\top$			MO		DA		YR			STUDEN	т	Γ			мо				YR	
DATE HIRED (AIR CARRIER ONLY)								YR			PRIVATE	1			[	30	]			ų	
DOMICILE ZIP CODE							]				COMMERC	IAL			Γ						
HOURS IN MAKE AND MODE	L						][	$\overline{\mathbf{N}}$			FLIGHT IN	ST.							][	$\overline{\nabla}$	
HOURS IN LAST 90 DAYS	$\perp$						][				ATP								<u>[</u>	1	
HOURS IN LAST YEAR										F	OREIGN PI	LOT								$\overline{\mathbf{N}}$	
TOTAL HOURS											SPORT										
CERTIFICATE NO.	+		_			_	1 6		_		NON-PILC	т	⊢	-			_ ,	_		_	
REGULATORY CHECK RIDE				MO		DA		YR			OTHER	t				мо		DA		YR	
32. CORRECTIVE ACTION(S) PLA	NNEI	OR	INITI	ATED		_		OR DEFECT	_	_	UNSELING	81	R								
34. NTSB PARTICIPATION	ON	-SCE	NE	1.0	мгте	_	NO				IGATIO		SCEN		NOT O	-scen		SCEN	ENOT	ACCESS	IBLE
36. FAA INITIAL NOTE	FICA	TIO	N		37			FSDO N					38			_		IVAL			
	TIME	R							D		YR					DAT	EAN	DA	LTIM	YR	
	24	- 10	DUR C	LOCK							24 - HOUR (	CLOCK								24-10	CLOCK
».				ID FOR GATIC		0.					TAL HOURS		41							FROM S	EL HOUR CENE
42.					_			AA NINE R													
1. FAA FACILITIES Y	ES		NO					AGENCY CO			YES	NO			CURIT				Y	s	NO
2. NON FAA FACILITIES Y	ES		NO	3	. FA	R CHAI	NGE	NEEDED			YES	NO		8. AIB	MAN	MEDIC	ALO	UALIF	. YI	s	NO
3. AIRWORTHINESS Y	ES		NO	•	5. AID	PORT	CER	RTIFICATION	I		YES	NO		9. FAI	R VIOL	ATION	4		Y	5	NO
43. BRIEF EXPLANATION OF ISSU 44. FAA IIC NAME	ES IN	VOL	VED					DATE			1	REGI	ON			DIST	RI	CT OF	FIC	E	
FAA Form 8020-23 (01-10)																		NSN: 0			

#### INSTRUCTIONS FOR FAA FORM 8020-23 ACCIDENT/INCIDENT REPORT

#### OCCURRENCE INFORMATION:

- FAA FORM 8020-23 IS TO BE COMPLETED FOR EACH ACCIDENT AND INCIDENT AND FORWARDED TO THE RESPONSIBLE REGIONAL FLIGHT STANDARDS DIVISION WITHIN 30 DAYS. THE REGIONAL FS DIVISION WILL FORWARD ORIGINAL FAA ACCIDENT/INCIDENT REPORT TO AFS-620 AND A COPY OF ACCIDENT REPORT ONLY TO AAI-220 WITHIN 15 DAYS OF RECEIPT OF ORIGINAL AMENDED DATE:
- INSERT AMENDED DATE FOR A MENDED REPORTS, FILL IN ITEMS 1, 2, 3, 5, AND 13, REGISTRATION NUMBER ONLY, AND NEW OR CHANGED INFORMATION PERTAINING TO ACCIDENT INVESTIGATION.
- DATE OF THE OCCURRENCE: COMPLETE THE EVENT DATE (MONTH/DAY/YEAR) IN FORMAT MMDDYY.
- FAA (INVESTIGATING OFFICE): THE FIRST TWO BLOCKS ARE THE REGION ID. THE SECOND TWO BLOCKS ARE THE NUMERICAL ID OF THE FSDO (E.G., EA 21).
- NTSB ID:
  - INSERT NTSB REPORT NUMBER FOR ACCIDENTS AND INCIDENTS. THE NUMBER IS SUPPLIED BY THE NTSB OFFICE WITH JURISDICTIONAL RESPONSIBILITY.
- LOCATION:
- CITY: NEAREST CITY OR TOWN TO THE OCCURRENCE. STATE: 2 LETTER IDENTIFIER OF THE STATE OR TERRITORY CODE.
- ZIP CODE: ZIP CODE OF NEAREST CITY OR TOWN LOCATION. OPERATOR:
- PROVIDE THE NAME OF THE OPERATOR THAT HAS OPERATIONAL CONTROL OF THE AIRCRAFT INVOLVED IN THE EVENT. THE 4 LETTER DESIGNATOR IS FROM OPSS/SPAS/VIS
- AIRPORT:
- PROVIDE THE AIRPORT NAME AND 4-LETTER ID IF OCCURRENCE TOOK PLACE ON AN AIRPORT. USE AIRPORT DESIGNATOR IAW FAA 7350.7B TIME
- PROVIDE THE TIME OF THE OCCURRENCE IN LOCAL 24 HOUR CLOCK.
- 10. LATITUDE / LONGITUDE: PROVIDE GEOGRAPHIC INFORMATION FOR ALASKA AND OCEANIC EVENTS.
- 11 AIRCRAFT DAMAGE: PROVIDE THE MOST SEVERE DAMAGE TO A IRCRAFT FROM CATEGORIES
- 12. COLLISION: IDENTIFY IF TWO AIRCRAFT ARE INVOLVED; AND IF TWO COLLIDED IN THE 32. CORRECTIVE ACTION: AIR OR ON THE GROUND. TWO FAA \$020-23 FORMS REQUIRED IF BOTH AIRCRAFT WERE FLYING OR HAD THE INTENT TO FLY.
- 13. AIRCRAFT REGISTRATION NUMBER: COMPLETE AIRCRAFT REGISTRATION INFORMATION (E.G. REGISTRATION
- N1234M, MAKE/MODEL: E.G. DC-9-10. SERIAL NUMBER: 99347Y178, YEAR OF 34. MANUFACTURE E.G. 1994). ALSO PROVIDE AIRFRAME CYCLES AND AIRFRAME HOURS IN WHOLE NUMBERS.
- FAR PART NUMBER:
- PROVIDE THE FEDERAL AVIATION RECULATION THAT THE AIRCRAFT WAS OPERATING UNDER. NOTES: AN AIR CARRIER DOING POSITIONING, TRAINING IS PART 91. PART 135 AIR TAXI AND AIR AMBULANCE IS PART 91 UNTIL PASSENGER PICKUP, MEDICAL PERSONNEL ARE PART OF THE CREW
- 15. TYPE OF AIRCRAFT:
- PROVIDE THE TYPE OF A IRCRAFT AND A IRW ORTHINESS CERTIFICA TE (MORE THAN ONE TYPE MAY BE CHECKED IN SOME CASES). POWER PLANT INFORMATION:
- PROVIDE THE MAKE/MODEL/SERIES OF ENGINE ONLY IF RELEVANT TO THE ACCIDENT/INCIDENT.
- 17. PROPELLER INFORMATION :
- ROVIDE THE MAKE/MODEL/SERIES OF PROPELLER ONLY IF RELEVANT TO THE ACCIDENT/INCIDENT.
- BIOHAZA RD AREA: PROVIDE BIOHAZARD AREA INFORMATION. NOTE: SELECT YES' IF BODY
- FLUIDS PRESENT. ALSO PROVIDE USE OR NONUSE OF PERSONAL PROTECTIVE EQUIPMENT INFORMATION.
- 19. TYPE OF LANDING GEAR: PROVIDE TYPE OF LANDING GEAR OF AIRCRAFT INVOLVED IN EVENT.
- 20. INJURY SUMMARY: ENTER THE COUNT FOR EACH INJURY TYPE BY PERSON CATEGORY. FOR ALL ON BOARD THE AIRCRAFT. ACCOUNT FOR PERSONNEL INJURED THAT WERE NOT ON THE AIRCRAFT UNDER OTHER.
- 21. FACTORS: SELECT THE MOST APPROPRIATE PRIMARY FACTOR FROM EITHER
- TECHNICAL OR OPERATIONAL FACTORS. SELECT ALL SECONDARY FACTORS. 21A. TECHNICAL FACTORS:
- SELECT ALL APPLICABLE FACTORS. THIS IS THE
- INSPECTOR/INVESTIGATOR OPINION BASED ON THE INVESTIGATION. 21B. OPERATIONAL FACTORS:
- 44 FAA IIC INFORMATION: BELIECT ALL APPLICABLE FACTORS. THIS IS TH
- SUPERSEDES FAA FORMS 8020-5 and 8020-16 INFORMATION IS PRELIMINA BY AND SUBJECT TO CHANCE FAA Form 8020-23 (01-10)

21C. PART NAME: IDENTIFY THE PART NAME THAT FAILED OR IS SUSPECTED OF FAILURE BY THE PROPER NOMENCLATURE THAT IS DEPICTED IN THE MANUFACTURERS PARTS CATALOGUE

INSPECTOR/INVESTIGATOR, OPINION BASED ON THE INVESTIGATION

- 21D. MANUFACTURER: IDENTIFY THE MANUFACTURER OF THE PART. IF KNOWN.
- 21E. PART NUMBER: IDENTIFY THE MANUFACTURER PART NUMBER. THIS WOULD BE THE SAME NUMBER NEEDED TO REQUISITION A REPLACEMENT PART.
- 21E ATA CODE:
- ENTHR ATA CODES IAW TABLES IN THE FLIGHT STANDARDS GUIDE TITLED: JOINT AIRCRAFT SYSTEM AND COMPONENT CODE TABLE AND DEFINITIONS. 22. TYPE OF OPERATIONS:
- SELECT TYPE OF OPERATIONS AIRCRAFT PERFORMED AT TIME OF OCCURRENCE. 23. WEATHER BRIEFING SOURCE:
- SELECT WEATHER SOURCE PROVIDING WEATHER AT TIME OF OCCURRENCE. 24. PRECIPITATION:
- SELECT ALL APPLICABLE PRECIPITATION FACTORS AT TIME OF OCCURRENCE. WEATHER FACTORS: 25.
- SELECT ALL APPLICABLE WEATHER FACTORS AT TIME OF OCCURRENCE. 26. PHASE OF FLIGHT:
- SELECT PHASE OF FLIGHT WHERE ACCIDENT OR INCIDENT SEQUENCE STARTED. 27. ACTUAL WEATHER CONDITIONS:
- SELECT ACTUAL WEATHER CONDITION AT TIME OF OCCURRENCE. RUNWAY CONDITIONS: ENTER RUNWAY DESIGNATOR AND RUNWAY INFORMATION IF EVENT
  - OCCURRED ON A RUNWAY.
- 29. PILOT TRAINING INFORMATION: ENTER TYPE AND DATE OF ALL TRAINING RECEIVED WITHIN LAST 24 MONTHS. EVACUATION OVERVIEW:
  - SELECT IF AN EVACUATION WAS INITIATED; AND SELECT IF INJURIES OCCURRED ATTRIBUTABLE TO EVACUATION.
- 31. PILOT INFORMATION:
  - ENTER ALL PILOT INFORMATION IF THEIR ACTIONS CONTRIBUTED TO THE ACCIDENT/INCIDENT. FOR ALL OTHER ACCIDENTS/INCIDENTS ENTER ONLY THE PILOT'S DATE OF BIRTH, HIGHEST CERTIFICATE MAINTAINED AND ALL PILOT
  - SELECT APPLICABLE CORRECTIVE ACTION(S) PLANNED OR INITIATED.
- 33. NARRATIVE:
- ONLY STATE FACTS OR SEQUENCE OF EVENTS THAT ARE RELEVANT TO THE ACCIDENT OR INCIDENT.
- NTSB PARTICIPATION :
- IDENTIFY LEVEL OF NTSB PARTICIPATION IN INVESTIGATION FAA PARTICIPATION:
- IDENTIFY LEVEL OF FAA PARTICIPATION IN INVESTIGATION. ON-SCIENE CAN BE CHECKED IF THE INSPECTOR/INVESTIGATOR PARTICIPATES IN THE INVESTIGATION BEYOND USE OF THE TELEPHONE, LE, ENGINE TEARDOWN. INTERVIEW, OR WRECKAGE INVESTIGATION NOT AT THE SCENE OF THE ACCIDENT
- 36. FAA INITIAL NOTIFICATION:

IDENTIFY THE TIME THE FIRST FAA FACILITY IS MADE AWARE OF THE OCCURRENCE EITHER THROUGH DISCOVERY OR NOTIFICATION NOTE USUALLY FIRST NOTIFICATION IS TO AIR TRAFFIC.

- 37. FSDO NOTIFICATION: IDENTIFY THE FIRST CALL ON THE OCCURRENCE RECEIVED BY THE FSDO.
- 38. FAA IJC ARRIVAL ON SCENE:

RESPONSIBILITIES INVOLVED.

EXPLAIN WHY.

- IDENTIFY THE DATE AND TIME THE FAA IIC ARRIVES ON THE SCENE. 39. FAA HOURS USED FOR TOTAL INVESTIGATION:
  - IDENTIFY TOTAL HOURS FAA SPENT ON THE INVESTIGATION. THIS INCLUDES ON SCENE, TRAVEL HOURS, AND NON-SCENE ACTIVITIES IN WHOLE HOURS ONLY.
- 40. TOTAL HOURS USED AT A COLDENT/INCIDENT SCENE IDENTIFY TOTAL HOURS FAA SPENT AT THE SCENE IN WHOLE HOURS ONLY. 41. TOTAL TRAVEL HOURS TO & FROM SCENE
- IDENTIFY TOTAL HOURS FAA SPENT ON TRAVEL TO AND FROM SCENE IN WHOLE HOURS ONLY. 42. FAA NINE RESPONSIBILITIES:

ANNOTATED UNDER AIRMANAIR AGENCY COMPETENCE. IT IS NOT NECESSARY TO SUBMIT AN EIR BECAUSE OF ANNOTATION OF VIOLATION.

DESCRIBE RELEVANT ISSUES SURROUNDING THE OCCURRENCE. IF NO ISSUES.

- ENTER IIC INFORMATION NAME AND OFFICE AND DATE FORM COMPLETED
  - NSN- 0052-00-923-1000
- MORE RESPONSIBILITIES DOES NOT HAVE TO BE JUSTIFIED OR PROVEN, AN AIRMAN WHO MAKES A MISTAKE, WHICH RESULTS IN AN ACCIDENT IS

43. BRIEF EXPLANATION OF ISSUES INVOLVED FOR EACH OF THE NINE

- IDENTIFY FAA AREAS OF RESPONSIBILITY INVOLVED. DETERMINATION OF
- RESPONSIBILITIES IS THE OPINION OF THE INSPECTOR/INVESTIGATOR. BASED ON BACKGROUND, TRAINING, SKILL, AND EXPERIENCE. ANNOTATION OF ONE OR